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

ITEM
3.60
(ID # 3333)

MEETING DATE:
Tuesday, March 7, 2017

FROM : TLMA-TRANSPORTATION:

SUBJECT: TMLA - TRANSPORTATION: Approval of the Engineering and Environmental Services Agreement between the County of Riverside and Michael Baker International for El Toro Ethanac Expressway Project Corridor Development Planning Study located within the Communities of Perris, Menifee, Good Hope, Meadowbrook, Warm Springs, and Lake Elsinore. 1st and 3rd District; [$1,500.000 - Total Costs]; Local Funding 100%

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve the Agreement between the County of Riverside (County) and Michael Baker International for the El Toro Ethanac Expressway Project Corridor Development Planning Study; and
2. Authorize the Chairman of the Board to execute the same.

ACTION: Policy

Patricia Romo, Director of Transportation 2/8/2017

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Jeffries, seconded by Supervisor Ashley 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:	March 7, 2017
xc:	TLMA-Transp.

Kecia Harper-Ihem
Clerk of the Board
By: Deputy

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	$ 500,000	$ 1,000,000	$ 1,500,000	$0
NET COUNTY COST	$ 0	$ 0	$0	$0
SOURCE OF FUNDS: Measure A New Corridor Funds (100%). There are no General Funds used in this Project.			**Budget Adjustment:** No **For Fiscal Year:** 16/17 to 17/18	

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The Ethanac Road/State Route 74 (SR-74)/Nichols Road Corridor (also referred to as the El Toro Ethanac Expressway) is a critically important intra-county route. It connects the Cities of Hemet, Menifee, Perris and Lake Elsinore, and the unincorporated communities of Homeland, Romoland, Goodhope, Meadowbrook, and Warm Springs.

The El Toro Ethanac Expressway and the Cajalco Road/Ramona Expressway are planned to function as the primary east-west, non- freeway arterial routes that are centrally located to serve all of Western Riverside County.

The County and the Cities of Lake Elsinore, Menifee, and Perris desire to study and develop conceptual alignments for an expressway between I-15/ Nichols road and the westerly terminus of Ethanac Road. The new expressway is expected to save about five (5) miles of circuitous travel for motorists traveling between I-15 and I-215 who currently must travel south on SR74 through Perris from I-215 then through Lake Elsinore, with numerous driveways and access points that are not conducive to the efficient movement of regional traffic, before reaching I-15.

The extension of Ethanac Road as a direct route would require building about a two-mile "missing link" from where the road terminates at the east bank of the San Jacinto River westerly to connect to SR-74 in Meadowbrook. It would include a bridge crossing over the San Jacinto River and Goodhope Wash. The Nichols Road connection through Warm Springs to Highway 74 would include building about 1.5 miles of new road. The study will be a comprehensive corridor study that evaluates multimodal options including transit and active transportation concepts, as these mobility options are essential components of a comprehensive system and will include a traffic analysis of the ultimate connection to SR74 east of I-215.

The improvements will likely be done in phases as funding becomes available. Some of the improvements within the City of Perris are currently in the planning/development stages and are proceeding forward under City and/or developer projects.

A Request for Proposals was advertised by the County of Riverside Transportation Department (Transportation Department) soliciting potential consulting firms to provide the services needed to prepare the New Corridors Improvement Study. Five firms submitted proposals and Michael Baker International was selected as the firm to provide the services. The proposals were reviewed by representatives from the California Department of Transportation (Caltrans), the Transportation Department, and the City of Menifee. A not to exceed budget of $1,500,000 (including contingency) was negotiated between Michael Baker International and the Transportation Department. The services to be provided include preliminary engineering and environmental studies necessary for the preparation of a New Corridors Improvement Report.

County Counsel has approved the Agreement as to form.

Project Number C3-0092

Impact on Residents and Businesses

Regional transportation facilities are essential to public health, safety, and welfare. The proposed El Toro Ethanac Expressway Project will provide a significant benefit for east-west regional transportation.

SUPPLEMENTAL:

Additional Fiscal Information

The Riverside County Transportation Commission (RCTC) approved an Agreement between the County and RCTC for Measure A Western County New Corridors Improvement Study of the Ethanac Road/SR-74/Nichols Road Corridor Project in the amount of $2,000,000 in funding for the preparation of a New Corridor Improvement Study that will analyze the El Toro Ethanac Expressway Corridor Routes and provide appropriate recommendations for proceeding forward with the project. This agreement was approved by the Board of Supervisors on January 17, 2017 (Agenda Item 3.38).

Contract History and Price Reasonableness

N/A

ATTACHMENTS:

Vicinity Map
Agreement

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

Marsha Victor, Chief Deputy County Counsel 2/22/2017

Tina Grande, Principal Management Analyst 2/27/2017

Gregory P. Priamos, Director County Counsel 2/22/2017

El Toro Ethanac Expressway

Contract No. 16-12-001
Riverside County Transportation

ENGINEERING SERVICES AGREEMENT

for

El Toro Ethanac Expressway Project
Corridor Development Planning Study

between

County of Riverside • Transportation Department

and

Michael Baker International

MAR 07 2017 3.60

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ENGINEERING SERVICES AGREEMENT

COUNTY OF RIVERSIDE, hereinafter referred to as "COUNTY", and Michael Baker International, hereinafter referred to as "ENGINEER", located at the following addressees:

County of Riverside • Transportation Department	Michael Baker International
4080 Lemon Street, 8th Floor	3536 Concours Street, Suite 100
Riverside, CA 92502	Ontario, CA 91764

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:

Tim Haile

The COUNTY PROJECT MANAGER for COUNTY shall be:

C. Scott Staley

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".

RCTC, Caltrans and Cities of Lake Elsinore, Menifee and Perris

C. COUNTY/AGENCIES Standards

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

ARTICLE IV • CONDITIONS

A. Notifications

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

B. Assignment

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

C. Subcontracts

1. ENGINEER shall perform the services contemplated with resources available within its own organization. No portion of the services pertinent to this contract shall be subcontracted without written authorization by the COUNTY PROJECT MANAGER, except that which is expressly identified in this contract.
2. In the event ENGINEER subcontracts any portion of ENGINEER's duties under this contract, ENGINEER shall require its subcontractors to comply with the terms of this contract in the same manner as required of ENGINEER including, but not limited to; indemnification of the COUNTY, requiring the same insurance of Subcontractors as required of ENGINEER, and having Subcontractor's insurance name the COUNTY as Additional Insured for each type of insurance where this Agreement requires ENGINEER's insurance to name COUNTY as Additional Insured.

D. Modifications

1. This contract may be amended or modified only by mutual written agreement of the parties. No alteration or variation of the terms of this contract other than minor modifications will be valid unless made in writing and signed by the parties hereto and no oral understanding or agreement not incorporated herein, will be binding on any of the parties hereto.

2. Minor modifications are changes that do not substantially affect the Scope of Service or the contract budget. Minor modifications may be: changes in services to be provided that are consistent with the overall scope and do not require an increase in the contract budget; the shifting of work and/or funding between tasks within the same phase that impacts the budget allocated to any sub consultant, the shifting of work and/or funding from one phase to another; use of contingency pursuant to Article VI.B.1. All requests for minor modifications must be approved in writing by the Director of Transportation, or his designee. The shifting of work and/or funding between tasks within the same phase and does not modify the budget allocated to any sub consultant is also allowed and but not require approval of COUNTY.
3. There shall be no change in the ENGINEERING PROJECT MANAGER or key members of the PROJECT team without prior written approval by the COUNTY PROJECT MANAGER.
4. All modifications that do not fit within the definition of a minor modification to the contract shall be considered a major change and must be approved in writing by the ENGINEER and COUNTY Board of Supervisors prior to implementing the major change.

E. COUNTY Directives

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

F. Liability

1. ENGINEER has total responsibility for the accuracy and completeness of all data, reports, plans, specifications and estimates (PS&E) prepared for this PROJECT and shall check all such material accordingly. COUNTY will review all work product deliverables. The responsibility for accuracy and completeness of such items remains solely that of ENGINEER. Neither COUNTY'S review or approval shall give rise to any liability or responsibility on the part of COUNTY, or waive any of COUNTY'S rights, or relieve ENGINEER of its professional responsibilities or obligations under this contract.
2. The plans, designs, estimates, calculations, reports and other documents furnished in accordance with the Scope of Services shall meet the criteria for acceptance and be a product of neat appearance, well organized, technically and grammatically correct, checked and having the preparer and checker identified. The minimum standard of appearance, organization and contents shall be of similar types produced by COUNTY and AGENCIES. If any work product submitted is not complete and ready for use by COUNTY, it shall be marked "Draft" or similar designation to indicate it is not ready for use by

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

5. The page identifying preparers of engineering reports, the title sheet for specifications and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of the certificate, and signature of the professional engineer(s) responsible for their preparation.
6. COUNTY and ENGINEER agree that plans, drawings or other work products prepared by ENGINEER are for the exclusive use of COUNTY and will be used by COUNTY for the project for which they were specifically designed. ENGINEER shall not be responsible for use of such plans, drawings or other work products if used on a different project without the written authorization or approval by ENGINEER.
7. ENGINEER acknowledges that the plans, drawings and/or other work products may be used by COUNTY for the PROJECT regardless of any disputes that may develop between ENGINEER and COUNTY. All plans, drawings, or other work product shall be deemed the sole and exclusive property of COUNTY and ownership thereof is irrevocably vested in COUNTY whether the PROJECT is executed or not.
8. ENGINEER, and the agents and employees of ENGINEER, in the performance of this contract, shall act in an independent capacity and not as officers, employees or agents of COUNTY.

G. Indemnification and Defense

1. The ENGINEER agrees to and shall indemnify and hold harmless the County of Riverside, its Agencies, Districts, Departments and Special Districts, their respective directors, officers, Board of Supervisors, elected and appointed officials, employees, agents and representatives (hereinafter individually and collectively referred to as "Indemnitees") from all liability, including, but not limited to loss, suits, claims, demands, actions, or proceedings caused by any alleged or actual negligence, recklessness, willful misconduct, errors or omissions of ENGINEER, its directors, officers, partners, employees, agents or representatives or any person or organization for whom ENGINEER is responsible, arising out of or from the performance of services under this Agreement. To the extent a loss, suit, claim, demand, action, or proceeding is based on actual or alleged acts or omissions of ENGINEER which are not design professional services, ENGINEER shall indemnify Indemnitees whether or not ENGINEER is negligent.
2. The duty to indemnify does not include loss, suits, claims, demands, actions, or proceedings caused by actual negligence of Indemnitees; however, any actual negligence of Indemnitees will only affect the duty to indemnify for the specific act found to be negligence, and will not preclude a duty to indemnify for any

act or omission of ENGINEER.

3. ENGINEER shall defend and pay, at its sole expense, all costs and fees, including but not limited to attorney fees, cost of investigation, and defense, in any loss, suits, claims, demands, actions, or proceedings based or alleged to be based on any act or omission of ENGINEER arising out of or from the performance of services under this contract. The duty to defend applies to any alleged or actual negligence, recklessness, willful misconduct, error or omission of ENGINEER. The duty to defend shall apply whether or not ENGINEER is a party to the lawsuit, and shall apply whether or not ENGINEER is directly liable to the plaintiffs in the lawsuit. The duty to defend applies even if Indemnitees are alleged or found to be actively negligent, unless the act or omission at issue was caused by the sole active negligence of Indemnitees.
4. The specified insurance provisions and limits required in this contract shall in no way limit or circumscribe ENGINEER'S obligations to indemnify and hold harmless Indemnitees from third party claims.
5. In the event there is conflict between the indemnity and defense provisions and California Civil Code Sections 2782 and 2782.8, the indemnity and defense provisions shall be interpreted to comply with Civil Code sections 2782 and 2782.8.

H. Quality Control

ENGINEER shall implement and maintain the following quality control procedures during the preparation of the plans and documents relating to PROJECT. ENGINEER shall have a quality control plan in effect during the entire time services are being performed under this contract. The plan shall establish a process whereby calculations are independently checked, plans checked, corrected and back-checked, and all job related correspondence and memoranda routed and received by affected persons and then bound in appropriate job files. Where several drawings show different work in the same area, means shall be provided to avoid conflicts and misalignment in both new and existing improvements. Evidence that the quality control plan is functional may be requested by the COUNTY PROJECT MANAGER. All plans, calculations documents and other items submitted to the COUNTY PROJECT MANAGER for review shall be marked clearly as being fully checked and that the preparation of the material followed the quality control plan established for the work.

I. Value Engineering

1. Elements of PROJECT may be considered for Value Engineering Studies. To this end, the COUNTY

PROJECT MANAGER may direct the ENGINEER to examine the various elements of a design segment and submit an informal written statement or memorandum addressing those elements where it appears significant savings and other advantages can be realized. The statement shall be sufficiently informative to enable COUNTY to determine whether to direct a detailed Value Engineering Study or possibly direct immediate design changes where the value of the change is apparent without the need of detailed study and analysis.

2. ENGINEER or its subcontractors shall not incorporate in the design materials or equipment of single or sole source origin without written approval of COUNTY. Proprietary names of material or equipment shall not be used in the plans and specifications.

J. Extra Work

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

K. Disputes

1. In the event ENGINEER considers any work demanded of him to be outside the requirements of the contract, or if he considers any order, instruction, or decision of COUNTY to be unfair, he shall promptly upon receipt of such order, instruction or decision, ask for a written confirmation of the same whereupon he shall proceed without delay to perform the work or to conform to the order, instruction, or decision; but unless ENGINEER finds such order, instruction, or decision satisfactory, he shall within 20 days after receipt of same, file a written protest with COUNTY stating clearly and in detail his objections and reasons therefore. Except for such protests or objections as are made of record in the manner specified and within the time stated herein, and except for such instances where the basis of a protest could not reasonably have been foreseen by ENGINEER within the time limit specified for protest, ENGINEER hereby waives all grounds for protests or objections to the orders, instruction, or decisions of COUNTY

and hereby agrees that, as to all matters not included in such protests, the orders, instructions and decisions of COUNTY will be limited to matters properly falling within COUNTY's authority.

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

L. Termination Without Cause

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

M. Termination for Lack of Performance

COUNTY may terminate this contract and be relieved of the payment of any consideration to ENGINEER should ENGINEER fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination, COUNTY may proceed with the work in any manner deemed proper by COUNTY. In such event, ENGINEER shall be paid only for work completed and delivered to COUNTY in a timely and successful manner.

N. Insurance

Without limiting or diminishing the ENGINEER'S obligation to indemnify or hold the COUNTY harmless, ENGINEER shall procure and maintain or cause to be maintained, at its sole cost and expense, the following insurance coverage's during the term of this Agreement. As respects to the insurance section only, the

COUNTY herein refers to the County of Riverside, its Agencies, Districts, Special Districts, and Departments, their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as Additional Insureds.

