362 A

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

FROM: TLMA - Transportation Department

SUBMITTAL DATE: June 29, 2011

SUBJECT: Engineering and Environmental Services Agreement between Dokken Engineering and the County of Riverside for the 66th Avenue Railroad Grade Separation Project

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve the attached engineering and environmental services agreement between The County of Riverside and Dokken Engineering for the 66th Avenue Railroad Grade Separation Project, and;

2. Authorize the Chariman of the Board to execute the same;

Juan C. Perez
Director of Transportation

JA
(Continued On Attached Pages)

FINANCIAL DATA				
	Current F.Y. Total Cost:	$ 676,507	**In Current Year Budget:**	Yes
	Current F.Y. Net County Cost:	$ 0	**Budget Adjustment:**	No
	Annual Net County Cost:	$ 0	**For Fiscal Year:**	2011 / 2012

SOURCE OF FUNDS: CVAG (TUMF) (50%), Roads, Bridges, and Major Improvement DIF Funds for Coachella-Eastern Area Plan Fund No. 30524 (50%)
There are no General Funds used in this project. Project No. B80664

Positions To Be Deleted Per A-30 ☐

Requires 4/5 Vote ☐

C.E.O. RECOMMENDATION:

APPROVE
BY: Tina Grande

County Executive Office Signature

FORM APPROVED COUNTY COUNSEL
BY: MARSHA L. VICTOR DATE 6/29/11

Departmental Concurrence

Dep't Recomm.: ☒ Policy ☐ Consent
Per Exec. Ofc.: ☒ Policy ☐ Consent

Prev. Agn. Ref. 7/29/08 3.147, 5/17/11 3.29 | **District:** 4 | **Agenda Number:** 3.43

Form 11 (Rev 07/2007)

ATTACHMENTS FILED
WITH THE CLERK OF THE BOARD

3. Authorize the use of up to $500,000 of the Development Impact Fee (DIF) for the Coachella-Eastern Area Plan (AP18) – Roads, Bridges and major Improvement Fund No. 30524 for the 66th Avenue / UPRR Grade Separation in the community of Mecca, and;

4. Direct the Executive Office to transfer up to $500,000 from the Development Impact Fee Coachella-Eastern Area Plan (AP18) – Roads, Bridges and Major Improvement Fund to fund No. 31650-790600 as needed, pursuant to contracts and billings, including County staff support costs reserved for the 66th Avenue / UPRR Grade Separation project.

BACKGROUND: 66th Avenue is the primary access to the Community of Mecca from State Route 86S. Currently, 66th Avenue does not cross the Union Pacific Railroad (UPRR) requiring all through traffic to be routed north onto Highway 111 to cross the railroad at grade on 4th Street. The substantial number of agricultural freight trucks using this crossing on a regular basis can cause backups at the tracks. The UPRR has one track operating now with plans to construct three additional tracks in the future.

The 66th Avenue Railroad Grade Separation Project proposes to provide a grade separation of 66th Avenue and the UPRR, south of the community of Mecca. The 4th Street crossing will remain open for local traffic and access to SH-111 and the new 66th Avenue grade separation will provide an alternate route for agricultural trucks, emergency vehicles and through traffic. The project is planned to be constructed in two phases with the grade separation being constructed between Lincoln Street and 66th Avenue near Home Avenue in phase one, and the west tie-in to 66th Avenue constructed in phase two.

The UPRR and State Highway 86S are important NAFTA freight corridors to and from Mexico. Currently up to 71 freight trains pass through Riverside County daily on this rail line with the number projected to increase to 107 by the year 2030. The surrounding community, truck traffic and rail users will benefit from the construction of this project through:

- Improved traffic circulation and delays by providing uninterrupted and efficient access for agricultural trucks, motorists, residents, businesses, pedestrians and emergency vehicles.
- Substantially increase public safety by providing a separation for vehicles, bicycles and pedestrians from train traffic.
- Substantially reduce particulate matter and greenhouse gases from idling trucks and cars.

Dokken Engineering was selected as the firm to provide the needed services for this project. A not-to-exceed budget of $676,507 (including contingency) was negotiated between Dokken and the Transportation Department. The services to be provided include preliminary engineering and environmental services for the proposed improvements.

Dokken Engineering is on the Transportation Department's Pre-Qualified List of Design Firms. The list was established through a request for proposals. Fifteen firms submitted qualifications. Representatives from Caltrans, CVAG and the Riverside County Transportation Department evaluated the written proposals and interviewed the ten top ranked firms.

The 66th Avenue grade separation project will receive funding in the amount of $500,000 from the Coachella Valley Association of Governments (CVAG) for the engineering and environmental services phase of the project. The $500,000 from CVAG and the $500,000 recommended herein to program from the DIF will fund the consultant costs of $676,507 plus County staff support costs, and any unused funds will be carried over to the final design phase.

The CVAG funding agreement was approved by Board action on 5/17/11, Item 3.29. The Transportation Department will continue to actively seek right-of-way and construction funding for this project.

The Transportation Department will solicit input from and coordinate this project with the Mecca Community Council, affected property owners, and other interested stakeholders.

Project No. B8-0664

Contract No. 11-05-009
Riverside Co. Transportation

ENGINEERING SERVICES AGREEMENT

for

66th Avenue Grade Separation Project at UPRR

between

COUNTY OF RIVERSIDE • TRANSPORTATION DEPARTMENT

and

Dokken Engineering

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ENGINEERING SERVICES AGREEMENT

COUNTY OF RIVERSIDE, hereinafter referred to as "COUNTY", and Dokken Engineering, hereinafter referred to as "ENGINEER", located at the following addressees:

County of Riverside • Transportation Department	Dokken Engineering
4080 Lemon Street, 8th Floor	41707 Winchester Rd. Ste 201
Riverside, CA 92502	Temecula, CA 92590

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:

Elizabeth B. Diamond

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".

- Caltrans
- Coachella Valley Association of Governments
- Riverside County EDA
- Regional Water Quality Control Board
- Federal Highway Administration
- Federal and State Agencies
- Union Pacific Railroad
- Coachella Valley Water District
- Imperial Irrigation District
- Utility Companies
- Native American Tribes

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 and AGENCIES.

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 agreement 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 agreement, 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 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 except for minor modifications ad defined below.
2. Minor modifications are changes that do not substantially affect the Scope of Service. Minor modifications may be: a shift of funds between tasks within a budget category; the shifting of work and/or funding from one phase to another; use of contingency pursuant to Article VI.B.1. Any modification that purports to delete any line item of work that was included in the original Scope of Service shall be considered a major change. All requests for minor modifications must be approved in writing by the Director of Transportation prior to implementing the change.
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, plans, specifications and estimates 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 Agreement.
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 on PROJECT, 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 will 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 agreement, 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 includes loss, suits, claims, demands, actions, or proceedings caused by actual or alleged passive negligence of Indemnitees. The duty to indemnify does not include loss, suits, claims, demands, actions, or proceedings caused by actual active negligence of Indemnitees; however, any actual active negligence of Indemnitees will only affect the duty to indemnify for the specific act found to be active negligence, and will not preclude a duty to indemnify for any other act or omission of Indemnitees.
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 Agreement. 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 Agreement 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 the 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 the 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 Agreement 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 Agreement. All such documents and materials shall be property of COUNTY.

3. In the event that the 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 agreement 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 coverages and shall satisfy the following terms during the term of this Agreement, or for a term otherwise specified herein.

1. Workers' Compensation:

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. Policy shall be endorsed to waive subrogation in favor of the County of Riverside; and to provide a Borrowed Servant/Alternate Employer Endorsement.

2. Commercial General Liability:

Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, completed operations, personal and advertising injury covering claims which may arise from or out of ENGINEER's actual or alleged acts or omissions during any work under this Agreement.

The policy shall name, by endorsement, the County of Riverside and all Agencies, Special Districts and

Departments of the County of Riverside, their respective Directors, Officers, Board of Supervisors, employees, agents, elected and appointed officials ("County insureds") as Additional Insureds. The policy shall provide first party insurance coverage for the County insureds for any loss, suits, claims, demands, actions, or proceedings caused by any alleged or actual negligence, recklessness, willful misconduct, error or omission 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. Indemnity coverage under the policy does not include loss, suits, claims, demands, actions, or proceedings caused by actual active negligence of County insureds; however, any actual active negligence of County insureds will only affect the duty to indemnify for the specific act found to be active negligence, and will not preclude a duty to indemnify for any other act or omission of County insureds.

The 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.

The Policy shall provide a defense to the County insureds for any loss, suits, claims, demands, actions, or proceedings caused by an actual or alleged act or omission or 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, whether or not ENGINEER is negligent or otherwise at fault. A defense is required if the loss, suits, claims, demands, actions, or proceedings are based on the active negligence of the County insureds unless the active negligence of the County insureds is the sole cause of the loss, suits, claims, demands, actions, or proceedings.

3. Vehicle Liability:

ENGINEER shall maintain Liability Insurance for all owned, non-owned or hired vehicles in an amount not less than $1,000,000 per occurrence combined single limit. If ENGINEER's vehicles or mobile equipment are not to be used in the performance of the obligations under this Agreement, ENGINEER shall maintain coverage for non-owned or hired vehicles in an amount not less than $1,000,000 per occurrence combined single limit. Such non-owned or hired vehicle coverage may be included as a part of the Commercial General Liability policy. 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 by endorsement, the County of Riverside and all Agencies, Special Districts and Departments of the County of Riverside, their respective Directors, Officers, Board of Supervisors, employees, agents, elected and appointed officials as Additional Insureds.

4. Professional Liability:

ENGINEER shall maintain Professional Liability Insurance providing coverage for performance of work included within this Agreement, with a limit of liability of not less than $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. Upon termination of this Agreement or the expiration or cancellation of the claims made insurance policy ENGINEER shall purchase at his sole expense either 1) an Extended Reporting Endorsement (also known as Tail Coverage); or, 2) Prior Dates Coverage from a 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 for as long as allowed by law.

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 an 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 self-insured retentions. If such self-insured retentions exceed $500,000 per occurrence such retentions shall have the prior written consent of the County Risk Manager before the commencement of operations under this Agreement. Upon notification of self insured retentions which are deemed unacceptable to the COUNTY, at the election of the County's Risk Manager, ENGINEER shall either; 1) reduce or eliminate such self-insured retentions as respect to this Agreement with the COUNTY, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, defense costs and expenses.

c. The ENGINEER shall cause their insurance carrier(s) to furnish the COUNTY with 1) a properly

executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein; or, 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) shall provide no less than thirty (30) days written notice or ten (10) days in the event of cancellation for nonpayment of premium be given to the COUNTY prior to any cancellation of such insurance. In the event of a material modification or cancellation of coverage, this Agreement shall terminate forthwith, unless the COUNTY 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 coverages and the insurance required herein is in full force and effect. Individual(s) authorized by the insurance carrier to do so on its behalf shall sign the original endorsements for each policy and the Certificate of Insurance. ENGINEER shall not commence operations until the COUNTY has been furnished original Certificate (s) of Insurance and certified original copies of endorsements or policies of insurance including all endorsements and any and all other attachments as required in this Section. Submittal of certificates to County and review or approval of certificates by County does not relieve ENGINEER of its duties to provide insurance which fully complies with the terms stated above.

d. It is understood and agreed by the parties hereto and the ENGINEER's insurance company(s), that the Certificate(s) of Insurance and policies shall so covenant and shall be construed as primary insurance, and the COUNTY'S insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as excess.

e. If, during the term of this Agreement or any extension thereof, there is a material change in the scope of services or performance of work the Risk Manager of the County of Riverside reserves the right to adjust the types of insurance required under this Agreement and the monetary limits of liability for the insurance coverages required herein, 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 subcontractors working under 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 Agreement, including, without limitation, workers' compensation laws and licensing and regulations.

Q. Nondiscrimination

1. During the performance of this agreement, ENGINEER and its Subcontractors shall not 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 Agreement 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, 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 three years from the date of final payment under the contract or three years from project closeout, whichever is later.
2. 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. 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.

V. 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 the 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.

W. Funding Requirements

1. All obligations of COUNTY are subject to appropriation of resources by various Federal, State and local agencies.
2. This agreement is valid and enforceable only if sufficient funds are made available to COUNTY for the purpose of this PROJECT. In addition, this agreement 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 agreement.

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 judgement, 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 submit a progress report in accordance with COUNTY

Engineering Services Progress Reporting Guidelines. Progress Reports shall indicate the progress achieved during the previous month in relation to the Schedule of Services. Submission of such progress report by ENGINEER shall be a condition precedent to receipt of payment from COUNTY for each monthly invoice submitted.

2. To ensure understanding and performance of the contract objectives, meetings between COUNTY, AGENCIES, and ENGINEER shall be held as often as deemed necessary. 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.

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 agreement 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 $676,507 including a $61,500 (10%) contingency and reimbursement is to be made at actual cost plus fixed fee for the following contractors:

• Dokken Engineering - Design	$332,084.87
• Dokken Engineering - Environmental	$128,923.47
• Dokken Engineering – NEPA (Optional)	$75,082.85
• Fehr & Peers, Inc.	$40,069.86
• VMS	$38,846.28

A budget of $75,082.85 for optional NEPA environmental clearance work is included in the above contract amount and will commence upon written authorization by the COUNTY PROJECT MANAGER. COUNTY shall hold any contingency in reserve for unforeseen Extra Work that may arise during the performance of this agreement. Contingency budget shall only be used at the discretion of the COUNTY PROJECT

MANAGER, and with prior written authorization by the COUNTY PROJECT MANAGER. No additional compensation for Extra Work will be paid except upon the issuance of an Extra Work Order by COUNTY.

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 Code of Federal Regulations Section 49, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments shall be used to determine the allowability of individual items of cost.

7. ENGINEER also agrees to comply with Federal procedures in accordance with Office of Management and Budget Circular A-102, Uniform Administrative Requirements for Grants-in-Aid to State and Local Governments.
8. 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 Engineering 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 be included with a Progress Report covering the same period as the submitted invoice.
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..
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 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 plans, specifications and estimate.

