REPORT TO CITY COUNCIL

DATE: APRIL 24, 2013

TO: HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL

- FROM: GREG RAMIREZ, CITY MANAGER
- BY: RAMIRO ADEVA, DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

SUBJECT: APPROVE AWARD OF A DESIGN PROFESSIONAL CONSULTANT SERVICES AGREEMENT WITH PARSONS TRANSPORTATION GROUP, INC., FOR ENGINEERING DESIGN SERVICES RELATED TO THE U.S. 101/PALO COMADO CANYON ROAD (AT CHESEBRO) INTERCHANGE PROJECT

On January 23, 2013, the City Council authorized staff to solicit proposals for professional engineering services related to the U.S.101/Palo Comado Canyon Road (at Chesebro) Interchange Project. The services being provided include preparation of the four required stages of design documents, through Caltrans approval (35%, 65%, 95%, and 100%), right-of-way certification, utility design coordination, bridge type selection, traffic control plans, regular meetings with City and Caltrans staff, and other tasks as necessary.

On March 21, 2013, the City received proposals from three (3) prospective firms: Kimley-Horn and Associates, Inc., Parsons Transportation Group, Inc. (Parsons), and Willdan Engineering. A selection committee was formed, comprised of City staff and other local and State agency personnel. After the selection committee reviewed and evaluated the proposals, staff determined that all three firms would be invited back for oral interviews.

The selection committee conducted oral interviews on April 9, 2013, and Parsons was unanimously selected as the most experienced and qualified to complete the next phase of work. Parsons completed the Project Study Report (PSR) in 2009 for this project, and has an exceptional reputation with interchange projects.

While not part of the criteria used to score the firms, Parsons' cost proposal came in favorably. The cost proposals were as follows:

	Total
Parsons Transportation Group, Inc.	\$1,498,754
Kimley-Horn & Assoc.	\$2,195,677
Willdan Engineering	\$2,868,712

In addition to approving the proposal solicitation, the City Council directed staff to look at the possibility of a phased approach to the bridge widening. Due to the complexity and uncertainty of the pending phasing analysis, staff is requesting that the City Manager be authorized to approve up to 15% in additional services, instead of the normal 10%. This will help avoid any potential delays to the design phase. An adjustment of 15% results in a total contingency amount

of \$224,813. The funding for this phase of work will be covered entirely by Measure R Funds that were allocated to the City for this project. If approved, Parsons is prepared to begin immediately, with the current project schedule showing the 100% PS&E submittal to be completed by March 2015.

The proposed agreement has been reviewed by the City Attorney and approved as to form.

RECOMMENDATION

Staff respectfully recommends the City Council:

- 1. Authorize staff to utilize up to \$224,813 in contingency funds for the project.
- 2. Approve the design professional consultant services agreement with Parsons Transportation Group, Inc.
- 3. Authorize the Mayor to sign the agreement on behalf of the City Council.

Attachment: Design Professional Consultant Services Agreement

AGREEMENT FOR DESIGN PROFESSIONAL CONSULTANT SERVICES WITH THE CITY OF AGOURA HILLS

NAME OF CONSULTANT: RESPONSIBLE PRINCIPAL OF CONSULTANT: Attn: Thomas E. Sardo CONSULTANT'S ADDRESS: 2201 Dupont Drive, Suite 200 Irvine, CA 92612 CITY'S ADDRESS: City of Agoura Hills 30001 Ladyface Court Agoura Hills, CA 91301 Attn: City Manager Kelly Fisher PREPARED BY: COMMENCEMENT DATE: April 24, 2013 **TERMINATION DATE:**

CONSIDERATION:

Parsons Transportation Group, Inc.

Upon Completion of US 101/Palo Comado Interchange Project

Contract Price Not to Exceed: \$1,723,567

AGREEMENT FOR DESIGN PROFESSIONAL CONSULTANT SERVICES BETWEEN THE CITY OF AGOURA HILLS AND PARSONS TRANSPORTATION GROUP, INC.

THIS AGREEMENT is made and effective as of April 24, 2013, between the City of Agoura Hills, a municipal corporation ("City") and Parsons Transportation Group, Inc. ("Consultant"). In consideration of the mutual covenants and conditions set forth herein, the parties agree as follows:

1. <u>TERM</u>

This Agreement shall commence on April 24, 2013, and shall remain and continue in effect until tasks described herein are completed, but in no event later than December 31, 2017, unless sooner terminated pursuant to the provisions of this Agreement.