1. Workers' Compensation:

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

2. Commercial General Liability:

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

3. Vehicle Liability:

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

4. Professional Liability

   ENGINEER shall maintain Professional Liability Insurance providing coverage for the ENGINEER's performance of work included within this Agreement, with a limit of liability of not less then $1,000,000 per occurrence and $2,000,000 annual aggregate. If ENGINEER's Professional Liability Insurance is written on a claims made basis rather than an occurrence basis, such insurance shall continue through the term of this Agreement and ENGINEER shall purchase at his sole expense either 1) an Extended Reporting

Endorsement (also, known as Tail Coverage); or 2) Prior Dates Coverage from new insurer with a retroactive date back to the date of, or prior to, the inception of this Agreement; or 3) demonstrate through Certificates of Insurance that ENGINEER has Maintained continuous coverage with the same or original insurer. Coverage provided under items; 1), 2), or 3) will continue as long as the law allows.

5. General Insurance Provisions - All lines:

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

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

   c. ENGINEER shall cause ENGINEER'S insurance carrier(s) to furnish the County of Riverside with either 1) a properly executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein, and 2) if requested to do so orally or in writing by the County Risk Manager, provide original Certified copies of policies including all Endorsements and all attachments thereto, showing such insurance is in full force and effect. Further, said Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that thirty (30) days written notice shall be given to the County of Riverside prior to any material modification, cancellation, expiration or reduction in coverage of such insurance. In the event of a material modification, cancellation, expiration, or reduction in coverage, this Agreement shall terminate forthwith, unless the County of Riverside receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverage's set forth herein

and the insurance required herein is in full force and effect. ENGINEER shall not commence operations until the COUNTY has been furnished original Certificate (s) of Insurance and certified original copies of endorsements and if requested, certified original policies of insurance including all endorsements and any and all other attachments as required in this Section. An individual authorized by the insurance carrier to do so on its behalf shall sign the original endorsements for each policy and the Certificate of Insurance.

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

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

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

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

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

O. Conflict of Interest

ENGINEER warrants, by execution of this contract, that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by ENGINEER for the purpose of securing business. For breach or violation of this warranty, COUNTY has the right to annul this contract without liability, pay only for the value of the work actually performed, or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or

contingent fee. ENGINEER may be requested to complete a Conflict of Interest Statement prior to, during, or after execution of this contract. ENGINEER understands that as a condition of this contract ENGINEER agrees to complete the Conflict of Interest Statement when requested to do so by COUNTY.

P. Legal Compliance

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

Q. Nondiscrimination

1. During the performance of this contract, ENGINEER and its Subcontractors shall not act unlawfully against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age or sex. ENGINEER and Subcontractor shall comply with the provisions of the Fair Employment and Housing Act (Government Code, Section 12900 et seq.) and applicable regulations promulgated thereunder (California Administrative Code, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12900, set forth in Chapter 5 of Division 4 of Title 2 of the California Administrative Code are incorporated into this contract by reference and made a part hereof as if set forth in full. ENGINEER and its Subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
2. ENGINEER will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by COUNTY or AGENCIES to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of ENGINEER is in the exclusive possession of another who fails or refuses to furnish this information, ENGINEER shall so certify to COUNTY, or the Federal Highway Administration as appropriate and shall set forth what efforts he has made to obtain the information.
3. In the event of ENGINEER's noncompliance with the nondiscrimination provisions of this contract, COUNTY shall impose such contract sanctions as it determines to be appropriate, including, but not

limited to:

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

4. ENGINEER shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under this contract.
5. ENGINEER shall comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, 49 CFR 21 through Appendix H and 23 CFR 710.405(b) are applicable to this contract by reference.

R. Labor Code and Prevailing Wages

1. Certain Classifications of Labor under this contract may be subject to prevailing wage requirements.
2. Reference is made to Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section 1720). By this reference said Chapter 1 is incorporated herein with like effect as if it were here set forth in full. The parties recognize that said Chapter 1 deals, among other things with discrimination, penalties and forfeitures, their disposition and enforcement, wages, working hours, and securing worker's compensation insurance and directly effect the method of prosecution of the work by ENGINEER and subject it under certain conditions to penalties and forfeitures. Execution of the contract by the parties constitutes their agreement to abide by said Chapter 1, their stipulation as to all matters which they are required to stipulate as to by the provisions of said Chapter 1, constitutes ENGINEER's certification that he is aware of the provisions of said Chapter 1 and will comply with them and further constitutes ENGINEER's certification as follows: "I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this contract."
3. Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates, including the per diem wages applicable to the work, and for holiday and overtime work, including employer payments for health and welfare, pension, vacation, and similar purposes, in the county in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are available from the California Department of Industrial Relations' Internet website at http://www.dir.ca.gov.
4. Should a portion of the project contain Federal funding, Federal minimum wages shall be used. The Federal minimum wage rates for this project as determined by the United States Secretary of Labor are

available from the U.S Department of Labor, Employment Standards Administration, Wage and Hour Division's Internet website at http://www.access.gpo.gov/davisbacon. If there is a difference between the minimum wage rates determined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the ENGINEER and subcontractors shall pay not less than the higher wage rate. The Department will not accept lower State wage rates determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the ENGINEER and subcontractors, the ENGINEER and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

S. Review and Inspection

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

T. Record Retention / Audits

1. ENGINEER's and subconsultants' contracts, including cost proposals and indirect cost rates (ICR), are subject to audits or reviews such as, but not limited to, a Contract Audit, an Incurred Cost Audit, an ICR Audit, or a certified public accountant (CPA) ICR Audit Workpaper Review. If selected for audit or review, the contract, cost proposal and ICR and related workpapers, if applicable, will be reviewed to verify compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR Audit Workpaper Review, it is ENGINEER's responsibility to ensure federal, state, or local government officials are allowed full access to the CPA's workpapers. The contract, cost proposal, and ICR shall be adjusted by ENGINEER and approved by COUNTY contract manager to conform to the audit or review recommendations. ENGINEER agrees that individual terms of costs identified in the audit report shall be incorporated into the contract by this reference if directed by COUNTY at its sole discretion. Refusal by ENGINEER to incorporate audit or review recommendations, or to ensure that the Federal, State, or local governments have access to CPA workpapers, will be considered a breach of contract terms and cause for termination of the contract and disallowance of prior reimbursed costs.
2. ENGINEER, Subcontractors, and COUNTY shall maintain all books, documents, papers, accounting

records, and other evidence pertaining to the performance of the contract, but not limited to, the costs of administering the contract. All parties shall make such materials available at their respective offices at all reasonable times during the contract period and for ten years from the date of final payment under the contract or ten years from project closeout, whichever is later.

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

U. Rebates, Kickbacks, or Other Unlawful Consideration

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

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

1. ENGINEER certifies to the best of his or her knowledge and belief that:
   a. No state, federal or local agency appropriated funds have been paid, or will be paid by-or-on behalf of ENGINEER to any person for influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in connection with the awarding of any state or federal contract; the making of any state or federal grant; the making of any state or federal loan; the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.
   b. If any funds other than federal appropriated funds have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection with this federal contract, grant, loan, or cooperative agreement; ENGINEER shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with

its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, US. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.
3. ENGINEER also agrees by signing this document that he or she shall require that the language of this certification be included in all lower-tier subcontracts, which exceed $100,000, and that all such sub recipients shall certify and disclose accordingly.

W. Ownership of Data

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

X. Confidentiality of Data

1. All financial, statistical, personal, technical or other data and information which is designated confidential by COUNTY or AGENCIES, and made available to ENGINEER in order to carry out this contract, shall be protected by ENGINEER from unauthorized use and disclosure.
2. Permission to disclose information on one occasion for a public hearing held by COUNTY or AGENCIES relating to the contract shall not authorize ENGINEER to further disclose such information or disseminate the same on any other occasion.
3. ENGINEER shall not comment publicly to the press or any other media regarding the contract, including COUNTY or Agencies actions regarding this contract. Communication shall be limited to COUNTY, Agency or ENGINEER's staff that are involved with the project, unless ENGINEER shall be requested by COUTY to attend a public hearing or respond to questions from a Legislative committee.
4. Each subcontract shall contain provisions similar to the foregoing related to the confidentiality of data and nondisclosure of the same.
5. ENGINEER shall not issue any news release or public relations item of any nature whatsoever regarding work performed or to be performed under this contract without prior review of the contents thereof by COUNTY and receipt of COUNTY's written permission.

Y. Funding Requirements

1. All obligations of COUNTY are subject to appropriation of resources by various Federal, State and local agencies.
2. This contract is valid and enforceable only if sufficient funds are made available to COUNTY for the purpose of this PROJECT. In addition, this contract is subject to any additional restrictions, limitations, conditions or any statute enacted by Congress, State Legislature or COUNTY that may affect the provisions, terms or funding of this contract in any manner.
3. It is mutually agreed that if sufficient funds for the program are not appropriated, this contract will be amended or terminated to reflect any reduction in funds.

ARTICLE V • PERFORMANCE

A. Performance Period

1. This contract shall begin upon notification to proceed by the COUNTY PROJECT MANAGER.
2. ENGINEER is advised that any recommendation for contract award is not binding on COUNTY until the proposed contract is fully executed and approved by COUNTY.
3. ENGINEER shall perform PROJECT services in accordance with the provisions set forth in Appendix B, Schedule of Services, which is attached hereto and incorporated herein by reference.
4. Where ENGINEER is required to prepare and submit studies, reports, plans, etc., to COUNTY, these shall be submitted in draft as scheduled, and the opportunity provided for COUNTY to offer comments prior to final submission.
5. When COUNTY determines that ENGINEER has satisfactorily completed the PROJECT services, COUNTY may give ENGINEER a written Notice of Final Acceptance. ENGINEER shall not incur any further costs hereunder unless so specified in the Notice of Final Acceptance. ENGINEER may request a Notice of Final Acceptance determination when, in its opinion, it has satisfactorily completed all covenants as stipulated in this contract.
6. Time is of the essence in this contract.

B. Time Extensions

1. Any delay in providing PROJECT services required by this contract occasioned by causes beyond the control and not due to the fault or negligence of ENGINEER, shall be the reason for granting an extension of time for the completion of the aforesaid work. When such delay occurs, ENGINEER shall promptly

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

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

C. Reporting Progress

1. As part of the monthly invoice ENGINEER shall provide progress information on individual tasks and/or deliverables in accordance with COUNTY Consulting Services Manual.
2. To ensure understanding and performance of the contract objectives, meetings between COUNTY, AGENCIES, and ENGINEER shall be held as often as deemed necessary (typically monthly). All work objectives, ENGINEER's work schedule, the terms of the contract and any other related issues will be discussed and/or resolved. ENGINEER shall keep minutes of meetings and distribute copies of minutes as appropriate. The COUNTY Consulting Services Manual specifies a list of the documents that are expected to be prepared and distributed to the Project Team members as part of these progress meeting.

D. Evaluation of ENGINEER

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

ARTICLE VI • COMPENSATION

A. Work Authorization

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

B. Basis of Compensation

1. PROJECT services as provided under this contract and as described in the Scope of Services, shall be compensated for as defined in Appendix C, Budget, which is attached hereto and incorporated herein by reference. The total amount of the contract is not to exceed $1,500,000 ($1,353,130 + $146,870 contingency) and reimbursement is to be made at actual cost plus fixed fee for the following contractors:

Michael Baker International	$615,182
• Applied Earthworks	$17,098
• Arellano Associates	$54,767
• Converse Consultants	$4,835

• Fehr & Peers	$243,381
• HDRs	$341,687
• OPC	$15,153
• POWER	$61,027
Contingency	$146,870

If a contingency budget is provided, COUNTY shall hold such contingency in reserve for unforeseen Extra Work that may arise during the performance of this agreement. Contingency funds shall only be used at the discretion of the COUNTY PROJECT MANAGER. Use of Contingency funds will be authorized by issuance of an Administrative Budget Modification by COUNTY.

No additional compensation for Extra Work will be paid except upon the issuance of an Administrative Budget Modification by COUNTY or by execution of an amendment between COUNTY and ENGINEER.

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

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

4. Any equipment purchased as a result of this contract is subjected to the following: ENGINEER shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of $500 or more. If the purchased equipment needs replacement and is sold or traded in, COUNTY shall receive a proper refund or credit. At the conclusion of the contract or if the contract is terminated, ENGINEER may either keep the equipment and credit COUNTY in an amount equal to its fair market value or sell such equipment at the best price obtainable at a public or private sale in accordance with established COUNTY procedures and credit COUNTY in an amount equal to the sales price. If ENGINEER elects to keep the equipment, fair market value shall be determined, at ENGINEER's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable by COUNTY, and ENGINEER. If it is determined to sell the equipment, the terms and conditions of such sale must be

approved in advance by COUNTY and AGENCIES.

5. The consideration to be paid ENGINEER, as provided herein, shall be in compensation for all of ENGINEER's expenses incurred in the performance hereof, including travel and per diem, unless otherwise expressly so provided.
6. ENGINEER agrees that the Contract Cost Principles and Procedures, CFR 48, Federal Acquisition Regulations Systems, Chapter 1, Part 31, shall be used to determine the allowability of individual items of cost.
7. ENGINEER agrees to comply with the federal Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards of 2 CFR, Part 200.
8. ENGINEER also agrees to comply with Federal procedures in accordance the Code of Federal Regulations Section 49, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments
9. In the event of errors or omissions in the plans for PROJECT, ENGINEER shall perform the necessary engineering services required to correct such errors and omissions without additional charge to COUNTY.

C. Progress Payments

1. ENGINEER shall submit monthly invoices for PROJECT Services in accordance with Appendix C, Budget, and in accordance with COUNTY Consulting Services Invoicing Procedures.
2. ENGINEER shall submit an invoice each month for PROJECT services performed during the preceding month. Invoices shall be submitted to the COUNTY PROJECT MANAGER and shall include supporting progress documentation as defined in the COUNTY supplied Invoice Templates.
3. Progress payments will be based on PROJECT services provided and actual costs incurred. Payments made prior to the completion of each phase will not exceed the amount allowed in ENGINEER's cost proposal for the completion of that phase and prior phases, unless approved in writing by the COUNTY PROJECT MANAGER. Budgets established for individual Tasks within can be distributed between tasks within the same Phase without approval of the COUNTY PROJECT MANAGER with the exception of funds being transferred between sub consultants or between the prime and sub consultants. Budget Modifications that impact budgets specified for sub consultants require written approval by the COUNTY PROJECT MANAGER.
4. Progress payments will be made as promptly as fiscal procedures will permit upon receipt by the

COUNTY PROJECT MANAGER of itemized invoices.