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 agreement.

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: _____

JUAN C. PEREZ

Director of Transportation

APPROVED AS TO FORM:

PAMELA J. WALLS, COUNTY COUNSEL

_____ Dated: 6/29/11

By Deputy

APPROVAL BY THE BOARD OF SUPERVISORS

_____ Dated: _____

PRINTED NAME

Chairman, Riverside County Board of Supervisors

ATTEST:

_____ Dated: _____

KECIA HARPER-IHEM

Clerk of the Board (SEAL)

ENGINEER Approvals

ENGINEER:

_____ Dated: 5/18/2011

Richard T. Liptak
PRINTED NAME

President
TITLE

ENGINEER:

_____ Dated: 5/18/2011

Cathy Chan
PRINTED NAME

Secretary
TITLE

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APPENDIX A

SCOPE OF SERVICES

ARTICLE AI • INTRODUCTION

A. PROJECT DESCRIPTION

The County of Riverside proposes a grade separation of Avenue 66 with Union Pacific Railroad (UPRR). A single track carries UPRR freight service in a 400 foot wide right-of-way. Passenger service is provided through Amtrak.

The existing Avenue 66 traverses in the east-west direction and intersects State Highway 111 and Hammond Road at grade. The UPRR is located between Highway 111 and Hammond Road and prevents a continuous connection across the UPRR right-of-way. Commuters traveling in the east-west direction must travel northerly to 4th Street to cross UPRR tracks at grade. This crossing is located in the southeast Coachella Valley, in eastern Riverside County just south of the City of Coachella, paralleling the NAFTA Corridor Designated State Route 86S.

This project will improve the existing at-grade crossing of 4th Street, UPRR, and Highway 111 by providing a new grade separated crossing south of 4th at Avenue 66. Conceptual alignment alternatives for the proposed grade separation have been developed as described in the August 15, 2008 Preliminary Engineering Study by Stantec. The County is considering Alignment Alternative Layout 2 - Realign Avenue 66 southerly which constructs an overhead crossing of UPRR, Highway 111 and Hammond Road south of the existing Avenue 66. Access between Highway 111 and Avenue 66 would be via Lincoln Street. The County would like additional evaluation in setting the intersection locations and final alignment before advancing to more detailed design.

Further, the County intends to build in the near term only the eastern portion of the project between Lincoln Street and Avenue 66 near Home Avenue, and would like to proceed with the Project Approval and Environmental Document phase. The western portion of the project would be advanced to construction sometime in the future, as a separate project.

Fourth Avenue would remain open, but with substantially reduced traffic, since through traffic would use the new grade crossing. As part of a separate project, the County is considering surface upgrades of the existing Fourth Avenue at-grade crossing.

Avenue 66 Grade Separation

Avenue 66 is designated in the County General Plan as an Urban Arterial Highway with a Right-of-Way (ROW) width of 152 ft. To meet the County's General Plan requirements, the proposed improvements will require the acquisition of new right-of-way for the realignment of Avenue 66 and widening of portions of existing Avenue 66.

The Project has the following stated objectives:

- Implement improvements to provide Avenue 66 grade separation crossing at UPRR.
- Provide unimpeded access for emergency vehicles across the railroad tracks.
- Reduce the existing traffic congestion and improve Level of Service (LOS) within the project area.
- Improve air quality through reduction of vehicles stopped and idling at train crossings.
- Provide a more direct access for trucks from State Route 86S, the NAFTA Corridor, to eastbound Interstate 10.
- Improve operational characteristics (i.e. speed, efficiency, and reliability of goods, movements through Riverside County) by substantially reducing conflicts between the railroad tracks and the vehicular traffic.

Existing Condition:

The existing at-grade railroad crossing is located approximately 600 feet northeast of existing Avenue 66/Highway 111 intersection and approximately 1.2 miles southeast of Avenue 62. Avenue 66 consists of an existing two-lane roadway, with one (1) East-Bound (EB) lane and one (1) West-Bound (WB) lane.

The existing curb to curb width of Avenue 66 varies from 30 feet to 45 feet within 60 to 67 foot right-of-way (ROW) width.

The railroad tracks are located within a 400-foot ROW owned by UPRR.

There is currently one single track at the railroad crossing. UPRR plans to add a second track in the near future followed by two future additional tracks within the railroad ROW. The ultimate railroad section consists of four (4) tracks.

The land on both sides of the proposed Avenue 66 roadway located to the west of Avenue 66/Highway 111 intersection is vacant. East of the Coahuilla Street intersection, there are residential properties along the northern edge of Avenue 66. Mecca Family Service Center Community Health Clinic and a strip of shops are located along the southern edge of Avenue 66. There is an existing parking lot south of these buildings.

There are existing storm drainage culverts under Avenue 66, in the vicinity of the Lincoln Street intersection, and under Highway 111, west of existing UPRR crossing.

There are a number of abandoned fish ponds located in the southwest quadrant of the Avenue 111 and Lincoln Street intersection.

B. LOCATION

The proposed project is located in the southeast Coachella Valley, in eastern Riverside County just south of the community of Mecca, paralleling the NAFTA Corridor Designated State Rte. 86S. It is located on Avenue 66 southeast of the current 4th Street at-grade crossing with Union Pacific Railroad (UPRR) Los Angeles Subdivision mainline track at grade. The proposed crossing is approximately 0.75 miles east of the existing SR-86 and SR-195 interchange.

C. COORDINATION

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

- Community of Mecca
- Caltrans
- Union Pacific Railroad / Amtrak
- Riverside County Flood Control District
- Regional Water Quality Control Board
- Federal Highway Administration
- Federal and State Resource Agencies
- Utility Companies
- Native American Tribes

Caltrans may exercise review and approval function through the County project manager at key points in the development process. All contacts with Caltrans will be directed through Riverside County (COUNTY). Milestone project design reviews will be performed for the specific products and deliverables listed herein. The County project manager will conduct these reviews, in addition to the monthly project status reports and meetings. All meetings with other outside agencies shall be scheduled by ENGINEER with approval of COUNTY.

D. PHASES

The services performed by ENGINEER shall include the following phases:

- Phase I – Final Alignment Studies, which shall include both the near team project from Lincoln Street eastward to Avenue 66 near Home Avenue (East Project), and the future second project to the west of Lincoln Street and connecting to Avenue 66 near the terminus of the County's I-95/SR 86S Interchange project (West Project).
- Phase II - Project Approval and Environmental Documentation (PA & ED) for the preferred alignment for the East Project.

Phase I shall proceed upon written notice to proceed by COUNTY. The subsequent phase shall not proceed until authorized in writing by COUNTY.

E. STANDARDS

ENVIRONMENTAL

The procedures to be followed and the content of the environmental surveys, environmental technical reports, and environmental documents are set forth in Caltrans "Project Development Procedures Manual", Caltrans "Environmental Handbook", Caltrans Transportation Laboratory technical manuals for environmental studies, and FHWA's "Technical Advisory T6640.8A".

State requirements for environmental analysis and impact assessment, as set forth in the California Environmental Quality Act and other applicable county and state regulations, must be satisfied.

PROJECT FILES

Project Files shall be indexed in accordance with Caltrans Project Development Uniform File System.

DESIGN STANDARDS

The work to be performed by the ENGINEER shall be based on, but not limited to the procedures, guidelines, standards and code contained in the Caltrans and other agency publications listed below:

- All deliverables and supporting documentation shall be prepared based on English values.
- Caltrans Project Development Procedures Manual (PDPM), with current amendments
- Caltrans Local Assistance Program Guidelines, with current amendments
- Caltrans Local Programs Procedures (LPP), with current amendments
- Caltrans Local Assistance Procedures Manual (LAPM), with current amendments

- Caltrans Project Management Handbook, with current amendments
- Caltrans Project Risk Management Handbook, with current amendments
- Caltrans Project Communication Handbook, with current amendments
- Caltrans Highway Design Manual (HDM), current edition with current amendments
- Caltrans Traffic Manual, current edition
- Caltrans Construction Manual, current edition
- Caltrans Standard Plans, current edition
- Caltrans Standard Specifications, current edition
- Caltrans Standard Special Provisions, with current amendments
- Caltrans Bridge Design Specifications (code)
- Caltrans Storm Water Quality Handbooks, current editions
- Caltrans Encroachment Permit Manual, current edition
- Caltrans Cooperative Agreement Manual, current edition
- Caltrans PS&E Preparations Manual, current edition
- Caltrans CADD Users Manual, current edition
- Caltrans Drafting Manual, current edition
- Caltrans Standard Environmental Reference, current edition
- Caltrans Manual of Test, California 130, current edition
- All manuals and publications unique to the field of bridge design and construction, with current amendments
- Urban Drainage Design Manual, US Department of Commerce, current edition
- Drainage of Highway Pavement, US Department of Transportation, current edition
- County of Riverside Roadway Improvement Standards
- Riverside County Hydrology Manual
- Applicable Local Codes and Manuals
- Community of Mecca Design Guidelines
- County of Riverside Standards
- Federal Highway Administration guidelines

- American Disabilities Act (ADA) Standards

ROADWAY DESIGN SOFTWARE

Microstation - compatible with current Caltrans version

All Documents shall be prepared using English standards and dimensions.

F. KEY PERSONNEL

The ENGINEER has represented to the COUNTY that certain key personnel shall 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:

Assignment	Key Personnel
Project Manager	Elizabeth B. Diamond, PE
Roadway/Railroad Project Engineer	Michael Roberts, PE
Structures Project Engineer	John Bishop, SE
Environmental Team Leader	Namat Hosseinion
Senior Geologist	Michael Wilson, PG
QA/QC Engineer	Juann Ramos, PE

G. COUNTY RESPONSIBILITES

- Provide all current standards, existing plans, and manuals (at CONSULTANT cost)
- Perform Quality Assurance for all work and deliverables
- Attend project meetings
- Topographic mapping in Caltrans format
- Orthorectified Aerial Photograph in digital format
- Existing R/W and parcel mapping in Caltrans format
- Design surveys
- Coordinate Permits to Enter with property owners
- Select Preferred Alternative

ARTICLE AII • SERVICES TO BE PROVIDED

PHASE I: FINAL ALIGNMENT STUDIES

The purpose of Phase I is to refine the alignment work previously prepared and ensure the overall realigned Avenue 66 is consistent with COUNTY'S short and long term plans including compatibility with other nearby projects and developments. The goal is to provide sufficient preliminary engineering and specialized review to insure the preferred alignment has no fatal flaws. Phase I will provide the project stakeholders with alternatives analysis to allow a single alignment to be supported during the Project Approval and Environmental Documentation Phase.

TASK 1.0 PROJECT MANAGEMENT

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

TASK 1.1 PROJECT COORDINATION & PDT MEETINGS

ENGINEER shall schedule and conduct a kick-off meeting within two weeks of Notice to Proceed (NTP). ENGINEER shall contact all members of the PDT to coordinate the scheduled meeting date. ENGINEER shall also coordinate and attend regular PDT meetings with COUNTY, Caltrans, UPRR and other representatives from resource agencies as necessary. A meeting notice, an agenda, and meeting minutes shall be prepared by the ENGINEER for each meeting and distributed to the COUNTY'S Project Manager and other attendees at each meeting. ENGINEER shall prepare relevant meeting materials and exhibits to assist the PDT members in quickly understanding project progress and issues and provide meaningful input. An Action Item list and a Deliverables Status Matrix shall be updated and prepared for each PDT meeting. The environmental team leader shall be present at all PDT meetings up to environmental document signature.

TASK 1.2 MONTHLY PROGRESS REPORTS

ENGINEER shall prepare progress reports to record the progress of the project and as supporting data for invoices presented monthly to the COUNTY. The Progress Report shall include accomplished tasks for the month, anticipated progress for the next month, pending issues and schedule completion target dates.

ENGINEER shall mail progress reports with the monthly invoices and deliver the Progress Reports to the COUNTY and Caltrans Project Managers at the monthly PDT meetings.

TASK 1.3 PROJECT SCHEDULE

ENGINEER shall, within 2 weeks of Notice to Proceed (NTP), provide a detailed project baseline schedule, indicating milestones, major activities and deliverables, to the COUNTY and Caltrans for review and comments. ENGINEER shall update the schedule on a monthly basis, to coincide with the PDT meetings or as required.

TASK 1.4 QUALITY CONTROL

ENGINEER shall have a quality control plan in effect during the entire course of the project. ENGINEER shall develop a plan establishing a process to ensure design calculations are independently checked. Exhibits and plans shall also be checked, corrected and back-checked for accuracy and completeness. ENGINEER shall review environmental and engineering Sub-consultant report submittals to ensure that appropriate background information, study methodology, interpretation of data, format and content are completed in accordance with current standards.

TASK 1.5 PUBLIC MEETINGS

ENGINEER shall organize and attend public information meetings with COUNTY staff and appropriate team members to inform the public and interested parties of the COUNTY'S intent to construct the proposed project and to obtain input for the project development process. The meetings shall be conducted to identify economic, social and environmental issues perceived as important by the public. The meetings shall be held using the Caltrans open house format. The format of the open house is informal, allowing attendees to speak directly with COUNTY and ENGINEER representatives about their concerns. The public information meeting summary report shall become part of the formal project documentation and may be summarized as part of the discussion of project-related public outreach efforts.

TASK 1.6 COST ACCOUNTING

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

TASK 1.7 PROJECT FILES

Project Files shall be indexed in accordance with Caltrans Project Development Uniform File System.

TASK 1.8 PERMITS

ENGINEER shall prepare all necessary encroachment permits and rights of entry needed for Phase I activities.

Deliverable: ENGINEER shall prepare meeting notices, agendas and minutes, monthly progress reports and invoices, public meeting materials, and maintain project files. ENGINEER shall obtain permits and right-of-entry. Although fees for encroachment permits to access Caltrans or UPRR r/w to obtain information are included, fees for construction permits are not included.