2. <u>SERVICES</u>

Consultant shall perform the services and tasks described and set forth in Exhibit A, attached hereto and incorporated herein as though set forth in full. Consultant shall complete the tasks according to the schedule of performance which is also set forth in Exhibit A.

3. <u>PERFORMANCE</u>

In meeting its obligations under this Agreement, Consultant shall at all times faithfully and competently perform all tasks described herein in a manner satisfactory to CITY and consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

4. <u>PAYMENT</u>

A. The City agrees to pay Consultant monthly, in accordance with the payment rates and terms and the schedule of payment as set forth in Exhibit B, Payment Rates and Schedule, attached hereto and incorporated herein by this reference as though set forth in full, based upon actual time spent on the above tasks. Any terms in Exhibit B other than the payment rates and schedule of payment are null and void. This amount shall not exceed \$1,723,567 ("Contract Price"- \$1,498,754 Base Contract Price, \$224,813 Contingency Amount) for the initial Term of the Agreement unless additional payment is approved as provided in this Agreement.

B. Any additional work in excess of this amount shall be approved by the City Council.

C. Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to those set

forth herein, unless such additional services are authorized in advance and in writing by the City Manager. Consultant shall be compensated for any additional services in the amounts and in the manner as agreed to by the City Council and Consultant at the time City's written authorization is given to Consultant for the performance of said services.

D. Consultant shall submit invoices monthly for actual services performed. Invoices shall be submitted between the first and fifteenth business day of each month, for services provided in the previous month. Payment shall be made within thirty (30) days of receipt of each invoice as to all non-disputed fees. If the City disputes any of Consultant's fees, it shall give written notice to Consultant within thirty (30) days of receipt of an invoice of any disputed fees set forth on the invoice. For all reimbursements authorized by this Agreement, Consultant shall provide receipts on all reimbursable expenses in excess of Fifty Dollars (\$50) in such form as approved by the Director of Finance.

5. <u>SUSPENSION OR TERMINATION OF AGREEMENT WITHOUT CAUSE</u>

A. The City may at any time, for any reason, with or without cause, suspend or terminate this Agreement, or any portion hereof, by serving upon the consultant at least ten (10) days prior written notice. Upon receipt of said notice, the Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If the City suspends or terminates a portion of this Agreement, such suspension or termination shall not make void or invalidate the remainder of this Agreement.

B. In the event this Agreement is terminated pursuant to this Section, the City shall pay to Consultant the actual value of the work performed up to the time of termination, provided that the work performed is of value to the City. Upon termination of the Agreement pursuant to this Section, the Consultant will submit an invoice to the City pursuant to Section entitled "PAYMENT" herein.

6. DEFAULT OF CONSULTANT

A. The City may at any time, for any reason, with or without cause, suspend or terminate this Agreement, or any portion hereof, by serving upon the Consultant at least ten (10) days prior written notice. Upon receipt of said notice, the Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If the City suspends or terminates a portion of this Agreement such suspension or termination shall not make void or invalidate the remainder of this Agreement.

B. In the event this Agreement is terminated pursuant to this Section, the City shall pay to Consultant the actual value of the work performed up to the time of termination, provided that the work performed is of value to the City. Upon termination of the Agreement pursuant to this Section, the Consultant will submit an invoice to the City, pursuant to Section entitled "PAYMENT" herein.

7. <u>OWNERSHIP OF DOCUMENTS</u>

A. Consultant shall maintain complete and accurate records with respect to sales, costs, expenses, receipts and other such information required by City that relate to the performance of services under this Agreement. Consultant shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Consultant shall provide free access to the representatives of City or its designees at reasonable times to such books and records, shall give City the right to examine and audit said books and records, shall permit City to make transcripts therefrom as necessary, and shall allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

B. Upon completion of, or in the event of termination or suspension of this Agreement, all original documents, designs, drawings, maps, models, computer files containing data generated for the work, surveys, notes, and other documents prepared in the course of providing the services to be performed pursuant to this Agreement shall become the sole property of the City and may be used, reused or otherwise disposed of by the City without the permission of the Consultant. With respect to computer files containing data generated for the work, Consultant shall make available to the City, upon reasonable written request by the City, the necessary computer software and hardware for purposes of accessing, compiling, transferring and printing computer files.