5. COUNTY will withhold the last 10 percent of the budget for preparation of the final PS&E documents. The 10 percent retainage is to be held after 90% of the PS&E phase has been billed and is not to be deducted from each invoice. The amount retained will be paid to ENGINEER after COUNTY has approved ENGINEER's PS&E documents.

ARTICLE VII • GIS INFORMATION

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

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

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

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

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

not yet be reflected in COUNTY GIS.

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

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

ARTICLE VIII • APPROVALS

COUNTY Approvals

RECOMMENDED FOR APPROVAL:

Dated: 2-21-17

PATRICIA ROMO

Director of Transportation

APPROVED AS TO FORM:

GREGORY P. PRIAMOS, COUNTY COUNSEL

Dated: 2/22/17

Chief Deputy

By Deputy

APPROVAL BY THE BOARD OF SUPERVISORS

Dated: MAR 07 2017

JOHN TAVAGLIONE

PRINTED NAME

Chairman, Riverside County Board of Supervisors

ATTEST:

Dated: MAR 07 2017

KECIA HARPER-IHEM

Clerk of the Board (SEAL)

ENGINEER Approvals

ENGINEER:

Dated: 12/12/16

Darin Johnson

PRINTED NAME

Vice President

TITLE

ENGINEER:

Dated: 12/12/16

Steve Huff

PRINTED NAME

Assistant Corporate Secretary

TITLE

APPENDIX A • SCOPE OF SERVICES

TABLE OF CONTENTS

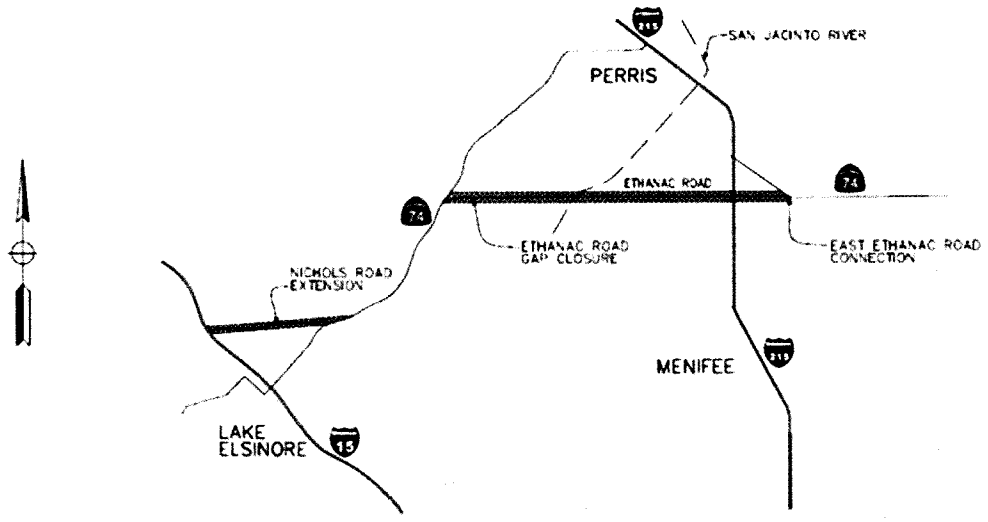
APPENDIX A • ARTICLE AI • INTRODUCTION

A. PROJECT DESCRIPTION

The County of Riverside (COUNTY) identified a need to study the El Toro Ethanac Expressway Project (PROJECT). The PROJECT is a critically important intra-county route. It connects the Cities of Hemet, San Jacinto, Menifee, Perris and Lake Elsinore, and the unincorporated communities of Winchester, Homeland, Romoland, Goodhope, Meadowbrook, and Warm Springs. The PROJECT and the Cajalco/Ramona Expressway are planned to function as the primary east-west, non-freeway arterial routes that are centrally located to serve all of Western Riverside County. The corridor to be studied would include the two-mile missing link, bridge crossing, grade separation, and new road. The study will need to be a comprehensive corridor study that evaluates multimodal options including transit and active transportation concepts, as these mobility options are essential components of a comprehensive system. It is anticipated that construction of the project will be funded in part with federal funds. It is assumed that SR-74 between the future Nichols Road and Ethanac Road is considered relinquished to the COUNTY for the preparation of PROJECT deliverables identified in Phase I Services.

B. LOCATION

The PROJECT is located within the Cities of Lake Elsinore, Perris, Menifee and unincorporated County of Riverside in the County of Riverside. The limits of the PROJECT begin at the I-15/Nichols Road interchange to the west, and end at the SR-74/Ethanac Road connection to the east.



VICINITY MAP

NO SCALE

C. **COORDINATION**

Michael Baker International, Inc. and its consultants (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:

- Other Riverside County Departments
- Riverside County Transportation Commission
- Caltrans
- Utility Companies
- U.S. Army Corp of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)
- California Department of Fish and Game (CDFG)
- Regional Water Quality Control Board (RWQCB)
- Cities of Canyon Lake, Lake Elsinore, Menifee and Perris
- Local Developers

All meetings with other outside agencies will be scheduled by ENGINEER with approval of COUNTY.

D. **PHASES**

The services performed by ENGINEER will be accomplished in 1 Phase:

- Phase I – Corridor Vision and Development

Phase I will proceed upon written notice to proceed.

E. **STANDARDS**

All plans and reports will be prepared under County of Riverside, Caltrans, City of Lake Elsinore, City of Menifee, or City of Perris standards and guidelines as appropriate.

F. **KEY PERSONNEL**

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

Project Manager	Tim Haile
Environmental Lead	Court Morgan

Engineering Lead	Mark Hager
Traffic Lead	Jason Pack

ARTICLE AII • SERVICES TO BE PROVIDED

A. CONTRACT DELIVERABLES

Task 1.4 – Quality Control Plan

Task 5.0 – Corridor Vision Strip Map

Task 6.2 – Forecasting Methodology memorandum

Task 6.2 – Forecast Volumes Memorandum

Task 6.3 – Traffic Report

Task 7.0 – Project Action Plan Strip Map

Task 9.0 – Alternative Development Exhibits

Task 10.0 – Right of Way Requirement Strip Maps

Task 11.12 – Preliminary Environmental Study Form

Task 13.0 – Preliminary Project Cost Estimates

Task 16.0 – Draft Corridor Development Report

Task 17.0 – Final Corridor Development Report

All deliverables will be provided to the COUNTY in pdf formats at a minimum.

B. PHASE I SERVICES

1.0 PROJECT MANAGEMENT

1.1 PROJECT EXECUTION AND COORDINATION

ENGINEER will be responsible for overall project management, liaison with the COUNTY and other affected agencies, and progress monitoring and maintenance of PROJECT files. ENGINEER will supervise, coordinate, monitor and review PROJECT for conformance with COUNTY standards, policies and procedures. ENGINEER shall prepare an invoice on a monthly basis.

ENGINEER will develop an Action Item Log and Decisions Log. The logs will be maintained on a weekly basis, and distributed electronically or at meetings as necessary.

1.2 PROJECT MEETINGS

ENGINEER will schedule PROJECT meetings with the COUNTY. The purpose of these meetings will be to discuss and resolve project issues and coordinate activities. ENGINEER will prepare and

electronically distribute agendas at least five (5) working days prior to each meeting. ENGINEER will lead these meetings and will prepare meeting minutes and electronically distribute them to the appropriate parties within five (5) working days after the meetings. ENGINEER will provide hardcopies of meeting agendas, the prior meeting's minutes, deliverables log, decision log, action items log, and sixty (60)-day look ahead schedule at each monthly PROJECT meeting. A total of nine (9) PROJECT meetings will be attended by four (4) ENGINEER's team staff.

Individual focused meetings will likely be held with various agencies, cities, resource agencies, and stakeholders involved in the PROJECT. ENGINEER will prepare and electronically distribute agendas at least five (5) working days prior to each stakeholder and other coordination meeting. ENGINEER will attend these meetings as required and prepare meeting minutes and electronically distribute them within five (5) working days after each meeting in which it attends. A total of nine (9) additional stakeholder/focused coordination meetings are anticipated to be attended by up to four (4) ENGINEER's team staff.

A Pre-Application meeting at the Western Riverside County Regional Conservation Authority (RCA) is anticipated to obtain input from resource agencies regarding the PROJECT.

Deliverables:

- PROJECT Meetings and Meeting Agendas/Minutes (9 total)
- Stakeholder/Focused Coordination Meetings and Meeting/Minutes (9 total)
- Pre-Application Meeting with RCA

1.3 PROJECT SCHEDULING

A detailed project schedule will be created and maintained by the ENGINEER to include the progress of individual tasks and a status of deliverables. ENGINEER will coordinate with the COUNTY to prepare and obtain concurrence on the initial baseline project schedule within six (6) weeks following Notice to Proceed (NTP). ENGINEER will schedule one (1) PROJECT schedule meeting with the COUNTY to review sequence and duration of all activities and obtain concurrence of the baseline project schedule. ENGINEER will develop detailed critical path logic (CPM) schedule for the project using Microsoft Project. ENGINEER will prepare a 60-day look ahead schedule for the monthly PROJECT meetings. ENGINEER will continue to monitor and track all tasks and update the project schedule accordingly.

ENGINEER will prepare a Deliverables Log for distribution at each monthly PROJECT meeting. The

Deliverables Log will be reflective of the current project schedule and will be maintained monthly.

1.4 QUALITY CONTROL PLAN (QCP)

ENGINEER will develop and implement a written Quality Control Plan (QCP) for all elements of the PROJECT, including, but not limited to, management, administration, design, and environmental studies and compliance. The QCP shall specify the quality procedures for the project work that must be approved by the COUNTY prior to any deliverable work being prepared on any element of the PROJECT. The QCP shall delineate how the ENGINEER will ensure that all disciplines, aspects, and elements of the Work will comply with the requirements of the Contract Documents and that all materials incorporated into the work will perform satisfactorily for the purpose intended.

Deliverable:

- Quality Control Plan (QCP)

1.5 DOCUMENT CONTROL/SHAREPOINT

ENGINEER will initiate project SharePoint site for stakeholders and ENGINEER to share files. SharePoint set-up includes initiation, custom file structure, file uploading, user invites, and continuous file management and organization. File management will be monitored on a weekly basis or more frequent on an as-needed basis.

2.0 REVIEW EXISTING REPORTS, STUDIES, MAPPING AND OTHER INFORMATION

COUNTY will provide existing reports, studies, mapping, and other information for the PROJECT to ENGINEER. ENGINEER will review all information provided and obtain any other necessary information for preparation of the Corridor Development Report. ENGINEER will obtain as-builts, Transportation Concept Report/Route Concept Report (TCR/RCR), Corridor System Management Plan (CSMP), Regional Transportation Plan (RTP), Congestion Management Program (CMP), 10-Year SHOPP, the State Implementation Plan, County General Plan, City General Plans, local development plans, other reports. ENGINEER will prepare an inventory list of related reports, studies, mapping and other information.

ENGINEER shall perform field reconnaissance when necessary. Field reviews will be limited to publicly accessible proposed arterial intersection, freeway/highway interchange improvement locations and private property in accordance to executed right of entries.

3.0 SURVEYS AND MAPS

ENGINEER will utilize available GIS right of way mapping and aerial photo mapping for use in project deliverables for the PROJECT. Available aerial photo mapping will be the used as the base mapping for all deliverables. Design surveys, aerial topographic mapping or right of way mapping/surveys for the PROJECT will not be required for this phase of the PROJECT.

4.0 PROJECT SCOPING

This task is established to kick-off the project with the COUNTY as the lead agency including scoping discussions for the PROJECT to understand the vision of the corridor development and widening for the COUNTY. This task will include five (5) meetings with the following entities:

- County of Riverside
- Caltrans
- City of Lake Elsinore
- City of Perris
- City of Menifee

Deliverables:

- Project Scoping Meeting Agendas/Minutes (5 total)

5.0 CORRIDOR VISION

ENGINEER will establish a Corridor Vision for the corridor from the I-15/Nichols Road interchange as the western limit, to the SR-74 (Romoland)/Ethanac Road connection as the eastern limit. The Corridor Vision will help guide roadway design concepts to be consistent with an overall corridor vision and complimentary to adjacent context zones, local jurisdiction standards, and will provide sufficient capacity and operational characteristics based on a constrained corridor analysis. The Corridor Vision will include preliminary determination of the number of lanes, design speed, intersection spacing, appropriate complete street treatments (e.g. providing for all users of all ages and all abilities), bicycle facilities, future existing and future transit operations, Active Transportation Program features and multi-modal capabilities. The Corridor Vision will be based on the scoping meetings conducted as part of Task 4.0. The Corridor Vision will be presented visually on a strip map at two Corridor Vision Workshops. The Corridor Vision Workshops will be attended by the PROJECT stakeholders. The strip map will be in color using a page size of approximately 36" by 72". The Corridor Vision will be triple-stacked so that

Nichols Road, SR-74 and Ethanac Road will be presented on the same deliverable.

ENGINEER will review existing and planned multimodal facilities and services to identify project elements that need to be included in the corridor improvement design and operation. Project elements to be identified include transit routes and services, bus stop locations, bus turnouts, and active transportation facilities such as bicycle lanes and routes. To obtain this information ENGINEER will work with the COUNTY and other local agencies in the corridor including the Cities of Lake Elsinore, Perris, and Menifee, as well as the Riverside Transit Agency (RTA) and the Western Riverside Council of Government (WRCOG).

It is assumed the COUNTY and stakeholders will provide one round of consolidated review comments on the Draft Corridor Vision Strip Map following each Corridor Vision Workshop. All comments will be addressed and incorporated into the Final Corridor Vision Strip Map.

Deliverables:

- Corridor Vision Strip Map

6.0 TRAFFIC FORECASTING AND ANALYSIS

The PROJECT represents a major new corridor in the COUNTY consistent with the County and Cities General Plans, which will significantly change travel patterns along I-15, SR-74, and I-215. The following intersections and freeway segments will be used as the basis of the STUDY AREA for the traffic forecasting analysis effort within this scope of work.

Local Roadway

The study area for the local roadway network and segments will be limited to major arterials within the area bounded by Cajalco Road to the north, I-215 to the east, I-215/I-15 split to the south, and I-15 to the west.