TASK 2.0 TRAFFIC STUDIES

Traffic Analysis will be completed to provide information needed to assess alternatives and size roadway improvements. The following existing conditions analysis, forecasting and operational analysis will be included.

TASK 2.1 EXISTING CONDITIONS ANALYSIS

Although traffic counts for this project were collected in 2007, new data will be collected to ensure that the "existing condition" for this assessment is current (e.g. less than one year old), and will continue to be acceptable to Caltrans (less than three years old) during the entire PA & ED phase. Morning (AM) and evening (PM) peak hour operating conditions will be evaluated at the following intersections. Additionally, daily traffic loads on area roadways will be identified.

Intersections:

1. 66th Avenue/Home Avenue
2. 4th Street/Hammond Road
3. 4th Street/Grapefruit Blvd
4. 66th Avenue/SR-111
5. 66th Avenue/Lincoln Avenue

Roadway Segments:

1. 66th Avenue, West of Lincoln Avenue
2. Lincoln Avenue, South of 66th Avenue

3. 4th Street, near the Railroad Crossing
4. Grapefruit Blvd, South of 4th Street
5. Grapefruit Blvd, North of 4th Street
6. SR-111, South of Avenue 66
7. *66th Avenue, East of Home Avenue*

24-hour counts will be taken at all roadway locations to determine the peak hour periods. Based on the peak hour period determinations, morning and evening peak period counts will be collected at all study intersections. Three days worth of machine counts will be collected at the roadway count locations.

Highway Capacity Manual (HCM) 2000 consistent methodologies will be used at all analysis locations. For intersections, Synchro software will be utilized. Roadway segment operations will be evaluated using *roadway segment capacities consistent with the County's* roadway segment thresholds from its General Plan. Available accident data in the study area will be reviewed to identify any concerns at the study facilities.

Deliverable: Memorandum summarizing the existing conditions assessment and electronic analysis files.

TASK 2.2 TRAVEL DEMAND FORECASTS

ENGINEER will use the County RivTAM travel demand forecasting model to develop traffic forecasts in the study area. For this project, the following forecasts will be created:

- *Construction Year No Project Forecasts* – Forecasts assuming the current roadway configuration
- Construction Year With East Project Forecasts – Forecasts assuming the proposed connectivity associated with construction from Lincoln Street to the east.
- Design Year No Project Forecasts – Forecasts assuming the current roadway configuration
- Design Year With East Project Forecasts – Forecasts assuming the proposed connectivity associated with construction from Lincoln Street to the east.
- *Design Year With East and West Projects Forecasts* – Forecasts assuming the proposed connectivity associated with both the near term project to the east and the second project to the west of Lincoln Street.

Deliverable: Memorandum summarizing the forecasting assumptions and forecasting results.

TASK 2.3 OPERATIONS ANALYSIS

The study facilities listed in Task 2.1 plus the new facilities associated with the Project (listed below) will be analyzed using the same analysis methodologies as described in Task 2.1.

Additional Intersections:

1. Avenue 66 New Alignment/Lincoln Avenue

Additional Roadway Segments:

1. Avenue 66 New Alignment east of Lincoln Avenue (East Project)
2. Avenue 66 New alignment east and west of Lincoln Avenue (East and West Projects)

AM and PM peak hour operations and roadway segments will be analyzed for each scenario. The results will contain peak hour LOS and associated performance measures. For intersections, projections of queuing for critical movements will be provided.

Deliverable: Draft and Final Operations Analysis Memorandum.

TASK 3.0 PROJECT MAPPING

TASK 3.1 RIGHT OF WAY REQUIREMENTS MAP

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

Deliverable: Preliminary Right-of-Way Requirement Map

TASK 3.2 UTILITY MAPPING

ENGINEER shall perform a utility search for affected utilities in the project area. The search shall include field review and review of available as-builts for the project area. ENGINEER shall research records for both public and franchise utilities and shall plot the location of all existing facilities including: water, gas, storm drain, electric, and fiber optic cable. ENGINEER shall include preparation of a database of utility records indicating the type of utility, owner, drawing number, and other vital information. The identified utility companies shall be sent a letter requesting information regarding existing and proposed utilities. Using the information obtained, ENGINEER shall prepare a utility base map which shall be the basis of the Utility Information Sheet.

Deliverable: *ENGINEER shall complete base* utilities mapping in Microstation format in accordance with Caltrans and COUNTY standards.

Task 3.2.1 Utility Information Sheet

ENGINEER shall prepare a Utility Information Sheet. The names of all utilities and points of contact shall be developed. A description of the location, existing facility and potential conflicts with the project shall be prepared. The utility information will be used as part of the alignment evaluation process and during future tasks and phases including completion of the Caltrans PEER, Utility Coordination, and preparation of PS&E.

Deliverable: ENGINEER shall complete a utility information sheet for the East and West Projects. Applicable portions will be included in the PEER in accordance with Caltrans standards.

TASK 4.0 PRELIMINARY GEOTECHNICAL STUDIES

TASK 4.1 LITERATURE REVIEW AND RECONNAISSANCE

ENGINEER shall begin the investigation by reviewing available geologic and geotechnical literature pertaining to the project site. ENGINEER shall review published soil and geologic data as available from appropriate public agencies. The review shall include a review of reports and geologic maps prepared by the California Geological Survey, the U.S. Geological Survey, and other government agencies, including available As-built drawings of nearby structures, to determine the types of soils and foundations these existing structures encountered and used.

A geologic/geotechnical reconnaissance by a California Certified Engineering Geologist and/or a California Registered Geotechnical Engineer shall 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.

TASK 4.2 PRELIMINARY SEISMIC STUDY

A preliminary seismic study will be performed concurrently with the literature search to document any previous seismic events at and near the project site.

Deliverable: Preliminary Geotechnical Study Report containing the results of the literature search, seismic study, and recommendations for determining preliminary costs to evaluate the alignment alternatives.

TASK 4.3 HAZARDOUS WASTE INITIAL SITE ASSESSMENT (ISA)/PHASE I ENVIRONMENTAL ASSESSMENT

ENGINEER shall prepare an ISA that shall identify known and potential contaminant occurrences and sources. This shall begin with a database search of federal, state, and local records, review of available

documents on area geology, hydrology, and contaminant occurrences. This ISA will be prepared in accordance with the latest Caltrans guidelines.

Deliverable: Draft and Final ISA. If based upon the results of the ISA it is determined that a Phase 2 Environmental Site Assessment is required, this work shall be negotiated under a separate item and is not considered part of this scope and fee.

TASK 5.0 CONCEPTUAL APPROVAL DRAWINGS

Based upon the results of the traffic operational analysis, project mapping, geotechnical study, previous work completed by Stantec, consultation with ENGINEER'S environmental team and with input from COUNTY, ENGINEER shall develop up to three alternative alignments for the East and West project. ENGINEER shall review with and obtain comments from the County, Caltrans, UPRR, and other stakeholders as approved by the COUNTY. ENGINEER shall prepare a final preferred alignment drawing that will serve to establish the project footprint for subsequent environmental studies. The Conceptual Approval Drawing will contain the following components.

TASK 5.1 GEOMETRIC DESIGN DRAWINGS

ENGINEER shall develop base geometric design and cross sections for the preferred alignment. Geometric design data and key project features shall be depicted. ENGINEER shall develop preliminary pavement delineation to aid in the analysis of the alternatives. Typical cross sections will be provided. Original ground, traveled way, shoulders, cut/fill slopes and existing/proposed right-of-way shall be shown. The grading design shall aid in the development of the project footprint, project cost, retaining wall locations, adherence to slope standards, drainage design and direct/indirect project impacts.

Deliverable: Preliminary Conceptual Approval Drawing and Final Conceptual Approval Drawing

TASK 5.2 DRAFT STRUCTURES ADVANCE PLANNING STUDIES (APS)

ENGINEER shall prepare a preliminary Structures APS in accordance with Caltrans guidelines for each alignment alternative to aid in selecting an alignment and structure type and be used as a basis for environmental studies and geotechnical field work in subsequent phases. The studies shall take into consideration foundation requirements, UPRR standards including temporary and permanent clearance requirements, Caltrans requirements, cost, ease of construction and aesthetics.

ENGINEER shall prepare the APS plan sheets using the standard Caltrans Bridge General Plan sheet format. ENGINEER shall prepare a Design Memo summarizing important assumptions and considerations involved in the advance planning study alternatives. ENGINEER shall prepare a Preliminary Cost Estimate for the bridge type based on approximate quantities and historical construction costs for similar projects.

Deliverable: Draft Structures Advance Planning Studies for each alternative alignment.

TASK 5.3 STAGE CONSTRUCTION DESIGN

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

Deliverable: Conceptual stage construction drawings.

TASK 5.4 ENGINEER'S ESTIMATE

ENGINEER shall develop preliminary engineer's estimates for each alternative. The estimates shall be in Caltrans estimate format using escalation cost factors.

Deliverable: Preliminary Engineer's Estimates.

PHASE II: PROJECT APPROVAL/ENVIRONMENTAL DOCUMENT (PA & ED)

ENGINEER shall provide Project Approval and Environmental Documentation services for the East Project.

TASK 1.0 PROJECT MANAGEMENT

Project Management shall continue to be conducted to ensure a smooth flow of information between Project Development Team (PDT) members. The tasks to be provided are listed below. The scope of each task shall be as detailed in Phase I of this Scope of Services.

TASK 1.1 PROJECT COORDINATION & PDT MEETINGS

TASK 1.2 MONTHLY PROGRESS REPORTS

TASK 1.3 PROJECT SCHEDULE

TASK 1.4 QUALITY CONTROL

TASK 1.5 PUBLIC MEETINGS

TASK 1.6 COST ACCOUNTING

TASK 1.7 PROJECT FILES

TASK 1.8 PERMITS

Deliverable: ENGINEER shall prepare meeting notices, agendas and minutes, monthly progress reports and invoices, public meeting materials, and maintain project files. ENGINEER shall obtain encroachment permits and rights-of-entry as needed to support Phase II activities. Although fees for encroachment permits to access Caltrans or UPRR r/w to obtain information are included, fees for construction permits are not included.

TASK 2.0 FINAL TRAFFIC REPORT

A final Traffic Report will be completed and approved to support the environmental document and PEER.

TASK 2.1 TRAFFIC REPORT

ENGINEER shall prepare a Traffic Report for the East Project. It will utilize relevant portions of the assumptions, forecasting and operational analysis developed during Phase I. The traffic report will be suitable to use in support of the PEER.

Deliverable: Draft and Final Traffic Reports

TASK 3.0 PRELIMINARY ENGINEERING EVALUATION REPORT

TASK 3.1 35% ROADWAY PLANS

ENGINEER will prepare 35% roadway plans for the East Project. The intent of the 35% plans is to gain consensus on project components and plan format, and include as an attachment with the PEER.

ENGINEER will submit the 35% plans to the COUNTY for comments.

The following plan sheets will be included in this submittal.

Title Sheet

Survey Control Plan

Typical Cross Sections

Combined Plan/Profile Sheets

Drainage Plans

Pavement Delineation Plans

Lighting Plans

Deliverable: 11x17 size copies of the 35% plans.

TASK 3.2 PRELIMINARY HYDROLOGY/DRAINAGE REPORT

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

Deliverable: ENGINEER shall complete a Preliminary and Final Hydrology/Drainage Report and Final Report.

TASK 3.3 STORM WATER QUALITY ASSESSMENT (SWQA)

ENGINEER shall prepare a SWQA. The Consultant shall study storm water quality during project development. The Consultant shall identify potential storm water quality impacts and develop options to avoid, reduce or minimize the potential for storm water quality impacts.

Deliverable: ENGINEER shall complete a SWQA and incorporate the assessment into the environmental document.

TASK 3.4 STORM WATER DATA REPORT (SWDR)

ENGINEER shall ensure that the programmed project includes sufficient right-of-way and budget for required storm water controls and identify project-specific permanent and temporary Best Management Practices (BMP's) that may be required to mitigate impacts. Drainage areas and total disturbed area shall be defined, as shall climatic conditions, existing drainage site conditions, site permeability, soil texture, existing vegetation and groundwater.

Task 3.4.1 Evaluation Documentation Form

ENGINEER shall determine hydraulic conditions, disturbed soil areas, local pollution control requirements and total maximum daily loads (TMDL's) within the project vicinity.

Task 3.4.2 Site Data and Storm Water Quality Design Issues

ENGINEER shall define site data and storm water quality design issues in accordance with checklists SW-1, SW-2 and SW-3 from the Caltrans Project Planning and Design Guide:

- Receiving water bodies/303(d) list/Pollutants of Concern
- Regional Water Quality Control Board (RWQCB) special requirements/concerns
- Local agency requirements/concerns
- Project design considerations (climate, soil, topography, geology, groundwater, right of way requirements, slope stabilization
- Right-of-way BMP costs and funding
- Measures for avoiding or reducing potential storm water impacts

Task 3.4.3 Design Pollution Prevention BMPs

ENGINEER shall describe proposed design pollution prevention BMPs to be used on the project in accordance with checklists DPP-1, Parts 1-5:

- Downstream effects related to potentially increased flow
- Slope/Surface protection systems
- Concentrated flow conveyance systems
- Preservation of existing vegetation

Task 3.4.4 Permanent Treatment BMP's

ENGINEER shall describe proposed permanent treatment BMPs to be used on the project in accordance with checklists T-1, Parts 1-7:

Task 3.4.5 Construction Cost Information

ENGINEER shall prepare a summary of construction costs included in the Preliminary Construction Cost Estimate Summary associated with storm water pollution prevention.

After review by the COUNTY and Caltrans, ENGINEER shall incorporate all comments into a final report.

Deliverable: Approved SWDR.

TASK 3.5 ADVISORY AND MANDATORY FACT SHEETS

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

Deliverables: Approved Advisory and Mandatory Fact Sheets

TASK 3.6 ENGINEER'S ESTIMATE

ENGINEER shall develop preliminary engineer's estimates for the preferred alternative. The estimate shall be in Caltrans estimate format using escalation cost factors.