8. INDEMNIFICATION

A. <u>Indemnity for Design Professional Services</u>. In the connection with its design professional services, Consultant shall hold harmless and indemnify City, and its elected officials, officers, employees, servants, designated volunteers, and those City agents serving as independent contractors in the role of City officials (collectively, "Indemnitees"), with respect to any and all claims, demands, damages, liabilities, losses, costs or expenses, including reimbursement of attorneys' fees and costs of defense (collectively, "Claims" hereinafter), including but not limited to Claims relating to death or injury to any person and injury to any property, which arise out of, pertain to, or relate in whole or in part to the negligence, recklessness, or willful misconduct of Consultant or any of its officers, employees, sub-consultants, or agents in the performance of its professional services under this Agreement.

B. <u>Other Indemnities</u>. In connection with any and all claims, demands, damages, liabilities, losses, costs or expenses, including attorneys' fees and costs of defense (collectively, "Damages" hereinafter) not covered by Paragraph 8.a. above, Consultant shall defend, hold harmless and indemnify the Indemnitees with respect to any and all Damages, including but not limited to, Damages relating to death or injury to any person and injury to any property, which arise out of, pertain to, or relate to acts or omissions of Consultant or any of its officers, employees, subcontractors, or agents in the performance of this Agreement, except for such loss or damage arising from the

sole negligence or willful misconduct of the City, as determined by final arbitration or court decision or by the agreement of the parties. Consultant shall defend Indemnitees in any action or actions filed in connection with any such Damages with counsel of City's choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Consultant's duty to defend pursuant to this Section 8.b. shall apply independent of any prior, concurrent or subsequent misconduct, negligent acts, errors or omissions of Indemnitees.

9. INSURANCE REQUIREMENTS

Prior to commencement of work, Consultant shall procure, provide, and maintain, at Consultant's own expense, for the duration of this Agreement, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

as:

A. <u>Minimum Scope of Insurance</u>. Coverage shall be at least as broad

1) Insurance Services Office Commercial General Liability form No. CG 00 01 11 85 or 88, or equivalent.

2) Insurance Services Office Business Auto Coverage form CA 00 01 06 92, or equivalent, covering Automobile Liability, code 1 (any auto). If the Consultant owns no automobiles, a non-owned auto endorsement to the General Liability policy described above is acceptable.

3) Worker's Compensation insurance as required by the State of California and Employer's Liability Insurance. If the Consultant has no employees while performing under this Agreement, worker's compensation insurance is not required, but Consultant shall execute a declaration that it has no employees.

4) Professional Liability Insurance shall be written on a policy form providing professional liability for the Consultant's profession.

B. <u>Minimum Limits of Insurance</u>. Consultant shall maintain limits no less than:

1) General Liability: \$2,000,000 per occurrence for bodily injury, personal injury and property damage, including without limitation, blanket contractual liability. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

2) Automobile Liability: \$2,000,000 per accident for bodily injury and property damage for all activities of the Consultant arising out of or in

connection with work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rental vehicles.

3) Worker's Compensation as required by the State of California; Employer's Liability: One million dollars (\$1,000,000) per accident for bodily injury or disease.

4) Professional Liability coverage: Two million (\$2,000,000) per claim and in aggregate.

C. <u>Deductibles and Self-Insured Retentions</u>. Any deductibles or selfinsured retentions must be declared to and approved by the City Manager. At the option of the City Manager, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees and volunteers; or the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

D. <u>Other Insurance Provisions</u>. The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1) The City, its officers, officials, employees and volunteers are to be covered and named as additional insureds in respect to: liability arising out of activities performed by or on behalf of the Consultant; products and completed operations of the Consultant; premises owned, occupied or used by the Consultant; or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officers, officials, employees or volunteers.

2) For any claims related to this project, the Consultant's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees and volunteers. Any insurance or self-insured maintained by the City, its officers, officials, employees or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

3) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the City, its officers, officials, employees or volunteers.

4) The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to the City. Consultant agrees to oblige its insurance agent or broker and insurers to provide City with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage.

E. <u>Acceptability of Insurers</u>. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City. Self insurance shall not be considered to comply with these insurance requirements.

F. <u>Verification of Coverage</u>. Consultant shall furnish the City with original endorsements, specifically naming the City of Agoura Hills as additional insured, effecting coverage required by this clause. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms acceptable to the City. Insurance certificates and endorsements must be received and approved by City's Risk Manager prior to commencement of performance. Current insurance certificates and endorsements shall be kept on file with the City at all times during the term of this agreement. City reserves the right to require complete, certified copies of all required insurance policies, at any time.

G. <u>Mailing Instructions</u>. Insurance documents shall be mailed with the signed Agreement to the attention of the staff person indicated on the cover sheet of this Agreement, to the City of Agoura Hills, 30001 Ladyface Court, Agoura Hills, CA 91301. Executed Agreement(s) cannot be released nor may any work commence on a project until the signed Agreement and appropriate insurance documents are on file with the City Clerk.