Intersections

- Collier Avenue/Nichols Road
- I-15 Southbound Ramps/Nichols Road
- I-15 Northbound Ramps/Nichols Road
- SR-74/El Toro Cutoff Road
- SR-74/Nichols Road (Proposed)
- SR-74/Ethanac Road (Existing)
- SR-74/Ethanac Road (Proposed)
- Goetz Road/Ethanac Road
- Murrieta Road/Ethanac Road
- Barnet Road (Case Road)/Ethanac Road
- I-215 Southbound Ramps/Ethanac Road
- I-215 Northbound Ramps/Ethanac Road

- Encanto Road/Ethanac Road
- Case Road/Ethanac Road
  - Palomar Road/SR-74
  - Menifee Road/SR-74
  - SR-74/Ethanac Road (Proposed)
  - Collier Avenue/SR-74
  - I-15 Southbound Ramps/SR-74
  - I-15 Northbound Ramps/SR-74
  - SR-74/Dexter Avenue
  - Redlands Avenue/East 4th Street
  - I-215 Southbound Ramps/Redlands Avenue
  - I-215 Northbound Ramps/Redlands Avenue
  - Redlands Avenue/San Jacinto Avenue
  - South D Street/4th Street
  - I-215 Southbound Ramps/Bonnie Drive
  - I-215 Northbound Ramps/SR-74
  - SR-74/Trumble Road

Freeway

- I-15 Northbound
  - Mainline south of SR-74 Road
  - Diverge/Merge at SR-74
  - Mainline between SR-74 and Nichols Road
  - Diverge/Merge at Nichols Road
  - Mainline north of Nichols Road
- I-215 Northbound
  - Mainline south of Ethanac Road
  - Diverge/Merge at Ethanac Road
  - Mainline between Ethanac Road and SR-74
  - Diverge/Merge at SR-74
  - Mainline between SR-74 and Redlands Avenue
  - Diverge/Merge at Redlands Avenue
  - Mainline between Redlands Avenue and D Street
  - Merge at D Street
  - Mainline north of D Street
- I-15 Southbound
  - Mainline north of Nichols Road
  - Diverge/Merge at Nichols Road
  - Mainline between Nichols Road and SR-74
  - Diverge/Merge at SR-74
  - Mainline south of SR-74
- I-215 Southbound
  - Mainline north of D Street
  - Diverge at D Street
  - Mainline between D Street and Redlands Avenue
  - Diverge/Merge at Redlands Avenue
  - Mainline between Redlands Avenue and SR-74
  - Diverge/Merge at SR-74
  - Mainline between SR-74 and Ethanac Road
  - Diverge/Merge at Ethanac Road
  - Mainline south of Ethanac Road

6.1 DATA COLLECTION

Engineer will obtain the following information for the traffic forecasting and analysis within the defined STUDY AREA:

- New AM and PM peak period vehicle traffic, truck traffic, bicycle, and pedestrian counts at all study intersections and roadway segments
- Caltrans PeMS Database and Caltrans Vehicle Classification Reports

6.2 TRAFFIC FORECASTING

ENGINEER will utilize RIVTAM to develop forecasts in the study area. ENGINEER will coordinate with COUNTY staff to either update RIVTAM with the proposed corridor (and account for other approved/pending development projects in the study area) or use the version of RIVTAM being updated for use in the WRCOG TUMF update for forecasting in this area.

ENGINEER will coordinate with COUNTY staff to verify assumptions for land use, future roadway network connectivity, and sizing of Ethanac Road through the corridor. Traffic forecasting and analysis will be conducted under the following study scenarios:

- Existing Conditions
- Opening Year (2025) Conditions – No Build Alterative
- Opening Year (2025) Conditions – Build Alternative with sequencing/phasing expected by 2025 (one build alternative with up to three different intersection configurations at the ramp terminal intersections, the SR-74/Nichols Road intersection, SR-74/Ethanac Road west intersection, and the SR-74/Ethanac Road east intersection)
- Interim Year (2035) Conditions – No Build Alternative
- Interim Year (2035) Conditions - Build Alternative with sequencing/phasing expected by 2035 (one build alternative with up to three different intersection configurations at the ramp terminal intersections, the SR-74/Nichols Road intersection, SR-74/Ethanac Road west intersection, and the SR-74/Ethanac Road east intersection)
- Design Year (2045) Conditions – No Build Alternative
- Design Year (2045) Conditions –Build Alternative (one build alternative with up to three different intersection configurations at the ramp terminal intersections, the SR-74/Nichols Road intersection, SR-74/Ethanac Road west intersection, and the SR-74/Ethanac Road east intersection)

ENGINEER will prepare a memorandum identifying the assumptions, methodologies and scope of services for the traffic analysis. The memorandum will memorialize the travel demand model use, the model assumptions (land use and future roadway network assumptions), and methodology for traffic analysis.

The analysis will be conducted using the methodologies contained in the Highway Capacity Manual 2010 (HCM 2010) and will be limited to macro-level tools (e.g. Synchro, HCS, etc.). Microsimulation is not assumed under this task. Traffic forecasting will be conducted under the study scenarios identified above. ENGINEER will prepare a Forecast Volumes Memorandum for review by the COUNTY and Cities.

ENGINEER will evaluate the STUDY AREA under the Design Year (2045) scenario to identify the facility needs (e.g. number of lanes) in support of the Corridor Vision (Task 5.0).

Deliverable:

- Forecasting Methodology Memorandum
- Forecast Volumes Memorandum

6.3 TRAFFIC REPORT

To begin the sequencing portion of the project, ENGINEER will first identify deficiencies on the transportation system for the "No Build" scenario under the following analysis horizons:

- Existing Conditions
- 2025 Opening Year No Project Conditions
- 2035 Interim Year No Project Conditions
- 2045 Design Year No Project Conditions

ENGINEER will develop the No Project forecasts and will utilize them to identify when deficiencies would likely occur in the study area. Of key concern, ENGINEER will complete operations assessment of the I-15/Nichols Road interchange, I-15/SR-74 interchange, SR-74, and I-215/Ethanac Road interchange to identify when those facilities are expected to degrade to unacceptable operations without the project and with the project. Additionally, ENGINEER will use the model under these analysis scenarios to identify key metrics for a broader study area bounded by Cajalco Road to the north, I-215 to the east, I-215/I-15 split to the south, and I-15 to the west. Key metrics anticipated to be used in this assessment include model segment volume-to-capacity (e.g. a map where the model predicts

congestion), area hours of delay, and lane miles of congestion. ENGINEER will prepare an Existing Conditions Assessment Memorandum based on the evaluation of the above scenarios in support of the Project Action Plan.

ENGINEER will complete up to six select link model runs to identify the origins and destinations of people using the key segments identified above as being congested. This will assist in informing the team related to segmentation of the project. ENGINEER will complete up to six complete model runs to test "packages" of sequenced improvements to quantify their effect on the transportation network. This evaluation will confirm logical termini and independent utility for each of the segments

Once project sequencing has been finalized, ENGINEER will utilize the sequencing strategy to test potential phasing of the project within each sequence (e.g. how long will two lanes operate acceptably before needing widening to four lanes on each segment and which segments trigger additional widening).

ENGINEER will evaluate the STUDY AREA using methodologies consistent with the methodologies identified in the Transportation Research Board's (TRB) Highway Capacity Manual (HCM) (2010). For intersections, ENGINEER will utilize the Synchro (Version 9) software and will utilize a HCM-consistent spreadsheet for freeway segments.

ENGINEER will document the results of the traffic analysis in a Draft Traffic Report. This report will also prepare a scope for future traffic engineering studies. It is assumed that one (1) single document for the entire study corridor.

Deliverables:

- Traffic Report

7.0 PROJECT ACTION PLAN

For scoping purposes, it is assumed that the following discrete segments will be identified in the Project Action Plan as future projects:

- Segment 1A: Ethanac Road extension from SR-74 to San Jacinto River
- Segment 1B: Incremental improvements at I-215/Ethanac Road
- Segment 2: Interchange improvements at I-215/Ethanac Road
- Segment 3: Widen/realign Ethanac road (two (2) to four (4) lanes) from I-215 to SR-74
- Segment 4: Railroad grade separation

- Segment 5A: Nichols Road extension (four (4) lanes and SR-74 connection)
- Segment 5B: Incremental improvements at I-15/Nichols Road
- Segment 6: Interchange improvements at I-15/Nichols Road
- Segment 7: SR-74 improvements between future Nichols Road and Ethanac Road
- Segment 8: SR-74 improvements between Future Nichols Road and Dexter Avenue

Interim improvements and future widening for each of the above segments will be evaluated in the Project Action Plan.

ENGINEER will prepare a Project Action Plan Strip Map identifying the segments and sequencing of the project. Improvements will be identified for future projects based on the segments identified by the ENGINEER. The Project Action Plan Strip Map will provide recommendations on the scope, costs, and schedule of each of the future projects. The Project Action Plan Strip Map will identify the general scope of the future projects, such as number of lanes and construction limits. Engineering and environmental evaluation of each of the future projects is not included in this scope of work.

Deliverables:

- Project Action Plan Strip Map

8.0 ALTERNATIVE SCREENING AND EVALUATION

ENGINEER will conduct a preliminary alternative screening assessment for the following project segment:

- Nichols Road – Between I-15 and SR-74 (excluding I-15 interchange and including SR-74 connection)

ENGINEER will coordinate with the COUNTY to utilize existing base mapping from previously prepared studies and reports and will supplement, as necessary, from readily available sources for use with the Quantm system tool in order to develop alignment options for Nichols Road. ENGINEER shall assess the existing conditions of the roadway system and determine the geometric cross-section required to meet the project needs. Environmental data in the format of GIS.shp files from readily available sources will be imported into the Quantm system tool for the development and evaluation of the representative alternative alignments. Also, Quantm corridors alignments will be imported to GIS for further evaluation of environmental concerns for general comparison of environmental performance between up to three (3) representative alternative alignments. In addition, readily available terrain data (such as from USGS

or other recent project sources) and linear features such as streams and roadways will be imported into Quantm to generate corridor alignments within a realistic range for horizontal and vertical alignments (such as a bridge or culvert for stream crossings, and at-grade crossings for roadway intersections). Engineering cost information will be included within the Quantm system tool to generate order of magnitude cost estimates for the alternative alignments. Costs and other data that is refined or identified during the various project development phases can be updated in the Quantm system tool to develop more accurate results.

ENGINEER shall develop alternative alignments for the Nichols Road corridor using the Quantm system tool. Alignment corridor "trends" will be identified, assessed, and refined into up to three (3) representative alternative alignments from said corridor trends and subsequently summarized in the Corridor Development Report. The criteria for screening alternatives will be further developed after meetings with the COUNTY and major stakeholders. A matrix of screening criteria, identified issues and performance measures will be outlined within a corridor performance table and the order of magnitude corridor construction costs, environmental considerations, approximate right of way impacts, and other metrics and stakeholder input will be developed, evaluated. The matrix of screening criteria will allow the PROJECT team to evaluate the corridor "trends" developed by Quantm, and reduce the "trends" to three (3) viable build alternatives for the Nichols Road corridor. The alignments and rough order of magnitude costs developed by Quantm will utilize the ultimate roadway cross-section, and order of magnitude cost differences for phased improvements will be based on a per mile of roadway basis. Vertical profile design will be preliminarily evaluated during geometric development.

9.0 ALTERNATIVE DEVELOPMENT

ENGINEER will conduct preliminary alternative development for the following project segments:

- Nichols Road – Between I-15 and SR-74 (excluding I-15 interchange and including SR-74 connection)
- Ethanac Road – Between SR-74 (to the west) and the western abutment of San Jacinto River Bridge

ENGINEER will identify three (3) alternative concepts for the Corridor Development Report for the Nichols Road segment. The alternative concepts will identify two (2) design variations for the intersection at Nichols Road and SR-74. ENGINEER will prepare layout schematics (plan and profile) on

aerial photo base mapping in 11x17 format at 1" = 200' scale for three (3) alternative concepts for the Corridor Development Report. Layout schematics will also be prepared on 36x96 (inch) strip format at 1"=200" for use at PROJECT meetings. The layout schematics will include proposed lane configurations, shoulders, intersections, and right of way for each alternative. Right of way requirements, retaining wall and sound wall locations will be shown. Estimated right of way requirements will be based on grading limits using a 4:1 (H:V) slope grading rate. The three (3) build alternatives and two (2) design variations will be analyzed for geometric and operation feasibility based upon traffic analysis. The layout schematics will be prepared in Microstation format. Alternative concepts will also be provided to the COUNTY in KMZ format for viewing in Google Earth.

ENGINEER will identify one (1) alternative concept for the Corridor Development Report for the Ethanac Road segment between SR-74 and the western abutment of the future San Jacinto River Bridge. The alternative concept will identify two (2) design variations for the intersection at Ethanac Road and SR-74. ENGINEER will prepare layout schematics (plan and profile) on aerial photo base mapping in 11x17 format at 1" = 200' scale for alternative concept for the Corridor Development Report. Layout schematics will also be prepared on 36x96 (inch) strip format at 1"=200" for use at PROJECT meetings. The layout schematics will include proposed lane configurations, shoulders, intersections, and right of way for each alternative. Right of way requirements, retaining wall and sound wall locations will be shown. Estimated right of way requirements will be based on grading limits using a 4:1 (H:V) slope grading rate. The two (2) design variations will be analyzed for geometric and operation feasibility based upon traffic analysis. The layout schematics will be prepared in Microstation format. Alternative concepts will also be provided to the COUNTY in KMZ format for viewing in Google Earth.

Deliverables:

- Geometric Strip Layout Sheets
- Layout Sheets
- Typical Cross Section Sheets
- Design Variation Screening Matrix

10.0 RIGHT OF WAY REQUIREMENTS MAP/RIGHT OF ENTRY COORDINATION

ENGINEER will determine right of way needs and prepare preliminary right of way requirements maps. Right of way requirements may include the need for new right of way, permanent easements, slope

easements, and temporary construction easements. ENGINEER will prepare right of way requirement maps on aerial photo and GIS right of way base mapping in 36x96 format at 1" = 100' scale for three (3) alternative concepts for the Nichols Road Corridor and (1) alternative concept for Ethanac Road Corridor.

Executed Right of Entry letters will be coordinated by the COUNTY. ENGINEER will provide COUNTY information regarding the properties that require executed Right of Entry letters.

Deliverables:

- Right of Way Requirement Strip Maps for Nichols Road Corridor
- Right of Way Requirement Strip Maps for Ethanac Road Corridor

11.0 ENVIRONMENTAL ASSESSMENT

ENGINEER will conduct preliminary environmental assessment for the following project segments:

- Nichols Road – Between I-15 and SR-74 (excluding I-15 interchange and including SR-74 connection)
- Ethanac Road – Between SR-74 (to the west) and the western abutment of San Jacinto River Bridge

Provided below is a discussion regarding efforts that will be conducted to identify potential constraints that may influence build alternatives (e.g., alignment options) analyzed for the PROJECT. The results of these tasks will support the evaluation included in the Preliminary Environmental Study (PES) Forms that are prepared for each respective segment of the PROJECT.