Deliverable: Engineer's Estimate.

TASK 3.7 PRELIMINARY ENGINEERING EVALUATION REPORT

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

Deliverable: Draft and Final PEER.

TASK 4.0 TECHNICAL STUDIES AND ENVIRONMENTAL DOCUMENTATION

An Initial Study leading to a Mitigated Negative Declaration (IS/MND) will be prepared for the East Project. ENGINEER shall work with COUNTY to coordinate activities, and to prepare necessary studies and documents.

TASK 4.1 TECHNICAL STUDIES

ENGINEER shall coordinate the preparation of the project description and all necessary and required studies to be included in a CEQA IS, and the following: Biological Technical Report, Cultural Resources Assessment, Noise Report, and an Air Quality Report.

Task 4.1.1 Biological Technical Report

ENGINEER will conduct a literature review to assist in determining the existence or potential occurrence of sensitive plant and animal species on the project site or in the vicinity. Literature under review will include federal and state lists of sensitive species and current database records, including the California Natural Diversity Data Base (California Department of Fish and Game, 2004) and the California Native Plant Society's *Electronic* Inventory of Rare and Endangered Vascular Plants of California (Skinner, et al., 2004). In accordance with County guidelines, ENGINEER will submit a letter to the U.S. Fish and Wildlife Service requesting a list of threatened and endangered species known in the project vicinity. The results of the records search will be summarized and included in the Biological Technical Report.

ENGINEER will conduct fieldwork (including habitat evaluation and a jurisdictional delineation) in order to document the presence/absence of sensitive biological and water resources (e.g., species or habitats), or to determine the potential for occurrence of such resources that may not be detectable when the fieldwork is conducted. Field work will be done by a qualified biologist. Habitats and locations of any sensitive biological resources present on site, including plants and plant communities, will be mapped.

ENGINEER will prepare a Biological Technical Report that will include a description of the field methods used and the results of the biological assessment of the project area. The report will list plant and animal species present, along with a general description of the plant communities occurring within the project area. If any sensitive resources are found on the site, ENGINEER will prepare and include in the Biological Technical Report a graphic exhibit displaying the location of the sensitive plant communities on site and any sensitive biological resources observed. The report also will contain tables describing sensitive species and their habitats that are present or potentially present; it also will identify and assess project impacts on the existing biological resources, including any sensitive species. Mitigation measures will be included as necessary. This task includes complying with the CVMSHCP.

Task 4.1.2 Cultural Resources Assessment

ENGINEER will prepare documentation in accordance with California Public Resources Code 5024, and the California State Historic Preservation Officer. This work will include:

Research – A cultural resource records search will be conducted at the Eastern Information Center (EIC), located at the University of California Riverside. The EIC is the state-designated repository for records concerning cultural resources in Riverside County. The records search will provide information on known cultural resources and on previous cultural resources investigations within a half-mile radius of the project area. Data sources that will be consulted at the EIC include archaeological site and artifact records, historic maps, reports from previous studies, and the state's Historic Resource Inventory (HRI) for Riverside County, which contains listings for National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). In addition, ENGINEER will complete research for the properties within the Area of Potential Effects to determine built dates for any buildings and structures.

Field Survey – ENGINEER will conduct a systematic field survey of portions of the project area that are not obscured by asphalt/concrete. The ground surface will be visually examined by an archaeologist for evidence of prehistoric (Native American) or historic (non-Native American) archaeological materials and other potential historic resources (e.g., buildings, bridges, railroads, mines, or canals). Any previously unrecorded resources identified during the survey will be recorded on State of California DPR 523 forms.

Phase 1 Cultural Report – Base on the sensitivity of the project location ENGINEER will prepare a Phase 1 Report. This Phase I Report is the initial report required within areas identified as having a high probability of prehistoric and historic sites The report will describe: 1) the results of Native American Consultation, 2) research and field methods used in identifying cultural resources, 3) the archaeological and historic resources identified in the project vicinity, 4) the architectural resources identified in the project, and 5) the potential of the project to effect any archaeological or historic resources. If recommendations for further studies are warranted, these will be described in detail in a separate memorandum.

Native American Coordination – ENGINEER will contact the Native American Heritage Commission (NAHC). The NAHC will provide a list of Native American groups to contact regarding this project. ENGINEER will

contact each tribe via certified mail. After 28 days, ENGINEER will follow up with those groups that have not commented, via telephone. ENGINEER will document all efforts to consult with each tribe.

Task 4.1.3 Noise Impact Report

ENGINEER will prepare a Noise Impact Report that assesses the project's potential construction effects on sensitive receptors. ENGINEER will review applicable State and County noise and land use compatibility criteria for the project area. Noise standards in the County General Plan will be discussed for land uses adjacent to the project. The areas with potential future noise impacts will be identified using land use information, aerial photographs, and field reconnaissance. A discussion of any existing sensitive uses in the project vicinity will be included. Noise impacts from construction sources will be analyzed based on the equipment expected to be used, length of a specific construction task, equipment power type (gasoline or diesel engine), horsepower, load factor, and percent of time in use. EPA recommended noise emission levels will be used for the construction equipment. Analysis requirements will be based on the sensitivity of the area and applicable specifications and will be documented in a Report to support the Initial Study. TNM 2.5 noise model will be used for modeling noise in the project area.

Task 4.1.4 Air Quality Report

ENGINEER will evaluate the project's operational and construction related Air Quality impacts. The project will be modeled using URBEMIS 2007 model which uses the California Air Resources Board's EMFAC2007 model for on-road vehicle emissions and the OFFROAD2007 model for off-road vehicle emissions. ENGINEER will prepare an Air Quality Report to support the Initial Study. Emission factors included in the SCAPCD's CEQA Air Quality Handbook or the ARB's OFFROAD2007 model will be used for construction dust emission estimates. Green House Gas emissions will be analyzed according to the latest 2009 OPR regulations and implementation guidelines as directed by the County. BMP's or mitigation measures will be included as necessary.

Task 4.1.5 Visual Simulations

ENGINEER will prepare two computer-generated visual simulations from key viewpoints showing the proposed improvements in the surrounding setting. No Visual Assessment will be prepared as one is not required for CEQA compliance nor is the proposed project area included in a State or County scenic corridor.

Deliverable: Biological Technical Report, Cultural Resources Assessment, Noise Impact Report, Air Quality Report, Visual Simulations.

TASK 4.2 ENVIRONMENTAL DOCUMENT

Based on consultation with COUNTY environmental planning staff, ENGINEER shall prepare an Initial Study leading to a Mitigated Negative Declaration for the East Project.

Task 4.2.1 Prepare Draft Initial Study/Mitigated Negative Declaration

ENGINEER will incorporate the project description and summarize the technical studies listed above into a draft Initial Study/Mitigated Negative Declaration (IS/MND). ENGINEER will prepare sections within the IS/MND for land use, public safety, public services, recreation, and utilities. The IS will determine: if the project will have any significant adverse effects on the environment under both State and Federal standards; identify potential mitigation measures for such impacts; determine if the mitigation measures reduce all impacts below a level of significance. Based on consultation with County environmental staff, additional technical studies, such as visual, are not considered necessary for this project. Should they become necessary, ENGINEER can have those studies completed under an Addendum to this agreement. The Draft IS/MND will be provided to agencies for review and comment. The Draft IS/MND will be revised by ENGINEER in response to the agencies' comments and a revised Draft IS/MND will be provided to the agencies for draft approval.

Task 4.2.2 Document Circulation

ENGINEER will prepare the requisite public notices for distribution of the IS/MND. ENGINEER will prepare the hard copies of the IS/MND document and the technical studies. ENGINEER will coordinate the preparation of the distribution list with the County.

If requested, ENGINEER will also prepare for and attend a public meeting to obtain public input on the project. Exhibits and project information will be presented at a local venue in order to present the project to the public for any comments or concerns. Informational flyers and comment cards will be distributed at the event.

Task 4.2.3 Prepare Responses to Comments

At the close of the public review period for the IS, ENGINEER will meet with County staff to review any comments on the IS that were received, and to discuss potential responses to these comments.

ENGINEER will then formulate responses to the comments and incorporate these responses into the final document.

Task 4.2.4 Mitigation Monitoring Program

ENGINEER will prepare a mitigation monitoring plan to ensure the mitigation measures contained in the IS are properly implemented.

Task 4.2.5 Final Administrative Record

ENGINEER will prepare the Final Mitigated Negative Declaration (MND) sheet and assemble the final document for County approval and Board of Supervisors adoption. Upon Board adoption of the project, ENGINEER will prepare and file a Notice of Determination with the County Clerk and pay the appropriate filing fee.

Deliverable: Draft and Final Initial Study, Responses to Comments, Mitigation Monitoring Program, Mitigated Negative Declaration, Notice of Determination.

TASK 5.0 NEPA OPTIONAL TECHNICAL STUDIES/ENVIRONMENTAL DOCUMENT

If the County decides to use federal funding for the project the tasks below will provide NEPA compliance for the Avenue 66 Grade Separation project. The proposed environmental document type will be a Categorical Exclusion for NEPA. This task includes elevating the CEQA technical studies listed above to comply with formatting and technical requirements necessary to comply with CEQA, NEPA and FHWA requirements. It also includes additional anticipated NEPA studies as outlined below. Regulatory permits are not included in this phase.

Task 5.1 Relevant Technical Studies to Be Formatted to Support NEPA

Dokken Engineering shall format and write the Biological Technical Report as a Natural Environment Study, Cultural Resources Assessment as a Historic Properties Survey Report/Archaeological Survey Report, Noise Impact Report, Air Quality Report, completed for the CEQA document to comply with both NEPA and CEQA. Caltrans review, approval, and tasks related to NEPA only will be handled in Task 5.2.

Task 5.1.2 Natural Environment Study (NES)

In addition to the CEQA related biological evaluation, Dokken Engineering will conduct research and fieldwork within the Biological Study Area to meet NEPA and FESA compliance requirements. Dokken Engineering will prepare a NES to Caltrans standards that will include the results of the biological reconnaissance. The NES

will identify and assess project impacts on the existing biological resources, including jurisdictional waters and any sensitive plant or wildlife species. Mitigation measures will be included as necessary. Caltrans review and approval will be handled in Task 5.2.

Task 5.1.2 Cultural Resource Consultation for Section 106 Compliance

Dokken Engineering shall prepare documentation in accordance with Section 106. This work shall include a Historic Properties Survey Report and Archaeological/Historic Survey Report – All cultural resource efforts will be completed in compliance with Section 106 of the National Historic Preservation Act (NHPA) and will follow the requirements set forth by Caltrans Regarding Compliance with Section 106 of the NHPA.

Dokken Engineering will prepare the Area of Potential Effects (APE) Map, contact the Native American Heritage Commission and coordinate with the tribes, conduct a systematic field survey of portions of the APE that are not obscured by asphalt/concrete, and prepare a Caltrans format Historic Property Survey Report (HPSR) and Archaeological Survey Report (ASR) according to Caltrans specifications. Caltrans review and approval will be handled in Task 5.2.

Task 5.1.3 Air Quality Report

Dokken Engineering will prepare an Air Quality Impact Assessment for the project's operation and construction in accordance with the Caltrans' Transportation Project Level Carbon Monoxide (CO) Protocol, the EPA's fugitive dust conformity rule, and the South Coast Air Quality Management District's (SCAQMD) CEQA regulations for the Salton Sea Air Basin (SSAB).

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

Carbon monoxide hot-spot analyses will be conducted based on the peak traffic hour along Avenue 66, and turn volumes projected at key affected intersections in the project vicinity. The proposed project's impacts on the local and regional fugitive dust emissions (PM2.5 and PM10) will be evaluated using the Environmental

Protection Agency's Transportation Conformity Guidelines for Qualitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas. Dokken Engineering will work with Caltrans and the SCAQMD to identify feasible mitigation measures that will be developed as indicated in the impact analysis. Caltrans review and approval will be handled in Task 5.2.

Task 5.1.4 Noise Impact Report

Dokken Engineering will prepare a Noise Study Report that assesses the project's potential effects on existing and future noise conditions, including construction impacts. Dokken Engineering will review applicable Federal (Caltrans) and County noise and land use compatibility criteria for the project area. Noise standards regulating noise impacts including Federal Highways (FHWA) Noise Abatement Criteria (NAC) and standards included in the County's Noise Ordinance will be discussed for land uses adjacent to the project. The areas with potential future noise impacts have been identified using land use information, aerial photographs, and field reconnaissance. Existing roadway traffic noise will be calculated as baseline conditions, using traffic data included in the traffic study for the proposed project.

A survey of existing ambient noise levels (including the Railroad) will be conducted to establish the character of the noise environment at any sensitive receptor locations in the project area. Analysis requirements will be based on the sensitivity of the area and the Noise Ordinance specifications of the County. The existing and future noise levels will be assessed using the traffic noise impact screening procedure outlined in section N-4000 of the Caltrans Technical Noise Supplement (TeNS). If the proposed project fails the screening criteria, a detailed analysis will be performed as outlined in section N-5000 of the TeNS using the most recent version of the Traffic Noise Model 2.5 (TNM 2.5). If the future with-project noise levels are estimated to approach or exceed the NAC, noise abatement measures (such as sound barriers) will be analyzed and any necessary abatement measures will be assessed for feasibility and reasonableness. If both feasible and reasonable, abatement measures will be included in the project to reduce potential noise impacts to a less than significant level. Caltrans review and approval will be handled in Task 5.2.

Deliverable: NEPA and CEQA formatted documents: Biological Technical Report as a Natural Environment Study, Cultural Resources Assessment as a Historic Properties Survey Report/Archaeological Survey Report, Noise Impact Report, Air Quality Report, completed for the CEQA document formatted to comply with both NEPA and CEQA.