10. INDEPENDENT CONTRACTOR

A. Consultant is and shall at all times remain as to the City a wholly independent contractor. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Neither City nor any of its officers, employees, agents, or volunteers shall have control over the conduct of Consultant or any of Consultant's officers, employees, or agents except as set forth in this Agreement. Consultant shall not at any time or in any manner represent that it or any of its officers, employees or agents are in any manner officers, employees or agents of the City. Consultant shall not incur or have the power to incur any debt, obligation or liability whatever against City, or bind City in any manner.

B. No employee benefits shall be available to Consultant in connection with the performance of this Agreement. Except for the fees paid to Consultant as provided in the Agreement, City shall not pay salaries, wages, or other compensation to Consultant for performing services hereunder for City. City shall not be liable for compensation or indemnification to Consultant for injury or sickness arising out of performing services hereunder.

11. <u>LEGAL RESPONSIBILITIES</u>

The Consultant shall keep itself informed of all local, State and Federal ordinances, laws and regulations which in any manner affect those employed by it or in any way affect the performance of its service pursuant to this Agreement. The Consultant shall at all times observe and comply with all such ordinances, laws and regulations. The City, and its officers and employees, shall not be liable at law or in equity occasioned by failure of the Consultant to comply with this section.

12. RELEASE OF INFORMATION

A. All information gained by Consultant in performance of this Agreement shall be considered confidential and shall not be released by Consultant without City's prior written authorization. Consultant, its officers, employees, agents or subcontractors, shall not without written authorization from the City Manager or unless requested by the City Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the City. Response to a subpoena or court order shall not be considered "voluntary" provided Consultant gives City notice of such court order or subpoena.

B. Consultant shall promptly notify City should Consultant, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed there under or with respect to any project or property located within the City. City retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with City and to provide City with the opportunity to review any response to discovery requests provided by Consultant. However, City's right to review any such response does not imply or mean the right by City to control, direct, or rewrite said response.

13. <u>NOTICES</u>

Any notices which either party may desire to give to the other party under this Agreement must be in writing and may be given either by: (i) personal service, (ii) delivery by a reputable document delivery service, such as but not limited to, Federal Express, that provides a receipt showing date and time of delivery, or (iii) mailing in the United States Mail, certified mail, postage prepaid, return receipt requested, addressed to the address of the party as set forth below or at any other address as that party may later designate by Notice. Notice shall be effective upon delivery to the addresses specified below or on the third business day following deposit with the document delivery service or United States Mail as provided above.

To City:	City of Agoura Hills 30001 Ladyface Court Agoura Hills, California 91301 Attention: City Manager
To Consultant:	Parsons Transportation Group, Inc. 2201 Dupont Drive, Suite 200 Irvine, CA 92612 Attention: Thomas E. Sardo

14. ASSIGNMENT

The Consultant shall not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, without prior written consent of the City. Upon termination of this Agreement, Consultant's sole compensation shall be payment for actual services performed up to, and including, the date of termination or as may be otherwise agreed to in writing between the City Council and the Consultant.

15. LICENSES

At all times during the term of this Agreement, Consultant shall have in full force and effect, all licenses required of it by law for the performance of the services described in this Agreement.

16. <u>GOVERNING LAW</u>

The City and Consultant understand and agree that the laws of the State of California shall govern the rights, obligations, duties and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the municipal, superior, or federal district court with geographic jurisdiction over the City of Agoura Hills. In the event such litigation is filed by one party against the other to enforce its rights under this Agreement, the prevailing party, as determined by the Court's judgment, shall be entitled to reasonable attorney fees and litigation expenses for the relief granted.

17. PROHIBITED INTEREST

No officer, or employee of the City of Agoura Hills shall have any financial interest, direct or indirect, in this Agreement, the proceeds thereof, the Consultant, or Consultant's sub-contractors for this project, during his/her tenure or for one year thereafter. The Consultant hereby warrants and represents to the City that no officer or employee of the City of Agoura Hills has any interest, whether contractual, non-contractual, financial or otherwise, in this transaction, or in the business of the Consultant or Consultant's sub-contractors on this project. Consultant further agrees to notify the City in the event any such interest is discovered whether or not such interest is prohibited by law or this Agreement.