11.1 PHASE I INITIAL SITE ASSESSMENT CHECKLIST

ENGINEER will prepare a Phase I Initial Site Assessment (ISA) Checklist. As part of the ISA Checklist, ENGINEER will review the commercial database summaries, provided by Environmental Data Resources, Inc. (EDR), regarding public agency records for the project site and surrounding area. The regulatory database search will cover a 0.25-mile corridor radius of the project site. ENGINEER will also perform a site visit, which will consist of a visual examination of the project site for visual evidence of potential environmental concerns, including existing or potential soil and groundwater contamination as evidenced by soil or pavement staining or discoloration; stressed vegetation; indications of waste dumping or burial; pits; ponds; or lagoons; containers of hazardous substances or petroleum products; electrical and hydraulic equipment that may contain PCBs, such as electrical transformers and hydraulic

lifts; and underground and aboveground storage tanks. ENGINEER will examine the physical characteristics of the property (i.e., apparent runoff directions, location of paved areas, etc.). A preliminary visual examination of immediately adjacent property conditions and their general nature will be conducted. It should be noted that the site visit specifically excludes any subsurface investigation including, but not limited to, sampling and/or laboratory analysis.

ENGINEER will incorporate the results of the ISA Checklist into the PES Form.

This scope of work excludes subsurface investigations, Phase II/site characterization, remediation plans and activities, and preparation of a Phase I Initial Site Assessment.

11.2 CULTURAL AND PALEONTOLOGICAL RESOURCES RESEARCH AND REVIEW

Cultural Resources

ENGINEER will complete a cultural resource literature and records search of the PROJECT area. For purposes of this PROJECT, the search will encompass a one-mile radius of the PROJECT area and proposed built alternatives. After review of the records search results, a qualified archaeologist will conduct a windshield survey of areas identified as culturally sensitive within the PROJECT area. If access is acquired, a focused reconnaissance level survey will be conducted in areas identified as culturally sensitive within the PROJECT area. No resources will be recorded during this effort. If any cultural resources are encountered, the resource will be noted, photographed, and Universal Transverse Mercator (UTM) coordinates will be acquired for its location so that the resource can be easily re-located for proper documentation at a later date.

ENGINEER will prepare the cultural resource summary paragraphs which summarize the potential cultural issues, risks, and assumptions that might affect both projects. ENGINEER will provide recommendations of studies that may need to be completed for the environmental document as directed by Caltrans Professionally Qualified Staff (PQS) for inclusion in the PES Form. In addition, ENGINEER will include an anticipated schedule and cost estimate to complete these studies.

Paleontological Resources

ENGINEER will request a museum records search at the nearest regional museum repository for potential paleontological resource localities in the vicinity of both project areas. To supplement museum collections records, a review of published and unpublished geologic mapping and literature will be performed to identify the geology and paleontology of the project area. In addition, the Project area will

be placed on the Riverside County's Paleontological Sensitivity Map to determine whether or not it overlies areas of high, low, of undetermined sensitivity.

ENGINEER will prepare paleontological resource summary paragraphs which summarize the potential paleontological issues, risks, and assumptions that might affect both projects. ENGINEER will provide recommendations of studies that may need to be completed for the environmental document as directed by Caltrans PQS for inclusion in the PES Form. In addition, ENGINEER will include an anticipated schedule and cost estimate to complete these studies.

It is assumed that the ENGINEER will not be required to produce/prepare a record search results map(s) depicting location of cultural resources and/or previous studies in relation to the PROJECT area.

ENGINEER assumes that cultural resource records search results for the PROJECT area will not exceed 80 previously-recorded resources. Should more than 80 resources be found within the records search area, additional time and cost would be required to process the records search.

11.3 NATIVE AMERICAN COORDINATION

ENGINEER will provide assistance to coordinate with pertinent Native American tribes to solicit input from them regarding potential resource constraints (this task does not include formal consultation with Native American tribes). ENGINEER will assist by attending up to four meetings and participating in conference calls. Information from the Native American Coordination will be incorporated into the PES Form as applicable.

11.4 VISUAL IMPACT ASSESSMENT QUESTIONNAIRE

ENGINEER will prepare a Visual Impact Assessment (VIA) Questionnaire for the PROJECT. Pursuant to the Caltrans Standard Environmental Reference (SER), ENGINEER will prepare the current Caltrans Landscape Architecture Program's recommended Visual Impact Assessment Questionnaire. The intent of the analysis is to determine the level of detail and documentation required for the visual analysis during the PA/ED phase of the project. ENGINEER will consider the existing visual setting qualitatively through desktop research for the project area. Based on the project plans, the visual change from baseline conditions will be discussed, as seen from surrounding public viewers. The anticipated viewer response to project changes will be documented. Based on the Visual Impact Assessment rating scale performed, ENGINEER will recommend the level of analysis necessary for the PA/ED phase of the project.

This scope of work excludes performance of a Visual Impact Assessment report and excludes viewshed mapping, photo simulations, and a site visit.

ENGINEER will incorporate the results of the VIA Questionnaire into the PES Form.

11.5 INITIAL WATER QUALITY STUDIES

A background document review and windshield survey of the project vicinity will be completed. ENGINEER will prepare a memorandum that will include: project setting, watersheds and the Regional Board Basin Plan, potential water discharges, permits and agency coordination required, recommendations and a summary. The Environmental Constraints Map will include the location of the watersheds and any water discharges which may have an impact on design or alternatives, including identification of proposed water quality basins. ENGINEER will incorporate the results of the memorandum into the PES Form.

11.6 INITIAL FLOODPLAIN STUDY

A background document review, including review of pertinent floodplain maps, and windshield survey of the project vicinity will be conducted. ENGINEER will prepare a memorandum that will include: description of hydrology and project setting, impacts to local hydrology, presence of floodplains, identify need for studies, agency coordination, recommendations, and a summary. The Environmental Constraints Map will include the location of any 100-year floodplains within the project area. The existing preliminary engineering study of Good Hope Wash will be referenced and refinements resulting from the PROJECT alternatives will be discussed in a qualitative manner. No additional floodplain hydrology or hydraulics are anticipated to be necessary. ENGINEER will incorporate the results of the memorandum into the PES Form.

11.7 FARMLAND IMPACTS

ENGINEER will perform California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) research to determine the presence or absence of classified farmlands in the project area. ENGINEER will incorporate the results of the research into the PES Form.

11.8 LAND USE

ENGINEER will perform applicable community plans and goals consistency research and incorporate findings into the PES Form:

- General Plans for all jurisdictions within the project area including: 1) Riverside County General

Plan (December 2015); 2) City of Lake Elsinore General Plan (December 2011); 3) City of Perris General Plan (April 2005); and 4) City of Menifee General Plan (2014).

- Riverside County Area Plans (project alignment traverses three Area Plans including Elsinore Area Plan; Mead Valley Area Plan; and Harvest Valley/Winchester Area Plan).
- Riverside County Policy Areas. Policy Areas are specific geographic districts that contain unique characteristics that merit detailed attention and focused policies (project is within the Highway 74 Good Hope Policy Area and the Mt. Palomar Night Time Lighting Policy Area).
- Airport Land Use Compatibility Plans (project is within the Perris Valley Airport and March Joint Air Reserve Base Influence Areas).
- Specific Plans and other development applications submitted to the COUNTY and Cities.

11.9 COMMUNITY IMPACTS

ENGINEER will perform right of way acquisition research to determine temporary right of way acquisition impacts related to TCEs and permanent ROW acquisition, which is anticipated to involve residential and/or business displacements. ENGINEER will research existing neighborhoods/communities in the project area to determine potential impacts regarding division/disruption of existing neighborhoods and/or community character and cohesion that may result with project implementation.

ENGINEER will perform U.S. Census Bureau research for community profile data including general demographics and the presence of Environmental Justice populations (low-income and minority) in the project area that may be disproportionately impacted by the project.

ENGINEER will complete PROJECT design research to determine potential temporary and permanent impacts regarding property/roadway access, and to preliminarily determine whether temporary roads, detours, or ramp closures would result in community impacts during construction.

ENGINEER will incorporate the results of the research into the PES Form.

11.10 BIOLOGICAL RESOURCES

The Ethanac Road segment is a covered activity in the Elsinore and Mead Valley Area Plans of the MSHCP, and portions of the PROJECT are located within/adjacent to designated Criteria Cells. This segment of the project is located within the designated survey area for burrowing owl, and Criteria Area and Narrow Endemic plant species. This portion of this alignment crosses Good Hope Wash.

The Nichols Road segment is a covered activity in the Elsinore Area Plan of the MSHCP, and portions of the project are located within designated Criteria Cells, but the alignment is not located within any designated conservation areas. This segment of the project is located within the designated survey area for burrowing owl. Several blue-line streams occur within this segment that will need to be delineated. The existing Nichols Road abuts federally designated Critical Habitat for California gnatcatcher; however, the proposed design will stay within the existing right-of-way and will not extend into the designated Critical Habitat.

Literature Review

ENGINEER will review pertinent and available technical survey reports and regulatory approvals for the PROJECT (or related project), if available, and any data for the site to determine which special-status biological resources are likely to occur on or within the general vicinity of the proposed alignment. A database search of the California Natural Diversity Database (CNDDB), the United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) tool, the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, and the Consortium of California Herbaria listings regarding special-status biological resources known to occur in the region and vicinity of the site will be conducted. Additional information sources will be consulted including the California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), and historic/current aerial photographs as appropriate to define the habitat requirements for special-status species potentially occurring on or within the vicinity of the proposed alignment. Literature detailing existing wildlife movement corridors and linkages will be reviewed to determine if the proposed project will have any adverse impacts to local or regional wildlife movement corridors. This will allow the ENGINEER to focus its field investigation on those biological resources and habitats known to occur or that have the potential to occur within the general vicinity of the proposed alignment.

A review of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) will also be conducted for its implications on the proposed project to determine consistency with the MSHCP. Geographic Information System (GIS) software will be utilized to map the proposed alignment in relation to MSHCP areas including Criteria Cells (core habitat and wildlife movement corridors) and Conservation Areas, including Public/Quasi Public (P/QP) lands. The Riverside County Integrated

Project (RCIP) Conservation Summary Report Generator will also be queried to determine if the MSHCP identifies any potential survey requirements for the proposed project. This will allow the ENGINEER to focus its field investigation on the suitability of the habitat within the proposed alignment to support MSHCP-covered species potentially occurring in the general vicinity.

Biological Due Diligence/Field Investigation

Following the literature review, a windshield survey and, if access is acquired, a reconnaissance-level survey of the proposed alignment will be conducted to document baseline conditions and verify the site's ability to provide suitable habitat for any special-status plant and wildlife species, special-status plant communities, and to document potential jurisdictional features and riparian/riverine habitat along the proposed alignment. Particular attention will be given to undeveloped areas along the project alignment that have a higher potential to provide suitable habitat for special-status plant and wildlife species.

ENGINEER will incorporate the results of the biological resources research into the PES Forms.

11.11 AIR QUALITY AND NOISE

The Air Quality section of the PES Forms will provide a cursory level review that will discuss the attainment status of the project area as well as regional and local conformity requirements, potential impacts, and applicable analysis methodologies. The review will also identify requirements associated with conformity, mobile source air toxics (MSATs), particulate matter hotspots, and interagency consultation.

The Noise section of the PES Forms will be based on a background document review of the project corridor and vicinity. The project setting and appropriate document for the noise analysis will be identified. The potential for adverse construction related noise impacts will also be discussed.

11.12 PRELIMINARY ENVIRONMENTAL STUDY FORM

ENGINEER will prepare a PES Form, one for the Nichols Road Corridor segment and one for the Ethanac Road Corridor segment (as defined above), utilizing the current format provided in Caltrans' Standard Environmental Reference (SER) and pursuant to guidance set forth in Chapter 6 (Environmental Procedures) of Caltrans' Local Assistance Procedures Manual. The information contained in the PES Forms will serve as a foundation to begin studies for the Project Approval and Environmental Document (PA/ED) phase.

The PES Form for each respective Project segment will address the following:

- Project description and preliminary design information;
- Discussion of potential environmental effects (direct or indirect);
- Identification of required technical studies;
- Anticipated permits and approvals;
- Preliminary Environmental Document classification pursuant to the National Environmental Policy Act (NEPA);
- Noise Analysis
- Air Quality Analysis
- Hazardous Materials/Hazardous Waste Analysis
- Water Quality/Resources
- Floodplain Evaluation
- Biological Resources
- Visual Resources
- Land use, community, and Farmland Impacts
- Cultural Resources

It is assumed that three (3) build alternatives will be evaluated in the Nichols Road segment PES Form, and one (1) build alternative will be evaluated in the Ethanac road segment PES Form. Additional intersection design variations are anticipated at the connections to SR-74.

Deliverables:

- PES Form for Nichols Road Corridor
- PES Form for Ethanac Road Corridor

12.0 ENGINEERING ASSESSMENT

ENGINEER will conduct engineering assessment for the following project segments:

- Nichols Road – Between I-15 and SR-74 (excluding I-15 interchange and including SR-74 connection)
- Ethanac Road – Between SR-74 (to the west) and the western abutment of San Jacinto River Bridge

The following tasks outline the level of analysis anticipated for the Corridor Development Report level

deliverables.

12.1 UTILITY RELOCATION REQUIREMENTS ASSESSMENT

ENGINEER will initiate contact with the utility owners to determine the existing facilities present within the project limits (east of I-15/Nichols Road IC to west I-215/Ethanac Road) following the concept alignments. ENGINEER will perform a field review to note existing surface and above ground evidence of facilities. ENGINEER will compare the concept roadway layout, profile, and cross sections of one (1) build alternative for the Ethanac Road extension, and three (3) build alternatives for the Nichols Road Corridor between SR-74 and I-15 to identify the locations of the existing facilities and determine those facilities which may be in conflict with the conceptual roadway improvements. ENGINEER will compile the results of the study in a preliminary utility matrix. The matrix will include the potential utility owners contacted, related responses, and identification of utility disposition. The utility disposition will classify the utility as a relocation, adjustment or to be protected in place. For those utilities which require positive protection or relocation/modification, ENGINEER will compare to existing right of way and determine if the utility changes would necessitate right of way for permanent easements or independent dedicated right of way. An order of magnitude cost estimate will be prepared by cost per linear foot to include in the preliminary project cost estimate for the impacted utility. The right of way consultant on the team will be responsible to assign property costs consistent with other determined PROJECT right of way costs estimates for relocation into new easements or replacement in-kind utility right of ways. Potholing or positive location surveying will be accomplished in the later phases (PA/ED or PS&E) of the PROJECT. Preliminary utility relocation costs will be incorporated into the Right of Way Conceptual Cost Estimate. The utility matrix will be summarized in the Corridor Development Report.