TASK 5.2 NEPA TECHNICAL STUDIES & CALTRANS REVIEW/APPROVAL

Dokken Engineering shall coordinate the preparation of all necessary and required studies to be included in the Categorical Exclusion (CE). Dokken Engineering will prepare and distribute copies of the technical studies for each of the review cycles and will respond to comments and update the studies as needed for approval. Caltrans review and approval of items prepared in Tasks 5.1 above are included in this task. Additional NEPA only technical studies included in this task are as follows:

Task 5.2.1 PES Form (NEPA ONLY)

A draft PES Form will be prepared followed by a scheduled field visit with the County and Caltrans. The draft PES Form will be sent for review to Riverside County and Caltrans. The PES form will outline the recommended federal environmental documentation, technical studies, surveys, clearances, agency coordination and permits required for the roadway project. The County will review the PES form prior to submitting to Caltrans for signature and prior to initiating technical studies.

Task 5.2.2 Paleontological Report (NEPA ONLY)

Dokken Engineering, will also prepare a Caltrans format Paleontological Identification Report/Paleontological Evaluation Report (PIR/PER) to evaluate the potential to encounter paleontological resources during ground-disturbing activities.

Task 5.2.3 Air Quality Conformity Document (NEPA ONLY)

Dokken Engineering will present the project to the Transportation Conformity Working Group (TCWG) to obtain concurrence that the project is not a Project of Air Quality Concern (POAQC). Following approval of the Air Quality Report Dokken Engineering will prepare an Air Quality Conformity Document for FHWA approval.

Task 5.2.4 Visual Impact Assessment (NEPA ONLY)

Dokken Engineering will assess existing visual resource conditions in the project area. The assessment will include an inventory including photographic documentation of the following existing conditions: viewpoints; notable visual resources; the vividness, intactness, and unity of the project area; and the site's landscape units. Photographs will be taken to be used in the analysis and for graphics. Dokken Engineering will collect and review the appropriate municipal plans from the County. The plans will be reviewed for applicable guidelines, policies, and objectives pertaining to highway facilities and visual resources.

Pre-project conditions will include a definition of landscape units within the project area, a regulatory setting, and explanation of the methodology used. The analysis will be performed using methods and protocol developed by the FHWA and adopted by Caltrans, in combination with elements of other visual resources assessment methods (including U.S. Forest Service and Bureau of Land Management). The analysis will be performed using a matrix to compare visual resources within defined landscape units, and will include: visual quality and character, the viewers and viewpoints, and changes in vividness, intactness, and unity. Photograph simulations will be prepared (in Task 4.1.5) in order for the County, agencies, and interested public to compare existing and proposed conditions of the project area.

Deliverable: Caltrans review and approval of Preliminary Environment Study (PES form), Natural Environment Study (NES), Federal Endangered Species Act Consultation, Cultural Resource Reports with Section 106 compliance, Paleontological Report, Noise Study Report, Air Quality Report/ Air Quality Conformity Document, and Visual Impact Assessment.

TASK 5.3 ENVIRONMENTAL DOCUMENT NEPA

Task 5.3.1 Categorical Exclusion

Following the CEQA determination Dokken Engineering will prepare the NEPA CE for Caltrans signature and approval. To complete NEPA, summary environmental documentation will be prepared for all federal regulation and laws. This documentation ensures projects compliance with the: Federal Clean Water Act, Clean Air Act, National Historic Preservation Act, California and Federal Endangered Species Act and all other laws, regulations and statutes that are in place during the life of the project.

Task 5.3.2 Environmental Commitments Record (ECR)

Dokken Engineering will prepare and obtain approval on the Caltrans Environmental Commitments Record (ECR) for impacts to sensitive natural communities, waters of the U.S., and habitats of sensitive species. On-site commitments will consist of standard Best Management Practices using a combination of invasive species removal, native species planting, and improvements to waters of the U.S. and State. This ECR will include implementable measures for all environmental resources that can be used directly in the project construction specifications.

Deliverable: Approved Categorical Exclusion, Responses to Comments, Environmental Commitments Record, and administrative record for the County files.

TASK 6.0 VALUE ANALYSIS STUDY

Based on guidance in Chapter 19 of the PDPM, and detailed in the Caltrans VA Team Guide and Report Guide, ENGINEER shall conduct a VA Study. The VA Study shall be conducted over the course of a 5-day period. Tasks shall include: provide a qualified, independent Certified Value Specialist (CVS) team leader to lead the VA Study in accordance with Caltrans Value methodology; provide VA study documentation in accordance with the Caltrans VA Report Guide; ensure that applicable data and correspondence and any other relevant information necessary for the VA study is collected, developed and distributed; facilitate VA team meetings. The VA team leader shall be responsible for leading the study meetings; developing the draft VA study charter; completing the Preliminary VA Report with input/review of team and technical reviewers; submitting Preliminary VA Report; coordinate responses to preliminary VA Report and prepare for an implementation meeting to resolve the disposition of the VA alternatives; finalize the VA Study Report; submitting the final VA Report; scheduling an implementation meeting. ENGINEER shall provide personnel to assist the VA Study team with CADD support during the study. COUNTY to provide expert reviewers to staff the 5-day VA Study.

Deliverable: Draft and Final Value Analysis Study

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 November 7, 2013, unless extended by supplemental agreement.

A. PHASES

The Schedule is divided into the following two phases:

1. Final Alignment Studies
2. PA/ED

B. GANTT CHART

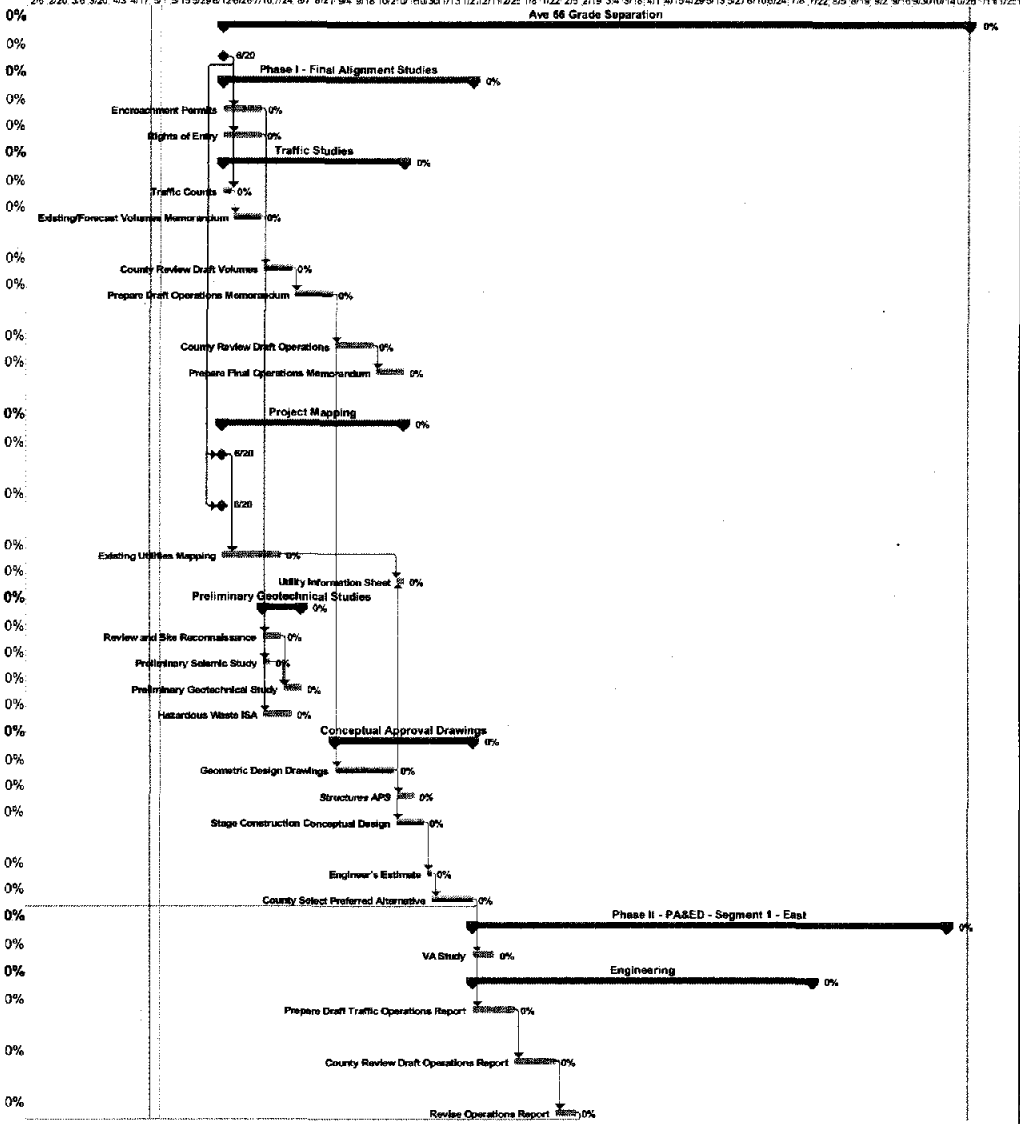
A gantt chart is provided below that graphically illustrates the sequencing and completion time for the project phases.

C. DELIVERABLES

See Attached

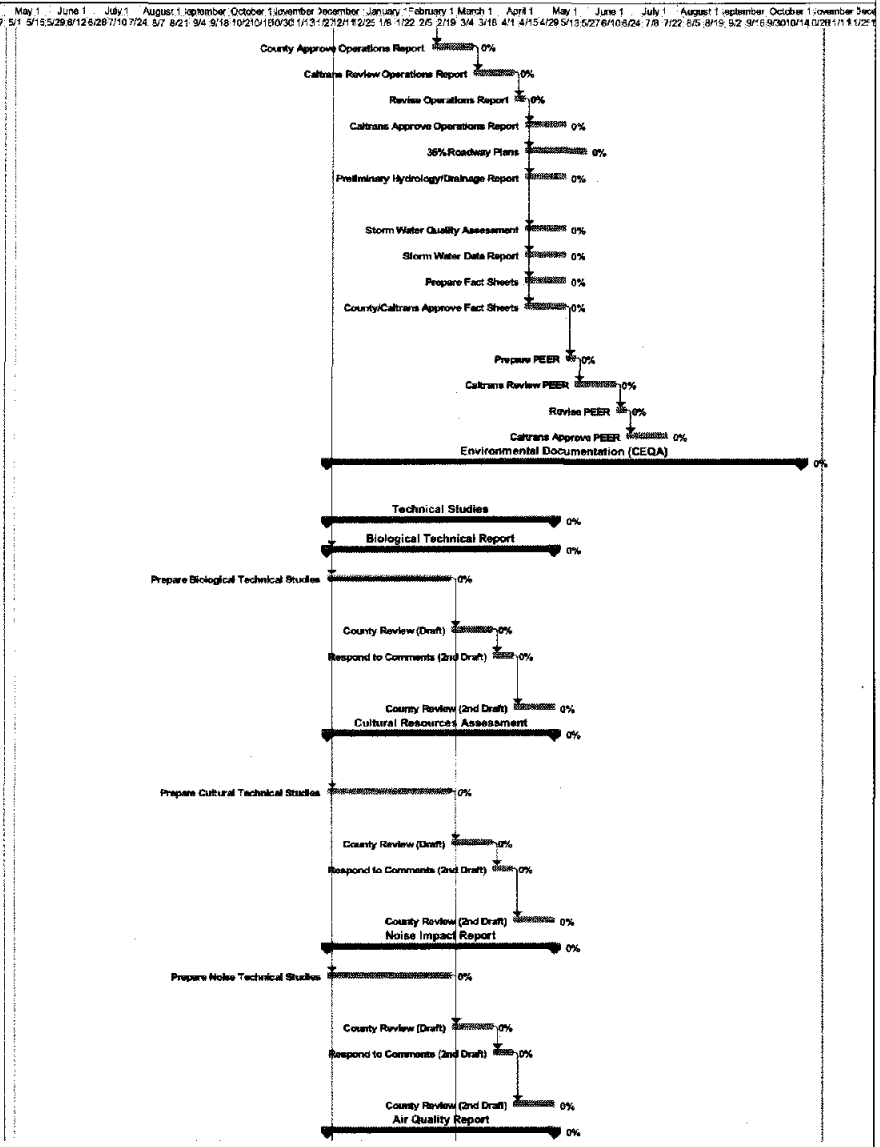
5-Schedule 2011-0330.mpp

ID	Task Name	Duration	Start	Finish	% Complete
1	**Ave 66 Grade Separation**	**72.6 wks**	**Mon 6/20/11**	**Wed 11/7/12**	**0%**
2	Notice to Proceed	0 days	Mon 6/20/11	Mon 6/20/11	0%
3	**Phase I - Final Alignment Studies**	**24.6 wks**	**Mon 6/20/11**	**Wed 12/7/11**	**0%**
4	Encroachment Permits	20 days	Mon 6/20/11	Fri 7/15/11	0%
5	Rights of Entry	20 days	Mon 6/20/11	Fri 7/15/11	0%
6	**Traffic Studies**	**18 wks**	**Mon 6/20/11**	**Fri 10/21/11**	**0%**
7	Traffic Counts	5 days	Mon 6/20/11	Fri 6/24/11	0%
8	Existing/Forecast Volumes Memorandum	15 days	Mon 6/27/11	Fri 7/15/11	0%
9	County Review Draft Volumes	15 days	Mon 7/18/11	Fri 8/5/11	0%
10	Prepare Draft Operations Memorandum	20 days	Mon 8/8/11	Fri 9/2/11	0%
11	County Review Draft Operations	20 days	Mon 9/5/11	Fri 9/30/11	0%
12	Prepare Final Operations Memorandum	15 days	Mon 10/3/11	Fri 10/21/11	0%
13	**Project Mapping**	**18 wks**	**Mon 6/20/11**	**Fri 10/21/11**	**0%**
14	Topographic Mapping (County Completed)	0 days	Mon 6/20/11	Mon 6/20/11	0%
15	Existing R/W Mapping (County Completed)	0 days	Mon 6/20/11	Mon 6/20/11	0%
16	Existing Utilities Mapping	30 days	Mon 6/20/11	Fri 7/29/11	0%
17	Utility Information Sheet	1 wk	Mon 10/17/11	Fri 10/21/11	0%
18	**Preliminary Geotechnical Studies**	**4 wks**	**Mon 7/18/11**	**Fri 8/12/11**	**0%**
19	Review and Site Reconnaissance	10 days	Mon 7/18/11	Fri 7/29/11	0%
20	Preliminary Seismic Study	5 days	Mon 7/18/11	Fri 7/22/11	0%
21	Preliminary Geotechnical Study	10 days	Mon 8/1/11	Fri 8/12/11	0%
22	Hazardous Waste ISA	15 days	Mon 7/18/11	Fri 8/5/11	0%
23	**Conceptual Approval Drawings**	**13.6 wks**	**Mon 9/5/11**	**Wed 12/7/11**	**0%**
24	Geometric Design Drawings	30 days	Mon 9/5/11	Fri 10/14/11	0%
25	Structures APS	10 days	Mon 10/17/11	Fri 10/28/11	0%
26	Stage Construction Conceptual Design	15 days	Mon 10/17/11	Fri 11/4/11	0%
27	Engineer's Estimate	3 days	Mon 11/7/11	Wed 11/9/11	0%
28	County Select Preferred Alternative	4 wks	Thu 11/10/11	Wed 12/7/11	0%
29	**Phase II - PA&ED - Segment 1 - East**	**46 wks**	**Thu 12/8/11**	**Wed 10/24/12**	**0%**
30	VA Study	2 wks	Thu 12/8/11	Wed 12/21/11	0%
31	**Engineering**	**33 wks**	**Thu 12/8/11**	**Wed 7/25/12**	**0%**
32	Prepare Draft Traffic Operations Report	20 days	Thu 12/8/11	Wed 1/4/12	0%
33	County Review Draft Operations Report	20 days	Thu 1/5/12	Wed 2/1/12	0%
34	Revise Operations Report	10 days	Thu 2/2/12	Wed 2/15/12	0%