18. ENTIRE AGREEMENT

This Agreement contains the entire understanding between the parties relating to the obligations of the parties described in this Agreement. All prior or contemporaneous agreements, understandings, representations and statements, oral or written, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

19. <u>AUTHORITY TO EXECUTE THIS AGREEMENT</u>

The person or persons executing this Agreement on behalf of Consultant warrants and represents that he or she has the authority to execute this Agreement on behalf of the Consultant and has the authority to bind Consultant to the performance of its obligations hereunder.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

CITY OF AGOURA HILLS

Denis Weber Mayor

ATTEST:

Kimberly M. Rodrigues, MMC City Clerk

Date Approved by City Council

APPROVED AS TO FORM:

Candice K. Lee, City Attorney

CONSULTANT

Parsons Transportation Group, Inc. 2201 Dupont Drive, Suite 200 Irvine, CA 92612 Attn: Thomas E. Sardo 949-333-4500 949-263-1225 (fax)

By: Name: Title:		
By: Name:		
Name: Title:		

[Signatures of Two Corporate Officers Required]

EXHIBIT A

TASKS TO BE PERFORMED

I. <u>Project Management, Deliverables, and Meetings</u>

- A. Attend kick-off meeting at the City to discuss roles of team personnel, schedule, critical activities, constraints, interface with the public, and specific design issues.
- B. Project Development Team (PDT) meetings with City and Caltrans shall be held as needed to discuss policy, procedural, and freeway-specific issues.
- C. Consultant's project manager shall attend meetings with City staff after each design submittal to review comments provided by the City and Caltrans
- D. Right-of-Way Coordination meetings shall be held before starting work between Consultant, City, and the Chief of Caltrans District 7 R/W Engineering. Thereafter, progress meetings shall take place as needed between Consultant, City, and Chief of Caltrans District 7 R/W Engineering at District 7 Headquarters. An emergency meeting may be called at any time to address pressing issues.
- E. Consultant shall be responsible for preparing and providing the following deliverables:
 - Notices
 - Agendas
 - Handouts
 - Minutes
 - Progress Plans
- F. Consultant shall supervise subcontractors, coordinate, and monitor work for conformance with Caltrans standards and policies.
- G. Consultant shall apply for and obtain Caltrans encroachment permits necessary for Consultant to be on the jobsite.
- H. Consultant shall apply for and obtain City approvals and permits as required.
- I. Consultant shall prepare, circulate, and file correspondence and memoranda as appropriate.
- J. Consultant shall maintain project files using the Caltrans Uniform File System.
- K. Thirty (30) days after Notice to Proceed, Consultant shall submit the Project Master Schedule to City and Caltrans Project Managers.

II. <u>Project Schedules/Reports</u>

- A. The Consultant shall be responsible for preparing and providing a detailed project schedule, including milestones for submittals to various agencies. The project schedule shall be prepared using Microsoft Project. The project schedule shall be updated monthly and submitted to the City with the progress reports.
- B. The following list of major tasks shall be used to develop the project schedule:

Task 1- Project Management/Coordination/Administration Task 2- 35% PS&E Submittal Task 3- PS&E (65%) Submittal

Task 4- Initial PS&E (95%) Submittal

Task 5- Final PS&E (100%) Submittal

- Task 6- Construction Bidding Phase
- Task 7- Construction Support Phase
- Task 8- Project Closeout
- C. Major tasks shall be broken down into subtasks as warranted.
- D. Consultant shall submit a copy of the project schedule to the City for review and approval, and a copy to Caltrans Project Manager for their information.
- E. Consultant shall prepare monthly progress reports and submit to the City. Consultant will establish an appropriate format for the progress reports to update the City on the progress to date, work to be accomplished in the next period, and potential technical problems. At a minimum the reports shall contain the following:
 - Summary of work completed during the previous month.
 - Discussion of any significant problems encountered.
 - Total effort expended by task separated into hours spent by each staff level.
 - Percent of project completed.