12.2 PRELIMINARY GEOTECHNICAL ASSESSMENT

ENGINEER will review available geological and geotechnical literature pertaining to the project alignments. ENGINEER's review will include published geologic maps and aerial photographs, which may provide information about the geologic units underlying the site, site geomorphology, history of development, and the presence of potential geologic hazards (i.e., fault lineaments, slope instability). ENGINEER will review geohazard maps published by California Geological Survey, the U.S. Geological Survey, County of Riverside, Caltrans, Cities of Perris, Menifee and Elsinore and other government agencies. ENGINEER will evaluate potential ground accelerations due to the earthquakes by reviewing

the Caltrans California Seismic Hazard Map.

A geologic/geotechnical reconnaissance by a California Certified Engineer Geologist and/or a California Registered Geotechnical Engineer will be performed along the full length of the proposed improvements, to observe and check for geological conditions and features that could impact design, construction, and cost of the proposed improvements. The field reconnaissance will concentrate on confirming, supplementing, or updating the results of the geologic and geotechnical literature.

ENGINEER will prepare a memorandum documenting the findings of the document review and alignment reconnaissance. The memorandum will address the following topics, as appropriate, based on the findings, and will be summarized in the Corridor Development Report:

- Physical description and representative photographs of the project alignments
- Geologic maps of the alignments
- Discussion of the mapped regional and alignment geology
- Location of bedrock outrcrops and discussion of anticipated rippability
- Regional groundwater depth
- Regional faulting
- Mapped geologic and seismic hazards, including liquefaction
- Discussion of potential geotechnical constraints and opportunities relating to the proposed alignments and geometry
- Recommendations for geotechnical investigation

The following items are excluded from the anticipated tasks:

- Subsurface investigation
- Geophysical investigation
- Laboratory testing
- Engineering analysis
- Geotechnical parameters for design
- Geotechnical recommendations for construction

12.3 RIGHT OF WAY CONCEPTUAL COST ESTIMATE

ENGINEER will secure preliminary design plans, as well as a list of impacted parcels and the square footages associated with each right of way impact. ENGINEER will use this information to evaluate and

analyze right of way impacts, direct and indirect. Due to the early phase for which these estimates will be provided, a conservative approach to potential impacts will be taken to identify potential costly right of way impacts to avoid through alternative design methods. ENGINEER believes this is important to maintaining a realistic understanding of potential costs going forward. Property values for these parcels will be estimated using traditionally accepted property valuation techniques for full and partial acquisitions, as well as permanent and temporary easement interests. Once a general understanding of market values is arrived at and applied to the subject properties, the cost study will estimate the probable values of land and any impacted improvements, as well as associated damages and cost-to-cure remediation costs, if applicable. ENGINEER will then work closely with the PROJECT team, securing and pertinent information (i.e. rail road / utility information sheets) to complete a Right of Way Conceptual Cost Estimate for each project segment.

The tasks involved with the Right of Way Conceptual Cost Estimates are as follows:

- Inventory of the affected properties.
- Secure preliminary parcel information from online database sources and investigate current ownerships. Utilizing this information and Assessor's Roll information, determine other valuation considerations such as zoning, lot and building size, current usage, and other relevant factors.
- Visually inspect each property (aerial and street-level views) and note the effects of all proposed acquisitions.
- Sort each property into product types to determine the set of real estate data to be researched and create valuation data sets for each product type.
- Prepare an estimate of the probable cost of each partial acquisition, as well as permanent and temporary easement interests, including (for partial acquisitions) damages to the remaining parcel.
- Prepare an estimate of the probable relocation assistance (if applicable) for each residential or non-residential occupant located on each property.
- Prepare an estimate of the total probable loss of business goodwill (if applicable) attributable to each operating business.
- Prepare an estimate of the inspection and demolition costs (if applicable) associated with delivering each cleared site.
- Prepare an estimate of the total services and incidental costs associated with each real estate

acquisition program (appraisals, acquisition and relocation consultants, title/escrow, legal services, etc.).

- Complete the Right of Way Conceptual Cost Estimate.
- Provide QA/QC of final work product.

If necessary, provide two sets of revisions assuming that any changes to alternative designs are minimal, do not result in a changes to the type of acquisition (i.e. temporary easement only to permanent partial fee, etc.), and that revisions are performed no later than 6 months following the original estimate. ENGINEER will summarize the findings of the Right of Way Conceptual Cost Estimate in the Preliminary Project Cost Estimates Corridor Development Report.

12.4 PRELIMINARY STRUCTURES ASSESSMENT

ENGINEER will identify proposed structure improvements in support of the Preliminary Project Cost Estimate and Corridor Development Report for the Ethanac Road bridge over Good Hope Wash. ENGINEER will use a streamlined estimating process, such as square-footage costs to develop a structures cost estimate for inclusion in the Corridor Development Report. The level of detail in the Structures Assessment and the structures cost estimate is limited to information required to develop accurate work plans for the next phase of work. For this phase, a General Plan of the proposed structure will be prepared. ENGINEER will summarize information in a memorandum for inclusion in the Corridor Development Report.

12.5 PRELIMINARY DRAINAGE ASSESSMENT

ENGINEER shall identify new large drainage facilities (48" or larger culverts) and similarly sized existing culverts to be extended in support of the cost estimate for the Corridor Development Report. Drainage improvements of major facilities will be shown in Corridor Development Report exhibits, symbolically and without annotation. Preliminary off-site hydrology will be prepared using the Riverside County Digital Elevation Model to establish approximate watershed boundaries. Cross culvert sizes will be based on an estimate of unit runoff rate using existing RCFD&WCD studies. Rational Method Hydrology will not be performed. Location of large diameter culverts for the extension/widening shall be evaluated and identified for a single alternative. The Preliminary Drainage Assessment will be prepared for off-site hydrology only. No profiles will be provided. Drainage facilities costs will be estimated as a percentage of project costs and will be included in the Preliminary Project Cost Estimates.

13.0 PRELIMINARY PROJECT COST ESTIMATES

ENGINEER will prepare a Preliminary Project Cost Estimate for each PROJECT segment identified Task 12.0 Engineering Assessment. ENGINEER will utilize the COUNTY's Consulting Services Manual, Appendix G, Preliminary Project Cost Estimate Summary Sheet template and guidance to prepare the cost estimate. Per Appendix G, construction usually represents the largest dollar value of the project, as such, only the Roadway Construction and Structures Construction sheets from the Preliminary Project Cost Estimate template will be completed. A cost estimate will be prepared for one (1) build alternative for Ethanac Road between SR-74 and San Jacinto River Bridge, and for one (1) build alternatives for the Nichols Road segment. It is assumed the three (3) build alternatives for Nichols Road will result in comparable cost estimates for the Preliminary Project Cost Estimate level of effort. The cost estimate will not include the cost development of the San Jacinto River Bridge Structure or the I-15/Nichols Road interchange, since this will be accomplished by others (COUNTY or local cities).

Deliverables:

- Preliminary Project Cost Estimate for Nichols Road
- Preliminary Project Cost Estimate for Ethanac Road

14.0 PUBLIC ENGAGEMENT

14.1 PUBLIC OUTREACH MATERIAL

ENGINEER will compile a comprehensive stakeholder database for the project. The database will include public agencies, businesses, residents, property owners, emergency responders, elected officials, environmental groups and interested parties in the project area.

A set of easy to understand and bilingual (Spanish) collateral materials are important communication tools for this public outreach effort. These may include, but are not limited to:

- Fact Sheet
- Frequently Asked Questions
- Meeting Notification Postcard
- Meeting Materials (sign-in sheets, agendas, comment cards, etc.)

14.2 OPEN HOUSE COMMUNITY MEETING

ENGINEER will plan and coordinate two (2) public meeting to support the project process. The meetings will be in an open house format and will provide an opportunity for stakeholders to learn about

the proposed project and process, ask questions and provide valuable input that can be used to refine the alignment alternatives and Corridor Development Reports.

Logistics and support activities for the meeting will include research of meeting locations and availability, coordination of meeting dates and times with the project team, organization of facility details (including equipment and insurance, if applicable), preparation of notices, meeting set-up and clean-up, meeting materials (sign-in sheets, comment cards and directional signage), photography, Spanish translation and interpretation services, refreshments and preparation of a summary report.

Deliverables:

- Two (2) Open House Community Meeting

14.3 STAKEHOLDER AND BUSINESS BRIEFINGS

ENGINEER will conduct specialized briefings with targeted stakeholder groups and elected officials, as defined by the PROJECT team. ENGINEER will draft briefing materials, coordinate meeting logistics agendas, facilitate meeting charrettes and provide materials. Briefings to the following groups will be coordinated:

- Six (6) Key Stakeholder/Business Briefings
- Three (3) City Council Briefings (one each to the Cities of Lake Elsinore, Menifee and Perris)
- Five (5) Municipal Advisory Committee/Council Presentations/Charrettes (One PowerPoint presentation or charrette-style meeting would be held for each MAC):
    - Goodhope/Meadowbrook Municipal Advisory Committee
    - Warm Springs Community Advisory Council
    - Winchester-Homeland Municipal Advisory Committee
    - Nuview-Romoland Municipal Advisory Committee
    - Mead Valley Municipal Advisory Committee
- Four (4) County Supervisor Town Hall Booths (various corridor communities)

Deliverables:

- Six (6) Key Stakeholder/Business Briefings
- Three (3) City Council Briefings
- Eight (5) Municipal Advisory Committee/Council Presentations/Charrettes
- Four (4) County Supervisor Town Hall Booths

15.0 RISK ASSESSMENT

ENGINEER will prepare a Risk Register for each PROJECT segment. ENGINEER shall coordinate with the COUNTY and PROJECT team members to jointly develop a Risk Register that enables them to identify, assess, quantify, prepare a response to, monitor, and control capital project risks with the Risk Register. Potential risks shall be evaluated and discussed by the PROJECT team, and ownership of the risks shall be identified. A risk assessment for the process and potential impacts to the overall project needs to be completed to identify the risk, define the probability, classify and quantify the risks, identify who or what the risk will impact, and identify the ownership of the risk. The risks will be summarized in the Corridor Development Report.

16.0 DRAFT CORRIDOR DEVELOPMENT REPORT

ENGINEER will prepare a Draft Corridor Development Report for the following roadway segments:

- Nichols Road – Between I-15 and SR-74 (excluding I-15 interchange and including SR-74 connection)
- Ethanac Road – Between SR-74 (to the west) and the western abutment of San Jacinto River Bridge

The Corridor Development Report will document the geometric assumptions, initial studies, methodology, build alternatives (if applicable), intersection design variation, findings, anticipated design exceptions with general PROJECT strategy of how to address within future phases, stakeholder meetings and involvement and results. A draft Corridor Development Report outline will be submitted to the COUNTY for concurrence prior to preparing the Corridor Development Report.

This report proposes to include, but not be limited to: (i) a description of the facility, and other generalities about the PROJECT Segment; (ii) the existing travel conditions in the segment area; (iii) the study methodology including the tasks identified in this scope; (iv) the physical configuration of the present and future arterial corridor and planned improvements by other such as the San Jacinto River Bridge, the I-15/Nichols Road interchange, and Ethanac Road improvements east of San Jacinto River Bridge.

Deliverables:

- Draft Corridor Development Report

17.0 FINAL CORRIDOR DEVELOPMENT REPORT

ENGINEER will prepare the Final Corridor Development Report based on any comments received from the COUNTY on the Draft Corridor Development Report. Response to comments will be prepared to address all COUNTY comments received on the Draft Corridor Development Report. The Final Corridor Development Report will establish the scope, schedule and estimated costs of the alternative concepts to the PROJECT. The document will also include a tabulation of estimated project support costs and capital costs by project phase and fiscal year. ENGINEER will coordinate and obtain final approvals of the Corridor Development Report.

Deliverables:

- Final Corridor Development Report

APPENDIX B • 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 June 30, 2021, unless extended by supplemental agreement.

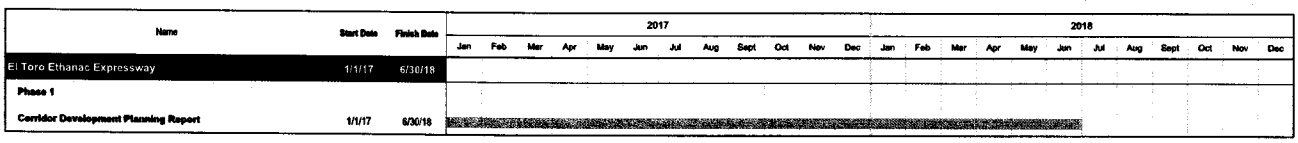
A. PHASES

The services performed by ENGINEER will be accomplished in 1 Phase:

Phase I – Corridor Vision and Development

B. GANTT CHART

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



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 • 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 .....46.59 %

   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 ..... 115.04 %

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

TOTAL MULTIPLIER.....161.63 %

(sum of Payroll Additives and Overhead Costs)

B. FIXED FEE

1. The Total Fixed Fee payable to the ENGINEER is $54,081.08 (PRIME CONSULTANT Profit)
2. A pro-rata share of the Fixed Fee shall be applied to the total Direct Labor Costs expended for services each month, and shall be included on each monthly invoice.

C. OTHER DIRECT EXPENSES

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

Rates for identified Additional Direct Costs are as follows:

Item	Rate	Unit
Mileage	$0.54	Mile
Postage	varies	Actual Cost
Reproduction	varies	Actual Cost
Sharepoint	varies	Actual Cost

Travel by air and travel in excess of 100 miles from ENGINEER's office nearest to COUNTY's office must have COUNTY's prior written approval to be reimbursed under this Agreement.

D. OUTSIDE SERVICES

Outside services shall be paid in accordance with the cost proposals submitted by each Subconsultant. Billings for Outside Services shall be submitted along with the Prime Consultant's monthly Progress Report/Billing submittals and shall be in conformance with the COUNTY Consulting Services Manual 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

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.

POSITION OR CLASSIFICATION	MAXIMUM HOURLY RATES	
Project Manager	$87	hour
Structural Engineer	$104	hour
Senior Environmental	$70	hour
Technical Manager	$61	hour
Alternative Development Analyst	$56	hour
Quality Control/Quality Assurance	$56	hour
Senior Engineer/Senior Planner	$54	hour
Senior Designer/Project Planner	$53	hour
Project Engineer	$49	hour
Design Engineer	$48	hour
Environmental Specialist	$50	hour
Designer/Planner	$43	hour
Biologist	$44	hour
Design Technician	$38	hour
GIS Analyst	$37	hour
Engineering Aid/Planning Aid	$32	hour

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

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 PROJECT MANAGER.
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 PROJECT 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 $1,500,000 including a $146,869.81 contingency. 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.