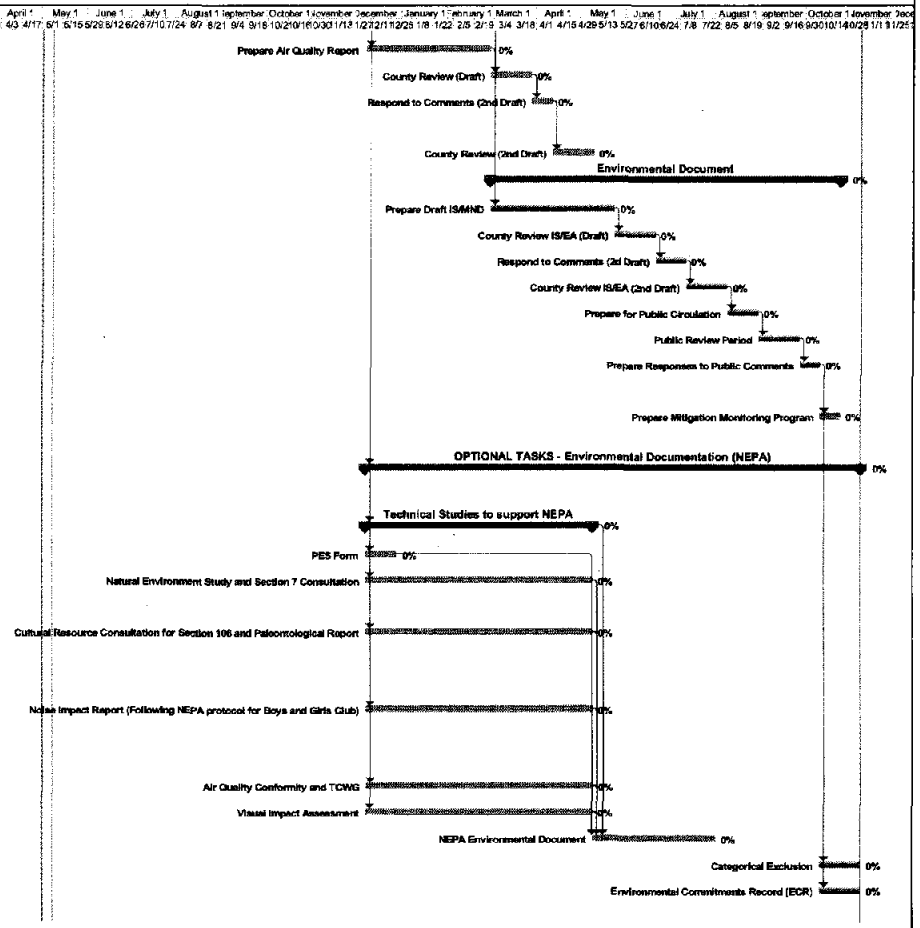
5-Schedule 2011-0330.mpp

ID	Task Name	Duration	Start	Finish	% Complete
35	County Approve Operations Report	20 days	Thu 2/16/12	Wed 3/14/12	0%
36	Caltrans Review Operations Report	20 days	Thu 3/15/12	Wed 4/11/12	0%
37	Revise Operations Report	5 days	Thu 4/12/12	Wed 4/18/12	0%
38	Caltrans Approve Operations Report	20 days	Thu 4/19/12	Wed 5/16/12	0%
39	35% Roadway Plans	30 days	Thu 4/19/12	Wed 5/30/12	0%
40	Preliminary Hydrology/Drainage Report	20 days	Thu 4/19/12	Wed 5/16/12	0%
41	Storm Water Quality Assessment	20 days	Thu 4/19/12	Wed 5/16/12	0%
42	Storm Water Data Report	20 days	Thu 4/19/12	Wed 5/16/12	0%
43	Prepare Fact Sheets	20 days	Thu 4/19/12	Wed 5/16/12	0%
44	County/Caltrans Approve Fact Sheets	20 days	Thu 4/19/12	Wed 5/16/12	0%
45	Prepare PEER	5 days	Thu 5/17/12	Wed 5/23/12	0%
46	Caltrans Review PEER	20 days	Thu 5/24/12	Wed 6/20/12	0%
47	Revise PEER	5 days	Thu 6/21/12	Wed 6/27/12	0%
48	Caltrans Approve PEER	20 days	Thu 6/28/12	Wed 7/25/12	0%
49	**Environmental Documentation (CEQA)**	**46 wks**	**Thu 12/8/11**	**Wed 10/24/12**	**0%**
50	**Technical Studies**	**22 wks**	**Thu 12/8/11**	**Wed 5/9/12**	**0%**
51	**Biological Technical Report**	**22 wks**	**Thu 12/8/11**	**Wed 5/9/12**	**0%**
52	Prepare Biological Technical Studies	60 days	Thu 12/8/11	Wed 2/29/12	0%
53	County Review (Draft)	20 days	Thu 3/1/12	Wed 3/28/12	0%
54	Respond to Comments (2nd Draft)	10 days	Thu 3/29/12	Wed 4/11/12	0%
55	County Review (2nd Draft)	20 days	Thu 4/12/12	Wed 5/9/12	0%
56	**Cultural Resources Assessment**	**22 wks**	**Thu 12/8/11**	**Wed 5/9/12**	**0%**
57	Prepare Cultural Technical Studies	60 days	Thu 12/8/11	Wed 2/29/12	0%
58	County Review (Draft)	20 days	Thu 3/1/12	Wed 3/28/12	0%
59	Respond to Comments (2nd Draft)	10 days	Thu 3/29/12	Wed 4/11/12	0%
60	County Review (2nd Draft)	20 days	Thu 4/12/12	Wed 5/9/12	0%
61	**Noise Impact Report**	**22 wks**	**Thu 12/8/11**	**Wed 5/9/12**	**0%**
62	Prepare Noise Technical Studies	60 days	Thu 12/8/11	Wed 2/29/12	0%
63	County Review (Draft)	20 days	Thu 3/1/12	Wed 3/28/12	0%
64	Respond to Comments (2nd Draft)	10 days	Thu 3/29/12	Wed 4/11/12	0%
65	County Review (2nd Draft)	20 days	Thu 4/12/12	Wed 5/9/12	0%
66	**Air Quality Report**	**22 wks**	**Thu 12/8/11**	**Wed 5/9/12**	**0%**



5-Schedule 2011-0330.mpp

ID	Task Name	Duration	Start	Finish	% Complete
67	Prepare Air Quality Report	60 days	Thu 12/8/11	Wed 2/29/12	0%
68	County Review (Draft)	20 days	Thu 3/1/12	Wed 3/28/12	0%
69	Respond to Comments (2nd Draft)	10 days	Thu 3/29/12	Wed 4/11/12	0%
70	County Review (2nd Draft)	20 days	Thu 4/12/12	Wed 5/9/12	0%
71	**Environmental Document**	**34 wks**	**Thu 3/1/12**	**Wed 10/24/12**	**0%**
72	Prepare Draft IS/MND	60 days	Thu 3/1/12	Wed 5/23/12	0%
73	County Review IS/EA (Draft)	20 days	Thu 5/24/12	Wed 6/20/12	0%
74	Respond to Comments (2d Draft)	15 days	Thu 6/21/12	Wed 7/11/12	0%
75	County Review IS/EA (2nd Draft)	20 days	Thu 7/12/12	Wed 8/8/12	0%
76	Prepare for Public Circulation	15 days	Thu 8/9/12	Wed 8/29/12	0%
77	Public Review Period	20 days	Thu 8/30/12	Wed 9/26/12	0%
78	Prepare Responses to Public Comments	10 days	Thu 9/27/12	Wed 10/10/12	0%
79	Prepare Mitigation Monitoring Program	10 days	Thu 10/11/12	Wed 10/24/12	0%
80	**OPTIONAL TASKS - Environmental Documentation (NEPA)**	**48 wks**	**Thu 12/8/11**	**Wed 11/7/12**	**0%**
81	**Technical Studies to support NEPA**	**22 wks**	**Thu 12/8/11**	**Wed 5/9/12**	**0%**
82	PES Form	15 days	Thu 12/8/11	Wed 12/28/11	0%
83	Natural Environment Study and Section 7 Consultation	110 days	Thu 12/8/11	Wed 5/9/12	0%
84	Cultural Resource Consultation for Section 106 and Paleontological Report	110 days	Thu 12/8/11	Wed 5/9/12	0%
85	Noise Impact Report (Following NEPA protocol for Boys and Girls Club)	110 days	Thu 12/8/11	Wed 5/9/12	0%
86	Air Quality Conformity and TCWG	110 days	Thu 12/8/11	Wed 5/9/12	0%
87	Visual Impact Assessment	110 days	Thu 12/8/11	Wed 5/9/12	0%
88	NEPA Environmental Document	60 days	Thu 5/10/12	Wed 8/1/12	0%
89	Categorical Exclusion	20 days	Thu 10/11/12	Wed 11/7/12	0%
90	Environmental Commitments Record (ECR)	20 days	Thu 10/11/12	Wed 11/7/12	0%



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..... 22.43 %

   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..... 134.81 %

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 ..... 157.24 %

(sum of Payroll Additives and Overhead Costs)

B. FIXED FEE

1. The Total Fixed Fee payable to the ENGINEER is $52,380 (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	Number	Unit	Cost
Exhibit Mounting	$100.00	10	EA	$1,000
ISA Record Search	$2,000.00	1	LS	$2,000
Encroachment Permits	$3,000.00	1	LS	$3,000
Cultural Record Search	$400.00	1	LS	$400
Notice of Determination Filing Fee	$500.00	1	LS	$500

Travel by air and travel in excess of 100 miles from ENGIN EER'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 Engineering Services Invoicing Procedures.

ARTICLE CII • DIRECT SALARY RATES

Direct Salary Rates, which are the range of hourly rates to be used in determining Direct Salary Costs, are given below and are subject to the following:

A. PREMIUM OVERTIME

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

B. SALARY RATES

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

POSITION OR CLASSIFICATION	MAXIMUM HOURLY RATES
Principal in Charge	$80.00 - $120.00
Project Manager	$50.00 - $80.00
Project Engineer	$50.00 - $75.00
Senior Engineer	$50.00 - $75.00
Associate Engineer	$38.00 - $50.00
Assistant Engineer	$28.00 - $40.00
Geotechnical Engineer	$50.00 - $70.00
Senior Geologist	$35.00 - $50.00
Geologist	$27.00 - $35.00
Engineering Geologist	$75.00 - $85.00
Senior Environmental Planner	$40.00 - $60.00
Environmental Planner	$23.00 - $40.00
Land Surveyor	$30.00 - $95.00
Senior CAD/Detailer	$25.00 - $55.00
CADD Technician	$18.00 - $30.00
Engineering Technician	$18.00 - $30.00
Administrative/Clerical	$15.00 - $30.00

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

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

ARTICLE CIV • PAYMENT

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

ARTICLE CV • COST PROPOSAL

The following cost proposal reflects the negotiated targeted contract amount. The cost proposal will serve as a guideline and reference document during the execution of this contract. ENGINEER shall be compensated in accordance with the rates provided. The total amount of the contract is not to exceed $676,507 including a $61,500 (10%) 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.

Project: Avenue 66 Grade Separation	PHASE 1	PHASE 2				TOTALS
Dokken Engineering-Design	$140,154.07	$191,930.80				**$332,084.87**
Dokken Engineering-Environmental*	$4,173.72	$124,749.75				**$128,923.47**
Dokken Engineering-NEPA (Optional)		$75,082.85				**$75,082.85**
Fehr & Peers, Inc.	$23,912.32	$16,157.54				**$40,069.86**
VMS		$38,846.28				$38,846.28

*Internal to Dokken. Shown as outside service to allow detailed summaries separate from other services.