III. <u>35% PS&E Submittal</u>

- A. Consultant shall collect existing topographic maps, as-built drawings, reports, and other available materials. Consultant shall request data from the City, Caltrans, L.A. County, and other agencies, as appropriate.
- B. Consultant shall prepare a "Phasing Analysis" for improvements. The analysis shall examine and identify any possible alternatives to a phased approach for construction in order to achieve an acceptable level of service "C" or better.
- C. Consultant shall conduct a meeting with Caltrans District 7 staff, the geometric reviewer, and City staff to present and obtain consensus on the geometrics of the ultimate improvements and proposed project design. Consultant shall identify and clarify any major non-standard features.
- D. Consultant shall prepare Fact Sheets for Mandatory and Advisory Design Exceptions for non-standard design features.
- E. Consultant shall perform design surveys during this phase. Consultant to request and obtain available recent data from City/Caltrans.
- F. Upon receipt of the Survey Control Data from Caltrans, Consultant shall verify the physical existence of the "Monument Control Points" and, if necessary, reestablish such control points.
- G. Consultant shall perform detailed field surveys of existing street and drainage features. The Surveys Manager shall coordinate with the Design Engineer to establish limits of work. Cross sections and tie-in surveys will ensure accurate design fit and smooth transitions from existing roadway and infrastructure features.
- H. All work and files will be based on project coordinate control and in accordance with Caltrans Surveys and Right-of-Way Manuals, and Caltrans District 7 Right of Way Engineering requirements for the preparation of

documents and maps. Consultant shall verify survey results prior to submitting survey plans.

- I. Consultant shall survey Geotechnical Boring locations to verify the locations.
- J. Consultant shall prepare and submit a geotechnical review and exploration plan for the City and Caltrans to review. Consultant shall obtain right-of-entry permits prior to exploration. Consultant shall conduct subsurface investigation and evaluate the results in accordance with Caltrans testing criteria. Consultant shall analyze the results and present them in the geotechnical report.
- K. Consultant shall prepare 35% level layouts, profiles, super elevation diagrams, typical sections, and right-of-way per selected alternate and the field survey.
- L. To assist in type selection, Consultant shall prepare a Preliminary Foundation Report in accordance with Caltrans Office of Structural Foundations requirements. The report shall include a summary of the exploration program, description of the site geotechnical issues, and recommendations for foundation design and construction including retaining walls, if appropriate.
- M. Consultant shall prepare the Structure Type Selection documents and Bridge General Plan to comply with the most current Caltrans guidelines.
- N. A preliminary utility survey to identify the type and locations of utilities is included in the approved PR. City will provide data and contact information in order for Consultant to prepare and send utility notifications to utility companies known to operate with the project area. Each notice will contain a letter requesting available atlases, as-builts, and proposed utilities within the project limits.
- O. Consultant shall maintain records of correspondence with utility companies, which will be made available to the City at the completion of the work.
- P. Consultant shall coordinate with the City, Caltrans, and utility companies to determine the need to relocate impacted utility lines per Caltrans Policy Manual. Consultant shall use utility conflict matrix to identify conflicts. It is assumed the utility companies relocation plans will not be part of PS&E package developed by Consultant.
- Q. Consultant shall test the unpaved area within the project limits for aerially deposited lead contamination and incorporate the results and conclusions into the PS&E package. This task shall also address the removal and disposal of traffic stripes and pavement markings.
- R. Consultant shall be responsible for a site-specific health and safety plan for the aerially deposited lead site investigation in accordance with Occupational Safety and Health Administration (OSHA) regulations, as specified in Title 29 of the Federal Code of Regulations to ensure the safety of site personnel conducting field work.
- S. The Structure Type Selection Report shall include a discussion of foundation and false work requirements, seismic and aesthetic considerations, traffic handling requirements and alternatives, construction cost, and staging. Anticipated construction methods will be identified in the type selection process and coordinated with the project geometry. Consultant shall submit Type Selection documents to Caltrans District 7 for review and approval.

- T. Consultant shall attend a Type Selection review meeting with Caltrans to finalize structure type, foundations, seismic design, aesthetics, and traffic handling plans. The location of review meeting shall be determined by Caltrans staff.
- U. Consultant shall submit Final Type Selection Report to the City and Caltrans for approval. The approved general plans (11"x17") will be accompanied by a design memorandum that will set forth the basis of design and design criteria to be used for the bridge PS&E.
- V. Consultant shall prepare a preliminary cost estimate at 35% completion. The cost estimate shall be based on recent bid results for similar projects and cost databases maintained by Caltrans. The cost estimate shall be prepared in a spreadsheet format using Microsoft Excel. Throughout development of PS&E, Consultant shall update the estimate.