El Toro Ethanac Expressway Fee Proposal Summary

August 25, 2016

COMPANIES	PHASE I	TOTAL
Michael Baker International, Inc. Prime	$ 615,181.90	$ 615,181.90
Applied Earthworks Cultural Resources	$ 17,097.91	$ 17,097.91
Arellano Associates Public Outreach	$ 54,766.64	$ 54,766.64
Converse Consultants Geotechnical Assessment	$ 4,835.35	$ 4,835.35
Fehr & Peers Traffic Forecasting	$ 243,381.32	$ 243,381.32
HDR Engineering, Inc. Preliminary Engineering / Utilities	$ 341,687.18	$ 341,687.18
Overland, Pacific & Cutler, Inc. Right of Way Conceptual Cost Estimate	$ 15,152.73	$ 15,152.73
POWER Engineers Environmental	$ 61,027.16	$ 61,027.16
TOTAL	$ 1,353,130.19	$ 1,353,130.19

Phase I **Corridor Vision and Development**

FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Michael Baker International, Inc.	Corridor Vision and Development	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Tim Haile	Project Manager	388	@	$86.94	$33,732.72
	Structural Engineer	68	@	$103.85	$7,061.80
	Senior Environmental	16	@	$69.24	$1,107.84
	Technical Manager	164	@	$60.16	$9,866.24
	Alternative Development Analyst	122	@	$55.29	$6,745.38
	Quality Control/Quality Assurance	52	@	$55.11	$2,865.72
	Senior Engineer/Senior Planner	458	@	$53.25	$24,388.50
	Senior Designer/Project Planner	180	@	$52.52	$9,453.60
	Project Engineer	805	@	$48.50	$39,042.50
	Design Engineer	358	@	$47.96	$17,169.68
	Environmental Specialist	308	@	$49.27	$15,175.16
	Designer/Planner	64	@	$43.00	$2,752.00
	Biologist	34	@	$43.51	$1,479.34
	Design Technician	398	@	$37.82	$15,052.36
	GIS Analyst	212	@	$36.56	$7,750.72
	Engineering Aid/Planning Aid	324	@	$31.67	$10,261.08
	Project Controls	54	@	$27.03	$1,459.62
	Administrative	56	@	$24.00	$1,344.00
	TOTAL HOURS	4,061		TOTAL DIRECT LABOR	$206,708.26

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	115.04%	(of Direct Labor + Escalation)	$237,797.18
PAYROLL ADDITIVES @	46.59%	(of Direct Labor + Escalation)	$96,305.38
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$54,081.08
		TOTAL MULTIPLIERS	$388,183.64

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Mileage	2000		@	$0.54	$1,080.00
Postage, Mailing	1	LS	@	$2,000.00	$2,000.00
Reproductions	1	LS	@	$16,000.00	$16,000.00
Sharepoint	22		@	$55.00	$1,210.00
				TOTAL ODC'S	$20,290.00

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
Applied Earthworks	$5,960.46	$8,463.85	$2,673.60	$17,097.91
Arellano Associates	$24,270.00	$24,996.64	$5,500.00	$54,766.64
Converse Consultants	$1,784.65	$3,050.70		$4,835.35
Fehr & Peers	$76,805.46	$158,521.86	$8,054.00	$243,381.32
HDR Engineering, Inc.	$122,545.26	$213,631.92	$5,510.00	$341,687.18
Overland, Pacific & Cutler, Inc.	$5,339.23	$9,813.50		$15,152.73
POWER Engineers	$19,335.76	$38,861.40	$2,830.00	$61,027.16
			TOTAL SUBCONSULTANT SERVICES	$737,948.29

TOTAL $1,353,130.19

MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Michael Baker International, Inc.	Manhour Summary	All Phases
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	PROJECT MANAGER	STRUCTURAL ENGINEER	SENIOR ENVIRONMENTAL	TECHNICAL MANAGER	ALTERNATIVE DEVELOPMENT ANALYST	QUALITY CONTROL/QUALITY ASSURANCE	SENIOR ENGINEER/SENIOR PLANNER	SENIOR DESIGNER/PROJECT PLANNER	PROJECT ENGINEER	DESIGN ENGINEER	ENVIRONMENTAL SPECIALIST	DESIGNER/PLANNER	BIOLOGIST	DESIGN TECHNICIAN	HOURS	(Top & Bottom) HOURS
	$250.21	$298.87	$199.27	$173.14	$159.12	$158.60	$153.25	$151.15	$139.58	$138.03	$141.80	$123.75	$125.22	$108.84		
PHASE TOTALS	**388**	**68**	**16**	**164**	**122**	**52**	**458**	**180**	**805**	**358**	**308**	**64**	**34**	**398**	**3,415**	**4,061**
PHASE I	388	68	16	164	122	52	458	180	805	358	308	64	34	398	3,415	4,061

TASK	GIS ANALYST	ENGINEERING AID/PLANNING AID	PROJECT CONTROLS	ADMINISTRATIVE	HOURS
	$105.22	$91.14	$77.79	$69.07	
PHASE TOTALS	**212**	**324**	**54**	**56**	**646**
PHASE I	212	324	54	56	646

MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Michael Baker International, Inc.	Corridor Vision and Development	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	PROJECT MANAGER	STRUCTURAL ENGINEER	SENIOR ENVIRONMENTAL	TECHNICAL MANAGER	ALTERNATIVE DEVELOPMENT ANALYST	QUALITY CONTROL/QUALITY ASSURANCE	SENIOR ENGINEER/SENIOR PLANNER	SENIOR DESIGNER/PROJECT PLANNER	PROJECT ENGINEER	DESIGN ENGINEER	ENVIRONMENTAL SPECIALIST	DESIGNER/PLANNER	BIOLOGIST	DESIGN TECHNICIAN	HOURS	COST
	$250.21	$298.87	$199.27	$173.14	$159.12	$158.60	$153.25	$151.15	$139.58	$138.03	$141.80	$123.75	$125.22	$108.84		
Total Manhours	388	68	16	164	122	52	458	180	805	358	308	64	34	398	3,415	
1.1 PROJECT EXECUTION AND COORDINATION	144								108						252	$ 51,104
1.2 PROJECT MEETINGS	32								56						88	$ 15,823
1.3 PROJECT SCHEDULING	12								26					42	80	$ 11,203
1.4 QUALITY CONTROL PLAN (QCP)	4					24			26					14	68	$ 9,960
1.5 DOCUMENT CONTROL/SHAREPOINT									57						57	$ 7,956
2.0 REVIEWING EXISTING REPORTS, STUDIES, MAPPING, AND OTHER INFORMATION	4			8			4		16	8				12	52	$ 7,643
3.0 SURVEY AND MAPS	4						20		16						40	$ 6,299
4.0 PROJECT SCOPING	16								60					24	100	$ 14,990
5.0 CORRIDOR VISION	20						24		32	28				16	120	$ 18,755
6.2 TRAFFIC FORECASTING	4					8	24							16	52	$ 7,689
6.3 TRAFFIC REPORT	2							8						10	20	$ 2,798
7.0 PROJECT ACTION PLAN	24						20	32	32	4		16		16	144	$ 22,647
8.0 ALTERNATIVE SCREENING AND EVALUATION	4	2		24	10	4		32	100	180				12	368	$ 52,925
9.0 ALTERNATIVE DEVELOPMENT	20				40		48	48	60	48		48		32	344	$ 50,403
10.0 RIGHT OF WAY REQUIREMENTS MAP/ RIGHT OF ENTRY COORDINATION	16						8		16						40	$ 7,463
11.1 PHASE I INITIAL SITE ASSESSMENT CHECKLIST											64				64	$ 9,075
11.4 VISUAL IMPACT ASSESSMENT (VIA) CHECKLIST											62				62	$ 8,791
11.5 INITIAL WATER QUALITY STUDIES				12							48				60	$ 8,884
11.6 INITIAL FLOODPLAIN STUDY				32			24							32	88	$ 12,701
11.7 FARMLAND IMPACTS											24				24	$ 3,403
11.8 LAND USE											24				24	$ 3,403
11.9 COMMUNITY IMPACTS											24				24	$ 3,403
11.10 BIOLOGICAL RESOURCES	4		16										34		54	$ 8,447
11.11 AIR QUALITY AND NOISE											50				50	$ 7,090
11.12 PRELIMINARY ENVIRONMENTAL (PES) STUDY FORM	8						16		22					10	56	$ 8,613
12.2 PRELIMINARY GEOTECHNICAL ASSESSMENT	2						2		12						16	$ 2,482
12.3 RIGHT OF WAY CONCEPTUAL COST ESTIMATE	4								24					12	40	$ 5,657
12.4 PRELIMINARY STRUCTURES ASSESSMENT		62		20						42					124	$ 27,790
12.5 PRELIMINARY DRAINAGE ASSESSMENT	2			64			200							70	336	$ 49,850
13.0 PRELIMINARY COST ESTIMATES	4					16		8	8	8				8	52	$ 7,839
14.1 PUBLIC OUTREACH MATERIAL	4								14					14	32	$ 4,479
14.2 OPEN HOUSE COMMUNITY MEETING	8	4		4					16		4			12	48	$ 7,996
14.3 STAKEHOLDER AND BUSINESS BRIEFINGS	8								16						24	$ 4,235
15.0 RISK ASSESSMENT	4				4				32		8			4	52	$ 7,674
16.0 DRAFT CORRIDOR DEVELOPMENT REPORT	16				40		40	36	24	40				34	232	$ 35,012
17.0 FINAL CORRIDOR DEVELOPMENT REPORT	16				28		28	16	32					8	128	$ 20,505

MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Michael Baker International, Inc.	Corridor Vision and Development	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	GIS ANALYST	ENGINEERING AID/PLANNING AID	PROJECT CONTROLS	ADMINISTRATIVE									HOURS	COST
	$105.22	$91.14	$77.79	$69.07										
Total Manhours	**212**	**324**	**54**	**56**									**646**	
1.0 PROJECT MANAGEMENT														
1.1 PROJECT EXECUTION AND COORDINATION			54										54	$ 4,201
1.2 PROJECT MEETINGS		48											48	$ 4,375
1.3 PROJECT SCHEDULING														
1.4 QUALITY CONTROL PLAN (QCP)		8											8	$ 729
1.5 DOCUMENT CONTROL/SHAREPOINT														
2.0 REVIEWING EXISTING REPORTS, STUDIES, MAPPING, AND OTHER INFORMATION		8											8	$ 729
3.0 SURVEY AND MAPS	20												20	$ 2,104
4.0 PROJECT SCOPING		24											24	$ 2,187
5.0 CORRIDOR VISION		40											40	$ 3,646
6.2 TRAFFIC FORECASTING		8											8	$ 729
6.3 TRAFFIC REPORT														
7.0 PROJECT ACTION PLAN	32	24											56	$ 5,554
8.0 ALTERNATIVE SCREENING AND EVALUATION		24											24	$ 2,187
9.0 ALTERNATIVE DEVELOPMENT		36											36	$ 3,281
10.0 RIGHT OF WAY REQUIREMENTS MAP/ RIGHT OF ENTRY COORDINATION	24	8		8									40	$ 3,807
11.0 ENVIRONMENTAL ASSESSEMENT														
11.1 PHASE I INITIAL SITE ASSESSMENT CHECKLIST														
11.2 CULTURAL AND PALEONTOLOGICAL RESOURCES RESEARCH AND REVIEW														
11.3 NATIVE AMERICAN COORDINATION														
11.4 VISUAL IMPACT ASSESSMENT (VIA) CHECKLIST														
11.5 INITIAL WATER QUALITY STUDIES														
11.6 INITIAL FLOODPLAIN STUDY														
11.7 FARMLAND IMPACTS	8												8	$ 842
11.8 LAND USE	8												8	$ 842
11.9 COMMUNITY IMPACTS	8												8	$ 842
11.10 BIOLOGICAL RESOURCES	8												8	$ 842
11.11 AIR QUALITY AND NOISE														
11.12 PRELIMINARY ENVIRONMENTAL (PES) STUDY FORM	24												24	$ 2,525
12.0 ENGINEERING ASSESSMENT														
12.1 UTILITY RELOCATION REQUIREMENTS ASSESSMENT														
12.2 PRELIMINARY GEOTECHNICAL ASSESSMENT		4											4	$ 365
12.3 RIGHT OF WAY CONCEPTUAL COST ESTIMATE														
12.4 PRELIMINARY STRUCTURES ASSESSMENT														
12.5 PRELIMINARY DRAINAGE ASSESSMENT		64											64	$ 5,833
13.0 PRELIMINARY COST ESTIMATES		8											8	$ 729
14.0 PUBLIC ENGAGEMENT														
14.1 PUBLIC OUTREACH MATERIAL														
14.2 OPEN HOUSE COMMUNITY MEETING	8	8		8									24	$ 2,123
14.3 STAKEHOLDER AND BUSINESS BRIEFINGS	4	4		8									16	$ 1,338

MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Michael Baker International, Inc.	Corridor Vision and Development	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	GIS ANALYST	ENGINEERING AID/PLANNING AID	PROJECT CONTROLS	ADMINISTRATIVE										HOURS	COST
15.0 RISK ASSESSMENT		8												8	$ 729
16.0 DRAFT CORRIDOR DEVELOPMENT REPORT	32			16										48	$ 4,472
17.0 FINAL CORRIDOR DEVELOPMENT REPORT	36			16										52	$ 4,893

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Applied Earthworks	**Cultural Resources**	**Phase I**
PROJECT:		**DATE:**
El Toro Ethanac Expressway		**August 25, 2016**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Vanessa Mirro	Principal Archaeologist	40	@	$75.86	$3,034.40
Jessica DeBusk	Senior Paleontologist	2	@	$55.08	$110.16
M. Colleen Hamilton	Senior Architectural Historian	4	@	$50.98	$203.92
Joan George	Associate Archaeologist	35	@	$31.94	$1,117.90
Heather Clifford	Associate Paleontologist	16	@	$28.72	$459.52
Dennis McDougall	Field Supervisor	16	@	$34.33	$549.28
Michael Mirro	GIS Analyst	10	@	$36.00	$360.00
Cari Inoway	Graphics Specialist	2	@	$31.94	$63.88
Suzie Bircheff	Administrative Assistant	2	@	$30.70	$61.40

TOTAL HOURS **127** TOTAL DIRECT LABOR **$5,960.46**

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	120.00%	(of Direct Labor + Escalation)	$7,152.55
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$1,311.30

TOTAL MULTIPLIERS **$8,463.85**

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Printing, Reproduction, Shipping	1		@	$300.00	$300.00
Mileage (personal vehicles)	340		@	$0.54	$183.60
Records and Literature Search	3		@	$500.00	$1,500.00
Museum Fee	2		@	$300.00	$600.00
Trimble	1		@	$90.00	$90.00