TOTALS:	$168,240.11	$446,767.22				**$615,007.33**
Phase I: Final Alignment Studies Phase II: PA/ED			Total Cost Phases 1 and 2	$615,007.33		

COMPANY:	SCOPE OF WORK	DATE:	REV:
Dokken Engineering-Design	Project Summary	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		Phases 1 and 2	

DIRECT LABOR

I	FUNCTION	HOURS		RATE	AMOUNT
L. Diamond	Project Manager	213	@	$75.00	$15,975.00
J. Bishop	Bridge Project Engineer	80	@	$70.00	$5,600.00
M. Roberts	Road Project Engineer	433	@	$58.00	$25,114.00
P. Dalcin-Walling	Senior Engineer-Drainage/Utilities	130	@	$58.00	$7,540.00
Staff	Senior Structures Engineer	70	@	$65.00	$4,550.00
Staff	Associate Engineer	370	@	$47.00	$17,390.00
Staff	Assistant Engineer	430	@	$34.50	$14,835.00
Staff	Senior CAD/Detailer	120	@	$47.00	$5,640.00
Staff	CADD Technician	200	@	$19.00	$3,800.00
Staff	Admin	40	@	$25.00	$1,000.00
J.Ramos	QA/QC Engineer	90	@	$65.00	$5,850.00
Staff	Senior Geologist	59	@	$47.50	$2,802.50
Staff	Geologist	170	@	$30.25	$5,142.50
	TOTAL HOURS	2420		TOTAL DIRECT LABOR	$115,239.00

MULTIPLIERS

ESCALATION @	Escalation after 3 years in Phase 4 & 5 only.	
OVERHEAD @	134.81% (of Total Direct Labor + Escalation)	$155,353.69
PAYROLL ADDITIVES @	22.43% (of Total Direct Labor + Escalation)	$25,848.11
	TOTAL MULTIPLIERS	$181,201.80

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Exhibit Mounting	10	EA	@	$100.00	$1,000.00
ISA Record Search	1	LS	@	$2,000.00	$2,000.00
Encroachment Permits	1	LS	@	$3,000.00	$3,000.00
				TOTAL OTHER DIRECT EXPENSES	$6,000.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
Dokken Engineering-Environmental*	$39,766.00	$62,528.06	$16,400.00	$118,694.06
Dokken Engineering-NEPA (Optional)	$22,647.00	$35,610.14	$11,000.00	$69,257.14
Fehr & Peers, Inc.	$11,468.65	$21,203.95	$4,130.00	$36,802.60
VMS	$10,925.00	$23,207.98	$1,300.00	$35,432.98

*Internal to Dokken. Shown as outside service to allow detailed summaries separate from other services.

TOTAL OUTSIDE SERVICES $260,186.78

FEES

DOKKEN ENGR-DESIGN @	10.00% (of Total Direct Labor + Total Multipliers)	$29,644.08
DOKKEN ENGR-ENVIRO @	10.00% (of Total Direct Labor + Total Multipliers)	$10,229.41
DOKKEN ENGR-NEPA	10.00% (of Total Direct Labor + Total Multipliers)	$5,825.71
FEHR & PEERS, INC. @	10.00% (of Total Direct Labor + Total Multipliers)	$3,267.26
VMS. @	10.00% (of Total Direct Labor + Total Multipliers)	$3,413.30
	TOTAL FEES	$52,379.76
	TOTAL COST	**$615,007.34**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Dokken Engineering-Design		4/1/2011	
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Avenue 66 Grade Separation		Phases 1 and 2	

Dokken Engineering-Design Summary

TASK	Project Manager	Bridge Project Engineer	Road Project Engineer	Senior Engineer-Drainage/Utilities	Senior Structures Engineer	Associate Engineer	Assistant Engineer	Senior CAD/Detailer	CADD Technician	Admin	QA/QC Engineer	Senior Geologist	Geologist		TOTAL
	$75.00	$70.00	$58.00	$58.00	$85.00	$47.00	$34.50	$47.00	$19.00	$25.00	$85.00	$47.50	$30.25		
Phase I: Final Alignment Studies	80	50	159	10	60	50	160	110	50	20	30	59	170	15	1,023
Phase II: PA/ED	133	30	274	120	10	320	270	10	150	20	60				1,397
Totals	213	80	433	130	70	370	430	120	200	40	90	59	170	15	2,420

Dokken Engineering-Environmental* Summary

TASK	Senior Environmental Planner	Lead Environmental Planner	Associate Environmental Planner	Environmental Planner	Sr. Environmental Planner (QA/QC	CADD Technician	Environmental Planner / Biologist	Senior CADD/Detailer							TOTAL
	$59.00	$32.00	$30.50	$28.00	$52.00	$26.50	$20.50	$47.00							
Phase I: Final Alignment Studies	25														25
Phase II: PA/ED	116	206	234	216	54	86	46	120							1,078
Phase II: NEPA (Optional)	90	150	276	30	48	28	2								624
Totals	231	356	510	246	102	114	48	120							1,727

Fehr & Peers, Inc. Summary

	Principal in Charge	Project Engineer	Transportation Engineer	Admin/ Graphics											TOTAL
	$77.88	$55.29	$27.88	$20.19											
Phase I: Final Alignment Studies	9	37	116	23											185
Phase II: PA/ED	10	20	80	45											155
Totals	19	57	196	68											340

VMS Summary

	VE Team Leader	Report Editor / QA/QC	Project Coordinator												TOTAL
	$85.00	$30.00	$25.00												
Phase II: PA/ED	105	50	20												175
Totals	105	50	20												175

COMPANY:	SCOPE OF WORK	DATE:	REV:
Dokken Engineering-Design	Phase I: Final Alignment Studies	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		Phase 1	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
L. Diamond	Project Manager	80	@	$75.00	$6,000.00
J. Bishop	Bridge Project Engineer	50	@	$70.00	$3,500.00
M. Roberts	Road Project Engineer	159	@	$58.00	$9,222.00
P. Dalcin-Walling	Senior Engineer-Drainage/Utilities	10	@	$58.00	$580.00
Staff	Senior Structures Engineer	60	@	$65.00	$3,900.00
Staff	Associate Engineer	50	@	$47.00	$2,350.00
Staff	Assistant Engineer	160	@	$34.50	$5,520.00
Staff	Senior CAD/Detailer	110	@	$47.00	$5,170.00
Staff	CADD Technician	50	@	$19.00	$950.00
Staff	Admin	20	@	$25.00	$500.00
J.Ramos	QA/QC Engineer	30	@	$65.00	$1,950.00
Staff	Senior Geologist	59	@	$47.50	$2,802.50
Staff	Geologist	170	@	$30.25	$5,142.50
	TOTAL HOURS	1023		TOTAL DIRECT LABOR	$47,587.00

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	134.81% (of Total Direct Labor + Escalation)	$64,152.03	
PAYROLL ADDITIVES @	22.43% (of Total Direct Labor + Escalation)	$10,673.76	
		TOTAL MULTIPLIERS	$74,825.79

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Exhibit Mounting	5	EA	@	$100.00	$500.00
ISA Record Search	1	LS	@	$2,000.00	$2,000.00
Encroachment Permits	1	LS	@	$3,000.00	$3,000.00
				TOTAL OTHER DIRECT EXPENSES	$5,500.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
Dokken Engineering-Environmental*	$1,475.00	$2,319.29		$3,794.29
Fehr & Peers, Inc.	$6,445.10	$11,916.10	$3,715.00	$22,076.20
			TOTAL OUTSIDE SERVICES	$25,870.49

*Internal to Dokken. Shown as outside service to allow detailed summaries separate from other services.

FEES

DOKKEN ENGR-DESIGN @	10.00% (of Total Direct Labor + Total Multipliers)	$12,241.28	
DOKKEN ENGR-ENVIRO @	10.00% (of Total Direct Labor + Total Multipliers)	$379.43	
FEHR & PEERS, INC. @	10.00% (of Total Direct Labor + Total Multipliers)	$1,836.12	
		TOTAL FEES	$14,456.83
		TOTAL COST	**$168,240.11**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Dokken Engineering-Design	Phase I: Final Alignment Studies	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		Phase 1	

TASK	Project Manager	Bridge Project Engineer	Road Project Engineer	Senior Engineer-Drainage/Utilities	Senior Structures Engineer	Associate Engineer	Assistant Engineer	Senior CAD/Designer	CADD Technician	Admin	QA/QC Engineer	Senior Geologist	Geologist			TOTAL
Total Manhours	80	50	159	10	60	50	160	110	50	20	30	59	170	15		1,023
1.0 Project Management																
Task 1.1 to Task 1.8 Project Management	40	20	60				10	10	10		10					**160**
2.0 Traffic Studies																
2.1 Existing Conditions Analysis	2		10													**12**
2.2 Travel Demand Forecasts	2		10													**12**
2.3 Operations Analysis	2		20													**22**
3.0 Project Mapping																
3.1 R/W Requirements Map	2		5													**7**
3.2 Utility Mapping	2		2	10			50									**64**
3.3 Utility Information Sheet	2		2			10	20									**34**
4.0 Preliminary Geotechnical Studies																
4.1 Literature Review and Reconnaissance	13	5	5		10							29	50			**112**
4.2 Preliminary Seismic Study	2	5	5		10							10	20			**52**
4.3 Hazardous Materials ISA	2		5							20		20	100			**147**
5.0 Conceptual Approval Drawings																
5.1 Geometric Design Drawings	5		20			40	80		40		5			15		**205**
5.2 Draft Structures APSs	2	20	5		40			100			5					172
5.3 Stage Construction Design	2		5								5					**12**
5.4 Engineer's Estimates	2		5								5					**12**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Dokken Engineering-Environmental*	Environmental Compliance	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		Phase 1	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
N. Hosseinion	Senior Environmental Planner	25	@	$59.00	$1,475.00
S. Jenkins	Lead Environmental Planner			$32.00	
C. Zamora	Associate Environmental Planner			$30.50	
T. Chamberlain	Environmental Planner			$28.00	
M. Campbell	Sr. Environmental Planner /QAQC			$52.00	
C. Grecco	CADD Technician			$26.50	
A. Scudiere	Environmental Planner / Biologist			$20.50	
Staff	Senior CADD/Detailer			$47.00	
	TOTAL HOURS	25		TOTAL DIRECT LABOR	$1,475.00

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	134.81% (of Total Direct Labor + Escalation)	$1,988.45	
PAYROLL ADDITIVES @	22.43% (of Total Direct Labor + Escalation)	$330.84	
		TOTAL MULTIPLIERS	$2,319.29

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
			TOTAL OTHER DIRECT EXPENSES	

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
			TOTAL OUTSIDE SERVICES	

FEES

DOKKEN ENGINEERING-ENVI	10.00% (of Total Direct Labor + Total Multipliers)	$379.43	
OUTSIDE SERVICES @	(of Total Labor + Total Multiplier for Outside Services)		
		TOTAL FEES	$379.43
		TOTAL COST	**$4,173.72**

COMPANY:		SCOPE OF WORK	DATE:	REVISION:
Dokken Engineering-Environmental*		Environmental Compliance	4/1/2011	
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:	
Avenue 66 Grade Separation			Phase 1	

TASK	Senior Environmental Planner	Lead Environmental Planner	Associate Environmental Planner	Environmental Planner	Sr. Environmental Planner /QA/QC	CADD Technician	Environmental Planner / Biologist	Senior CADD/Detailer				TOTAL
Total Manhours	25											25
1.0 Project Management												
Task 1.1 to Task 1.8 Project Management	10											10
2.0 Traffic Studies												
2.1 Existing Conditions Analysis												
2.2 Travel Demand Forecasts												
2.3 Operations Analysis												
3.0 Project Mapping												
3.1 R/W Requirements Map												
3.2 Utility Mapping												
3.3 Utility Information Sheet												
4.0 Preliminary Geotechnical Studies												
4.1 Literature Review and Reconnaissance												
4.2 Preliminary Seismic Study												
4.3 Hazardous Materials ISA												
5.0 Conceptual Approval Drawings												
5.1 *Geometric Design Drawings*	15											15
5.2 Draft Structures APSs												
5.3 Stage Construction Design												
5.4 Engineer's Estimates												

*Internal to Dokken. Shown as outside service to allow detailed summaries separate from other services.