IV. PS&E (65%) Submittal

- A. After approval of the Bridge Type Selection, bridge design shall be in accordance with Caltrans Bridge Design Specification and bridge design manuals and procedures. Bridge independent check will be performed for structures within Caltrans right-of-way in compliance with Caltrans practice.
- B. Consultant shall prepare the 65% unchecked bridge plans for the proposed structures based on Caltrans DOS design procedures and standards. Plans shall be submitted to Caltrans Headquarters independent of the PS&E package.
- C. The bridge design plans shall be prepared, based on the format and procedures outlined in Section I, "General Detailing", of the Caltrans Bridge Design Details Manual.
- D. Consultant shall incorporate all reviewing agencies' comments into roadway plans and estimates. Where it is not possible or desirable to incorporate certain comments, Consultant shall provide an explanation.
- E. Consultant shall prepare a drainage report to address the existing drainage condition and the proposed mitigation and design. This report shall consider both onsite and offsite systems.
- F. Consultant shall prepare drainage plans, profiles, and quantities based on the drainage report.
- G. To address NPDES and Caltrans storm water quality requirements, Consultant shall update the storm water data report, and incorporate its findings into the project's PS&E. All drainage plans shall be prepared in accordance with Caltrans Standard Drainage Plans and Quality Sheets guidance. Consultant shall prepare temporary drainage plans if required.
- H. Stage construction, traffic handling, detour plans, and a Transportation Management Plan (TMP) shall be coordinated with the City, Caltrans, and other appropriate agencies. Stage construction and detour plans shall include construction detour plans.
- I. Consultant shall prepare pavement delineation plans to identify locations of painted and thermoplastic stripes and markings, pavement markers, and delineators.
- J. Consultant shall prepare sign plans to show existing and proposed signs. The plans shall include sign details and quantity sheets.

- K. Consultant shall prepare lighting and signal plans for the project including safety lighting and ramp metering plans. Consultant shall coordinate with Caltrans to ensure that ramp metering and electrical designs will accommodate future traffic monitoring features within the project limits.
- L. Consultant shall prepare a landscape and irrigation plans for the project area. The landscaping theme shall be consistent with Reyes Adobe Road and Kanan Road interchanges.
- M. Consultant shall perform all right-of-way services per Caltrans requirements, the California Professional Land Surveyors Act, State law, and all applicable local ordinances and regulations. Tasks shall include:
 - Performing Record Data Search
 - Acquiring Title Reports
 - Performing Land Net Recovery Field Ties
 - Preparing Land Net Map- "Before Condition" Record of Survey
 - Performing Monument Perpetuation Surveys
 - Preparing Right-of-Way Maps
 - Preparing Acquisition Documents
 - Preparing Resolution of Necessity and Plats
 - Preparing Deed and Plats
 - Preparing Utility Legal Description and Plat
 - Preparing Parcel Files
 - Final Monumentation
 - Preparing Monumentation- "After Condition" Record of Survey.
- N. Consultant shall prepare Geotechnical Design Report discussing the geotechnical design basis of the project and recommendations for design and construction of earth retaining structures, cut and fill slopes, pavement, and drainage facilities. The report shall be submitted to Caltrans for review. Consultant shall address and comments from review and prepare a final draft. All calculations supporting the design recommendations shall be included as an appendix to the report.
- O. Consultant shall prepare a Foundation Report for bridge and retaining walls based upon Type Selection comments and additional information from the Geotechnical Design Report.
- P. Consultant shall prepare bridge plans and structural details for construction. Consultant shall also prepare draft technical special provisions. All plans and documents shall comply with Caltrans Standards, Manuals, and Specifications.
- Q. Consultant shall prepare retaining wall plans and structural details, and any technical special provisions.
- R. Consultant shall prepare, submit, and secure all permits for surveying, geotechnical investigations, and construction. Permits required, but not limited to, include:
- Environmental Permits
- State and Local Encroachment Permits for Construction
- NPDES General Activity Stormwater Permit
- S. Consultant shall update the Storm Water Data Report and incorporate its recommendations into the project's PS&E.

V. Initial PS&E (95%) Submittal

- A. The Consultant shall update Roadway, Stage Construction/Traffic Handling, and Drainage plans. Any revised and/or new standards developed by Caltrans shall be included with this submittal. In addition, this submittal shall include updated Special Provisions, comments, reviews, coordination efforts, and all other updated information.
- B. Consultant shall independently review plans, Draft Special Provisions, quantities, and construction cost estimate for the bridges and retaining walls. Consultant's independent review team shall analyze the structures, verify member capacities, review the Special Provisions, and prepare independent quantity calculations. All issues raised by the checkers shall be resolved with the structural designers. The final design shall reflect agreement among designers and independent checkers in terms of accuracy and conformance to Caltrans design standards.
- C. Consultant shall verify and update utility and Right-of-Way engineering data.
- D. Consultant shall prepare and send a second notification to each of the affected utility companies upon completion of the 95% plans. The notification shall include a reduced (11"x17") set of plans and a request to verify that their facilities have been accurately shown on the plans and to coordinate necessary relocations and/or adjustments to their facilities.
- E. Consultant shall prepare materials handout information per Caltrans HDM, Section 111.3 Materials Information Furnished to Prospective Bidders.