TOTAL ODC'S **$2,673.60**

TOTAL **$17,097.91**

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Applied Earthworks	Cultural Resources	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	PRINCIPAL ARCHAEOLOGIST	SENIOR PALEONTOLOGIST	SENIOR ARCHITECTURAL HISTORIAN	ASSOCIATE ARCHAEOLOGIST	ASSOCIATE PALEONTOLOGIST	FIELD SUPERVISOR	GIS ANALYST	GRAPHICS SPECIALIST	ADMINISTRATIVE ASSISTANT						HOURS	COST
	$183.58	$133.29	$123.37	$77.29	$69.50	$83.08	$87.12	$77.29	$74.29							
Total Manhours	**40**	**2**	**4**	**35**	**16**	**16**	**10**	**2**	**2**						**127**	
1.2 PROJECT MEETINGS	24			8											32	$ 5,024
11.2 CULTURAL AND PALEONTOLOGICAL RESOURCES RESEARCH AND REVIEW		1		3	12	16	8	2							42	$ 3,380
11.3 NATIVE AMERICAN COORDINATION	8			8											16	$ 2,087
11.12 PRELIMINARY ENVIRONMENTAL (PES) STUDY FORM	8	1	4	16	4		2		2						37	$ 3,933
14.2 OPEN HOUSE COMMUNITY MEETING																

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Arellano Associates	**Public Outreach**	**Phase I**
PROJECT:		**DATE:**
El Toro Ethanac Expressway		**August 25, 2016**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Cheryl Donauhe	Senior Project Manager	147	@	$90.00	$13,230.00
Elsa Argomaniz	Senior Project Coordinator	63	@	$61.00	$3,843.00
Ariel Alcon Tapia	Assistant Project Coordinator	157	@	$21.00	$3,297.00
	Project Intern	100	@	$15.00	$1,500.00
	Facilitators	48	@	$50.00	$2,400.00
	TOTAL HOURS	515		TOTAL DIRECT LABOR	$24,270.00

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	84.54%	(of Direct Labor + Escalation)	$20,517.86
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$4,478.79
		TOTAL MULTIPLIERS	$24,996.64

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Photocopying/Printing			@		$1,500.00
Translation			@		$500.00
Meeting Supplies/Refreshments			@		$500.00
Rental Fees (as needed)			@		$500.00
Travel/Mileage			@		$1,000.00
Advertisements			@		$1,500.00
				TOTAL ODC'S	$5,500.00

TOTAL **$54,766.64**

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Arellano Associates	Public Outreach	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	SENIOR PROJECT MANAGER	SENIOR PROJECT COORDINATOR	ASSISTANT PROJECT COORDINATOR	PROJECT INTERN	FACILITATORS										HOURS	COST
	$182.69	$123.83	$42.63	$30.45	$101.60											
Total Manhours	**147**	**63**	**157**	**100**	**48**										**515**	
1.2 PROJECT MEETINGS																
14.1 PUBLIC OUTREACH MATERIAL	**20**	**33**	**56**	**60**											**169**	**$ 11,954**
14.2 OPEN HOUSE COMMUNITY MEETING	**42**	**30**	**51**	**40**											**163**	**$ 14,780**
14.3 STAKEHOLDER AND BUSINESS BRIEFINGS	**85**		**50**		**48**										**183**	**$ 22,532**

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Converse Consultants	**Geotechnical Assessment**	**Phase I**
PROJECT:		**DATE:**
El Toro Ethanac Expressway		**August 25, 2016**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Scot Mathis, PG, CEG	Project Manager	12	@	$42.31	$507.72
Jordan Roper, PE	Lead Engineer	8	@	$29.81	$238.48
Jay Burnham	Field Geologist	12	@	$21.63	$259.56
Kathy Von Glahn	Word Processor	4	@	$19.30	$77.20
Danielle Ertl	Accounting	2	@	$28.32	$56.64
	TOTAL HOURS	43		TOTAL DIRECT LABOR	$1,784.65

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	118.05%	(of Direct Labor + Escalation)	$2,106.78
PAYROLL ADDITIVES @	28.26%	(of Direct Labor + Escalation)	$504.34
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$439.58
		TOTAL MULTIPLIERS	$3,050.70

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT

TOTAL ODC'S

TOTAL **$4,835.35**

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Converse Consultants	Geotechnical Assessment	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	PRINCIPAL IN CHARGE	PROJECT MANAGER	LEAD ENGINEER	FIELD GEOLOGIST	WORD PROCESSOR	ACCOUNTING									HOURS	COST
	$349.54	$114.64	$80.77	$58.60	$52.29	$76.73										
Total Manhours	5	12	8	12	4	2									43	
12.2 PRELIMINARY GEOTECHNICAL ASSESSMENT	5	12	8	12	4	2									43	$ 4,835

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Fehr & Peers	**Traffic Forecasting**	**Phase I**
PROJECT:		**DATE:**
El Toro Ethanac Expressway		**August 25, 2016**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Jason Pack, P.E.	Principal	276	@	$73.56	$20,302.56
Anna Luo, P.E.	Associate	370	@	$55.77	$20,634.90
Kara Hall	Engineer	888	@	$31.73	$28,176.24
Carrie Carsell	Graphics	178	@	$39.42	$7,016.76
Sandra Hyatt	Admin	18	@	$37.50	$675.00
	TOTAL HOURS	1,730		TOTAL DIRECT LABOR	$76,805.46

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	178.54%	(of Direct Labor + Escalation)	$137,128.47
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$21,393.39
		TOTAL MULTIPLIERS	$158,521.86

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Counts	32		@	$250.00	$8,000.00
Travel	100		@	$0.54	$54.00
			TOTAL ODC'S		$8,054.00

TOTAL **$243,381.32**

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Fehr & Peers	Traffic Forecasting	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	PRINCIPAL	ASSOCIATE	ENGINEER	GRAPHICS	ADMIN										HOURS	COST
	$225.38	$170.88	$97.22	$120.78	$114.90											
Total Manhours	276	370	888	178	18										1,730	
1.2 PROJECT MEETINGS	28	10	28												66	$ 10,742
2.0 REVIEWING EXISTING REPORTS, STUDIES, MAPPING, AND OTHER INFORMATION	20	10	20		2										52	$ 8,391
4.0 PROJECT SCOPING	8				2										10	$ 2,033
5.0 CORRIDOR VISION	40	50	120	48	2										260	$ 35,253
6.2 TRAFFIC FORECASTING	80	120	360	40											600	$ 78,366
6.3 TRAFFIC REPORT	20	50	50	16	4										140	$ 20,304
7.0 PROJECT ACTION PLAN	20	40	200	20											280	$ 33,202
9.0 ALTERNATIVE DEVELOPMENT	40	80	80	40	4										244	$ 35,754
16.0 DRAFT CORRIDOR DEVELOPMENT REPORT	16	10	20	10	2										58	$ 8,697
17.0 FINAL CORRIDOR DEVELOPMENT REPORT	4		10	4	2										20	$ 2,587

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
HDR Engineering, Inc.	Preliminary Engineering / Utilities	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Kip Field	Principal in Charge	2	@	$133.90	$267.80
Mark Hager	Project Manager/Transportation Lead	501	@	$96.82	$48,506.82
JD Douglas	Sr. Planner	21	@	$127.21	$2,671.31
Chuck Christoplis	Sr. Engineer	32	@	$82.40	$2,636.80
Jason Song / Julian Hernandez	Project Engineer	582	@	$58.71	$34,169.22
Eric Johnson/ Wellington Chu	Lead Structure Engineer			$81.37	
Mitali Gupta	Planner	45	@	$66.95	$3,012.75
Paul Paramo	CADD II	150	@	$53.56	$8,034.00
Walt Stebok	CADD I	298	@	$33.99	$10,129.02
Mano/Brown/Hager	QA/QC	50	@	$92.70	$4,635.00
Laura Paquette	Quality Manager	6	@	$40.17	$241.02
Pam Steinhart	Project Controls	6	@	$82.92	$497.49
Karen Di Padova	Project Administrator	155	@	$37.60	$5,828.23
Crystal Wang	Jr. Planner	62	@	$30.90	$1,915.80
	TOTAL HOURS	1,910		TOTAL DIRECT LABOR	$122,545.26

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	149.39%	(of Direct Labor + Escalation)	$183,070.36
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$30,561.56
		TOTAL MULTIPLIERS	$213,631.92

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reprographics	1		@	$3,000.00	$3,000.00
Utility Facility Maps / Schematics	1		@	$2,000.00	$2,000.00
Mileage (22 meetings + 2 field reviews)	700		@	$0.54	$378.00
Parking	22		@	$6.00	$132.00
				TOTAL ODC'S	$5,510.00

TOTAL $341,687.18

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
HDR Engineering, Inc.	Preliminary Engineering / Utilities	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	PRINCIPAL IN CHARGE	PROJECT MANAGER/TRANSPORTATION LEAD	SR. PLANNER	SR. ENGINEER	PROJECT ENGINEER	LEAD STRUCTURE ENGINEER	PLANNER	CADD II	CADD I	QA/QC	QUALITY MANAGER	PROJECT CONTROLS	PROJECT ADMINISTRATOR	JR. PLANNER	HOURS	COST
	$367.33	$265.61	$348.96	$226.05	$161.06	$223.22	$183.66	$146.93	$93.24	$254.30	$110.20	$227.46	$103.15	$84.77		
Total Manhours	2	501	21	32	582		45	150	298	50	6	6	155	62	1,910	
1.1 PROJECT EXECUTION AND COORDINATION	2	80			20					10	2	6	110		230	$ 40,679
1.2 PROJECT MEETINGS		70													70	$ 18,592
2.0 REVIEWING EXISTING REPORTS, STUDIES, MAPPING, AND OTHER INFORMATION		20			10		5	20							55	$ 10,780
4.0 PROJECT SCOPING		25											10		35	$ 7,672
5.0 CORRIDOR VISION		6	2	2			20							50	80	$ 10,655
9.0 ALTERNATIVE DEVELOPMENT		120		4	160			20	80	6					390	$ 70,470
10.0 RIGHT OF WAY REQUIREMENTS MAP/ RIGHT OF ENTRY COORDINATION		12		2	20			10	18	2			1		65	$ 10,620
12.1 UTILITY RELOCATION REQUIREMENTS ASSESSMENT		32		10	180			60	90				18		390	$ 58,815
13.0 PRELIMINARY COST ESTIMATES		20		4	60					16					100	$ 19,949
14.2 OPEN HOUSE COMMUNITY MEETING		28	10				6	6	20	5	1		5		81	$ 16,672
14.3 STAKEHOLDER AND BUSINESS BRIEFINGS		16	6				2	4	10	3			3		44	$ 9,303
15.0 RISK ASSESSMENT		16		2	12		4			2			4		40	$ 8,290
16.0 DRAFT CORRIDOR DEVELOPMENT REPORT		32	2	4	80		6	20	60	4	2		2	8	220	$ 34,743
17.0 FINAL CORRIDOR DEVELOPMENT REPORT		24	1	4	40		2	10	20	2	1		2	4	110	$ 18,936

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Overland, Pacific & Cutler, Inc.	Right of Way Conceptual Cost Estimate	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Joshua Cosper, P.E., P.L.S.	Special Services Manager	4	@	$57.69	$230.77
Robert Vasquez, P.E.	Project Manager	32	@	$44.47	$1,423.04
Maile Kop	Right of Way Engineering Analyst	72	@	$23.08	$1,661.54
Whitney Kelcher	Right of Way Engineering Analyst	76	@	$21.63	$1,643.88
Denyse Neville	Right of Way Engineering Analyst	19	@	$20.00	$380.00
	TOTAL HOURS	203		TOTAL DIRECT LABOR	$5,339.23

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	120.70%	(of Direct Labor + Escalation)	$6,444.45
PAYROLL ADDITIVES @	37.30%	(of Direct Labor + Escalation)	$1,991.53
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$1,377.52
		TOTAL MULTIPLIERS	$9,813.50

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
			TOTAL ODC'S	

TOTAL $15,152.73

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Overland, Pacific & Cutler, Inc.	Right of Way Conceptual Cost Estimate	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	SPECIAL SERVICES MANAGER	PROJECT MANAGER	RIGHT OF WAY ENGINEERING ANALYST	RIGHT OF WAY ENGINEERING ANALYST	RIGHT OF WAY ENGINEERING ANALYST										HOURS	COST
	$163.73	$126.21	$65.49	$61.39	$56.76											
Total Manhours	**4**	**32**	**72**	**76**	**19**										**203**	
12.3 RIGHT OF WAY CONCEPTUAL COST ESTIMATE	**4**	**32**	**72**	**76**	**19**										**203**	**$ 15,153**

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
POWER Engineers	**Environmental**	**Phase I**
PROJECT:		**DATE:**
El Toro Ethanac Expressway		**August 25, 2016**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Court Morgan	Environmental Task Lead	152	@	$67.32	$10,232.64
David Barrackman	GIS/Graphics	16	@	$40.60	$649.60
Kim Quinn	Environmental Planner	156	@	$40.17	$6,266.52
Heidi Horner	Technical Editor	16	@	$32.70	$523.20
Ken Bradley	Project Administrator	40	@	$27.00	$1,080.00
Yvonne Ulloa	Administrative Assistant	28	@	$20.85	$583.80
	TOTAL HOURS	408		TOTAL DIRECT LABOR	$19,335.76

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	117.48%	(of Direct Labor + Escalation)	$22,715.65
PAYROLL ADDITIVES @	56.14%	(of Direct Labor + Escalation)	$10,855.10
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$5,290.65
		TOTAL MULTIPLIERS	$38,861.40

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction	15000	Each	@	$0.10	$1,500.00
Communications/Postage	10	Each	@	$25.00	$250.00
Mileage	2000	Each	@	$0.54	$1,080.00
		TOTAL ODC'S			$2,830.00

TOTAL **$61,027.16**

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
POWER Engineers	Environmental	Phase I
PROJECT:		**DATE:**
El Toro Ethanac Expressway		August 25, 2016

TASK	ENVIRONMENTAL TASK LEAD	GIS/GRAPHICS	ENVIRONMENTAL PLANNER	TECHNICAL EDITOR	PROJECT ADMINISTRATOR	ADMINISTRATIVE ASSISTANT									HOURS	COST
	$202.62	$122.20	$120.90	$98.42	$81.27	$62.75										
Total Manhours	**152**	**16**	**156**	**16**	**40**	**28**									**408**	
1.0 PROJECT MANAGEMENT																
1.1 PROJECT EXECUTION AND COORDINATION	**32**				**40**	**8**									**80**	**$ 10,237**
1.2 PROJECT MEETINGS	**80**														**80**	**$ 16,210**
11.12 PRELIMINARY ENVIRONMENTAL (PES) STUDY FORM	**40**	**16**	**156**	**16**		**20**									**248**	**$ 31,751**