COMPANY:	SCOPE OF WORK	DATE:	REV:
Fehr & Peers, Inc.	Traffic Studies	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		Phase 1	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Fred Choa	Principal in Charge	9	@	$77.88	$700.92
Jason Pack	Project Engineer	37	@	$55.29	$2,045.73
Tamar Fuhrer	Transportation Engineer	116	@	$27.88	$3,234.08
staff	Admin/ Graphics	23	@	$20.19	$464.37
	TOTAL HOURS	185		TOTAL DIRECT LABOR	$6,445.10

MULTIPLIERS

ESCALATION @	5.00%	(Rate)	$322.26
OVERHEAD @	171.32%	(of Total Direct Labor + Escalation)	$11,593.84
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	
		TOTAL MULTIPLIERS	$11,916.10

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Mileage (Local Travel)	300	EA	@	$0.55	$165.00
Counts	11	EA	@	$300.00	$3,300.00
CA Overnight Shipping	2	EA	@	$25.00	$50.00
Copying	5	EA	@	$40.00	$200.00
		TOTAL OTHER DIRECT EXPENSES			$3,715.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
			TOTAL OUTSIDE SERVICES	

FEES

FEHR & PEERS, INC. @	10.00%	(of Total Direct Labor + Total Multipliers)	$1,836.12
OUTSIDE SERVICES @		(of Total Labor + Total Multiplier for Outside Services	
		TOTAL FEES	$1,836.12
		TOTAL COST	**$23,912.32**

COMPANY:		SCOPE OF WOI	DATE:	REVISION:
Fehr & Peers, Inc.		Traffic Studie	4/1/2011	
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:	
Avenue 66 Grade Separation			Phase 1	

TASK	Principal in Charge	Project Engineer	Transportation Engineer	Admin/ Graphics					TOTAL
Total Manhours	9	37	116	23					**185**
1.0 Project Management									
Task 1.1 to Task 1.8 Project Management									
2.0 Traffic Studies									
2.1 Existing Conditions Analysis	2	12	32	8					**54**
2.2 Travel Demand Forecasts	2	10	42						**54**
2.3 Operations Analysis	5	15	42	15					**77**
3.0 Project Mapping									
3.1 R/W Requirements Map									
3.2 Utility Mapping									
3.3 Utility Information Sheet									
4.0 Preliminary Geotechnical Studies									
4.1 Literature Review and Reconnaissance									
4.2 Preliminary Seismic Study									
4.3 Hazardous Materials ISA									
5.0 Conceptual Approval Drawings									
5.1 Geometric Design Drawings									
5.2 Draft Structures APSs									
5.3 Stage Construction Design									
5.4 Engineer's Estimates									

COMPANY:	SCOPE OF WORK	DATE:	REV:
Dokken Engineering-Design	Phase II: PA/ED	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		Phase 2	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
L. Diamond	Project Manager	133	@	$75.00	$9,975.00
J. Bishop	Bridge Project Engineer	30	@	$70.00	$2,100.00
M. Roberts	Road Project Engineer	274	@	$58.00	$15,892.00
P. Dalcin-Walling	Senior Engineer-Drainage/Utilit	120	@	$58.00	$6,960.00
Staff	Senior Structures Engineer	10	@	$65.00	$650.00
Staff	Associate Engineer	320	@	$47.00	$15,040.00
Staff	Assistant Engineer	270	@	$34.50	$9,315.00
Staff	Senior CAD/Detailer	10	@	$47.00	$470.00
Staff	CADD Technician	150	@	$19.00	$2,850.00
Staff	Admin	20	@	$25.00	$500.00
J.Ramos	QA/QC Engineer	60	@	$65.00	$3,900.00
Staff	Senior Geologist			$47.50	
Staff	Geologist			$30.25	
	TOTAL HOURS	1397		TOTAL DIRECT LABOR	$67,652.00

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	134.81%	(of Total Direct Labor + Escalation)	$91,201.66
PAYROLL ADDITIVES @	22.43%	(of Total Direct Labor + Escalation)	$15,174.34
		TOTAL MULTIPLIERS	$106,376.00

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Exhibit Mounting	5	EA	@	$100.00	$500.00
				TOTAL OTHER DIRECT EXPENSES	$500.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
Dokken Engineering-Environmental*	$38,291.00	$60,208.77	$16,400.00	$114,899.77
Dokken Engineering-NEPA (Optional)	$22,647.00	$35,610.14	$11,000.00	$69,257.14
Fehr & Peers, Inc.	$5,023.55	$9,287.85	$415.00	$14,726.40
VMS	$10,925.00	$23,207.98	$1,300.00	$35,432.98

*Internal to Dokken. Shown as outside service to allow detailed summaries separate from other services.

TOTAL OUTSIDE SERVICES $234,316.29

FEES

DOKKEN ENGR-DESIGN @	10.00%	(of Total Direct Labor + Total Multipliers)	$17,402.80
DOKKEN ENGR-ENVIRO @	10.00%	(of Total Direct Labor + Total Multipliers)	$9,849.98
DOKKEN ENGR-NEPA @	10.00%	(of Total Direct Labor + Total Multipliers)	$5,825.71
FEHR & PEERS, INC. @	10.00%	(of Total Direct Labor + Total Multipliers)	$5,825.71
VMS @	10.00%	(of Total Direct Labor + Total Multipliers)	$3,413.30
		TOTAL FEES	$36,491.79

TOTAL COST **$445,336.08**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Dokken Engineering-Design	Phase II: PA/ED	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		*Phase 2*	

TASK	Project Manager	Bridge Project Engineer	Road Project Engineer	Senior Engineer, Drainage/Utilities	Senior Structures Engineer	Associate Engineer	Assistant Engineer	Senior CAD/Detailer	CADD Technician	Admin	QA/QC Engineer	Senior Geologist	Geologist			TOTAL
Total Manhours	133	30	274	120	10	320	270	10	150	20	60					1,397
Task 1.0 Project Management																
Task 1.1 to Task 1.8 Project Management	60	20	100				10	10	10		10					**220**
Task 2.0 Final Traffic Study																
2.1 Traffic Report	5		10													**15**
Task 3.0 Preliminary Engineering Evaluation Report	10		25			40	80		40							**195**
3.1 35% Roadway Plans	10		40	40		80	80		100		10					**360**
3.2 Preliminary and Final Hydrology/Drainage Report	5		10	80							10					**105**
3.3 Storm Water Quality Assessment	1		2			40					5					**48**
3.4 Storm Water Data Report	1		2			40					5					**48**
3.5 Advisory and Mandatory Fact Sheets	5		10			80	40				10					**145**
3.6 Engineer's Estimate	1		5			10	10				5					**31**
3.7 Preliminary Engineering Evaluation Report	5		10			30					5					**50**
Task 4.0 Technical Studies and ED	10		20													**30**
Task 6.0 Value *Analysis Study*	20	10	40		10		50			20						**150**

COMPANY:	SCOPE OF WORK	DATE:	REV:
VMS	Value Analysis Study	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		Phase 2	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
	VE Team Leader	105	@	$85.00	$8,925.00
	Report Editor / QA/QC	50	@	$30.00	$1,500.00
	Project Coordinator	20	@	$25.00	$500.00
				$28.00	
				$52.00	
				$26.50	
				$20.50	
				$47.00	
	TOTAL HOURS	175		TOTAL DIRECT LABOR	$10,925.00

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	190.00% (of Total Direct Labor + Escalation)	$20,757.50	
PAYROLL ADDITIVES @	22.43% (of Total Direct Labor + Escalation)	$2,450.48	
		TOTAL MULTIPLIERS	$23,207.98

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Printing	1	LS	@	$900.00	$900.00
Shipping	1	LS	@	$400.00	$400.00
				TOTAL OTHER DIRECT EXPENSES	$1,300.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
			TOTAL OUTSIDE SERVICES	

FEES

VMS @	10.00% (of Total Direct Labor + Total Multipliers)	$3,413.30	
OUTSIDE SERVICES @	(of Total Labor + Total Multiplier for Outside Services)		
		TOTAL FEES	$3,413.30
		TOTAL COST	**$38,846.28**

COMPANY:		SCOPE OF WORK	DATE:	REVISION:
VMS		Value Analysis Study	4/1/2011	
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:	
Avenue 66 Grade Separation			Phase 2	

TASK	VE Team Leader	Report Editor / QA/QC	Project Coordinator									TOTAL
Total Manhours (Including Optional Task)	105	50	20									**175**
Phase II - Task 6.0 Value Analysis Study	**105**	**50**	**20**									**175**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Dokken Engineering-Environmental*	Environmental Compliance	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		Phase 2	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
N. Hosseinion	Senior Environmental Planner	116	@	$59.00	$6,844.00
S. Jenkins	Lead Environmental Planner	206	@	$32.00	$6,592.00
C. Zamora	Associate Environmental Planner	234	@	$30.50	$7,137.00
T. Chamberlain	Environmental Planner	216	@	$28.00	$6,048.00
M. Campbell	Sr. Environmental Planner /QAQC	54	@	$52.00	$2,808.00
C. Grecco	CADD Technician	86	@	$26.50	$2,279.00
A. Scudiere	Environmental Planner / Biologist	46	@	$20.50	$943.00
Staff	Senior CADD/Detailer	120	@	$47.00	$5,640.00
	TOTAL HOURS	1078		TOTAL DIRECT LABOR	$38,291.00

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	134.81% (of Total Direct Labor + Escalation)	$51,620.10	
PAYROLL ADDITIVES @	22.43% (of Total Direct Labor + Escalation)	$8,588.67	
		TOTAL MULTIPLIERS	$60,208.77

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Cultural Record Search	1	LS	@	$400.00	$400.00
Notice of Determination Filing Fee	1	LS	@	$500.00	$500.00
				TOTAL OTHER DIRECT EXPENSES	$900.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
Noise Study Report			$12,000.00	$12,000.00
Air Quality Report			$3,500.00	$3,500.00
			TOTAL OUTSIDE SERVICES	$15,500.00

FEES

DOKKEN ENGINEERING-ENV	10.00% (of Total Direct Labor + Total Multipliers)	$9,849.98	
OUTSIDE SERVICES @	(of Total Labor + Total Multiplier for Outside Services)		
		TOTAL FEES	$9,849.98
		TOTAL COST	**$124,749.75**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Dokken Engineering-NEPA (Optional)	Environmental Compliance	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		Phase 2	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
N. Hosseinion	Senior Environmental Planner	90	@	$59.00	$5,310.00
S. Jenkins	Lead Environmental Planner	150	@	$32.00	$4,800.00
C. Zamora	Associate Environmental Planner	276	@	$30.50	$8,418.00
T. Chamberlain	Environmental Planner	30	@	$28.00	$840.00
M. Campbell	Sr. Environmental Planner /QAQC	48	@	$52.00	$2,496.00
C. Grecco	CADD Technician	28	@	$26.50	$742.00
A. Scudiere	Environmental Planner / Biologist	2	@	$20.50	$41.00
Staff	Senior CADD/Detailer			$47.00	
	TOTAL HOURS	624		TOTAL DIRECT LABOR	$22,647.00

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	134.81% (of Total Direct Labor + Escalation)	$30,530.42	
PAYROLL ADDITIVES @	22.43% (of Total Direct Labor + Escalation)	$5,079.72	
		TOTAL MULTIPLIERS	$35,610.14

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Paleontological Record Search	2	1	$500.00	$1,000.00
			TOTAL OTHER DIRECT EXPENSES	$1,000.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
Noise Study Report			$10,000.00	$10,000.00
			TOTAL OUTSIDE SERVICES	$10,000.00

FEES

DOKKEN ENGINEERING-NEP	10.00% (of Total Direct Labor + Total Multipliers)	$5,825.71	
OUTSIDE SERVICES @	(of Total Labor + Total Multiplier for Outside Services)		
		TOTAL FEES	$5,825.71
		TOTAL COST	**$75,082.85**

COMPANY: Dokken Engineering-Environmental*						SCOPE OF WORK: Environmental Compliance		DATE: 4/1/2011		REVISION:	
PROJECT: Avenue 66 Grade Separation								MILESTONE/PHASE/PROJECT SUMMARY: Phase 2			
TASK	Senior Environmental Planner	Lead Environmental Planner	Associate Environmental Planner	Environmental Planner	Sr. Environmental Planner /CADD	CADD Technician	Environmental Planner / Biologist	Senior CADD/Graphic				TOTAL
Total Manhours (including Optional Task)	206	356	510	246	102	114	48	120				1,702
Phase II - Task 4.0 Technical Studies and Environmental Documentation	**116**	**206**	**234**	**216**	**54**	**86**	**46**	**120**				**1,078**
Task 4.1 Technical Studies												
4.1.1 Biological Technical Report	16	80	8	8	2	40	8					**162**
4.1.2 Cultural Resources Assessment	24	2	2	8	40	4	4					**84**
4.1.3 Noise Impact Report	8		24		2	8	4					**46**
4.1.4 Air Quality Report	8		8		2	8	8					**34**
4.1.5 Visual Simulations	4		4					120				**128**
Task 4.2 Environmental Document												
4.2.1 IS/MND	20	80	126	152	8	16	22					**424**
4.2.2 Public Circulation	8	32				10						**50**
4.2.3 Responses to Public Comments	12		62									**74**
4.2.4 Mitigation Monitoring Program	8	4		32								**44**
4.2.5 Final Administrative Record	8	8		16								**32**
Phase II - Task 5.0 - NEPA Optional Technical Studies/Environmental Document	**90**	**150**	**276**	**30**	**48**	**28**	**2**					**624**
Task 5.1 Relevant Technical Studies to be Formatted to Support NEPA	32	70	146	14	28	10						**300**
Task 5.2 NEPA Technical Studies & Caltrans Review/Approval	34	72	96	12	20	18	2					**254**
Task 5.3 Environmental Document NEPA	24	8	34	4								**70**

*Internal to Dokken. Shown as outside service to allow detailed summaries separate from other services.

COMPANY:	SCOPE OF WORK	DATE:	REV:
Fehr & Peers, Inc.	Traffic Studies	4/1/2011	
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Avenue 66 Grade Separation		Phase 2	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Fred Choa	Principal in Charge	10	@	$77.88	$778.80
Jason Pack	Project Engineer	20	@	$55.29	$1,105.80
Tamar Fuhrer	Transportation Engineer	80	@	$27.88	$2,230.40
staff	Admin/ Graphics	45	@	$20.19	$908.55
	TOTAL HOURS	155		TOTAL DIRECT LABOR	$5,023.55

MULTIPLIERS

ESCALATION @	5.00%	(Rate)	$251.18
OVERHEAD @	171.32%	(of Total Direct Labor + Escalation)	$9,036.67
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	
		TOTAL MULTIPLIERS	$9,287.85

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Mileage (Local Travel)	300	EA	@	$0.55	$165.00
CA Overnight Shipping	2	EA	@	$25.00	$50.00
Copying	5	EA	@	$40.00	$200.00
		TOTAL OTHER DIRECT EXPENSES			$415.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
			TOTAL OUTSIDE SERVICES	

FEES

FEHR & PEERS, INC. @	10.00%	(of Total Direct Labor + Total Multipliers)	$1,431.14
OUTSIDE SERVICES @		(of Total Labor + Total Multiplier for Outside Services	
		TOTAL FEES	$1,431.14
		TOTAL COST	**$16,157.54**

COMPANY:		SCOPE OF WOR	DATE:	REVISION:
Fehr & Peers, Inc.		Traffic Studie	4/1/2011	
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:	
Avenue 66 Grade Separation			Phase 2	

TASK	Principal in Charge	Project Engineer	Transportation Engineer	Admin/ Graphics					TOTAL
Total Manhours	10	20	80	45					**155**
Task 2.0 Final Traffic Report									
2.1 Traffic Report	10	20	80	45					**155**