VI. Final PS&E (100%) Submittal

- A. Consultant shall submit Final PS&E package to Caltrans District 7 Project Manager for final approval. The submittal shall incorporate review comments from all involved agencies.
- B. Consultant shall deliver the following:
 - Final Roadway PS&E
 - Full-size reproducible Final Structure Plans
 - Final Structures Special Provisions
 - Prints of Final Structure Plans
 - Original/Checked Quantity Calculations
 - Cost Estimates
- C. Consultant shall provide electronic version of all plans, reports, specifications, special provisions, and estimates.
- D. Consultant shall prepare and send a final notification to each of the affected utility companies. The notification shall include a set of approved signed plans to be used for their work to facilitate the project. The notification shall also identify anticipated bid and start of construction dates.
- E. Consultant shall provide the following information for the Resident Engineer's file. This list is not comprehensive and Consultant shall provide additional information as appropriate:
 - Permits
 - Surveying Notes
 - Geotechnical and Foundation Reports

- Hydrology/Hydraulics Report and Calculations
- Relevant Correspondence and Memoranda
- Engineering Calculations (Horizontal and Vertical Alignments, Earthwork Quantities, etc.)
- Environmental Agreements and Reports
- Summary and Discussion of Environmental Issues
- Traffic Management Plans and Supplements
- Material Handouts
- Storm Water Data Report
- Right-of-Way Maps and Agreements
- List of Project Personnel
- Bridge Four-Scale Plans
- F. Consultant shall provide an electronic version of all Resident Engineer information.

VII. <u>Construction Bidding Phase</u>

- A. Consultant shall attend the pre-bid meeting.
- B. Bidding procedures will be the responsibility of the City, but any necessary corrective action shall be in the form of an addendum prepared by the Consultant.
- C. Consultant shall draft responses to bidders' inquiries as requested by the Director of Public Works.
- D. Consultant shall provide City with a hard copy and electronic (MS Word) of the Draft Bidder Inquiry Responses.

VIII. <u>Construction Support Phase</u>

- A. Construction of the project will be the responsibility of the City, and Caltrans will provide Independent Quality Assurance. During the construction phase, Consultant shall work closely with City's Resident Engineer (RE) within the budget allotted to assist and advise the RE in order to minimize construction conflicts and to expedite project completion.
- B. Consultant shall attend the pre-construction meeting.
- C. Consultant shall attend public workshops as requested by City.
- D. In case of errors and/or emissions, Consultant shall furnish additional and/or revised drawings necessary for corrections and change orders. City will provide a written request for such drawings and Consultant shall provide said drawings at no additional charge to the City and Caltrans. Consultant shall also provide the contract wording for related change orders to the City and Caltrans at no additional cost.
- E. Consultant shall review all submittals and shop drawings. The review of shop drawings shall include bridge working drawing submittals, construction contractor's submittals for substitutions, construction contractor's alternative construction approval, steel layout for structures, independent check of construction contractor's falsework submittal, and others as requested by the Resident Engineer.

- F. If requested by City, Consultant shall prepare additional drawings and change order supporting documents. Any such additional drawings constitute extra work; therefore, prior approval from City is required. Any such additional engineering services, drawings, or change order documentation prepared prior to receiving the required approval shall be at the Consultant's risk and expense.
- G. Consultant shall visit the job site as requested by the City.
- H. Consultant shall draft responses to contractor inquiries and RFI as requested by the Resident Engineer.
- I. Consultant shall review proposed change orders and draft change order language as requested by the Resident Engineer. If said changes are necessary as a direct result of design errors and omissions, Consultant shall prepare and/or review contract change orders at no additional cost.
- J. Consultant shall be responsible for incorporating as-builts into the PS&E.

IX. <u>Project Closeout</u>

- A. After construction, Consultant shall provide all final construction project records in accordance with Caltrans requirements. Records shall include, but not necessarily limited to design survey records, including legible hard copies and electronic files, recorded monuments, and post audits. Consultant shall maintain all project records in accordance with Caltrans Uniform Filing System.
- B. Consultant shall provide all pertinent project records to City and Caltrans. Documents shall be organized in accordance with the Caltrans Uniform Filing System.
- C. In accordance with the Professional Land Survey Act, Consultant shall review monument surveys for the project right-of-way. Consultant shall also review mapping and documentation for all recorded monuments associated with the project. Monumentation shall include all local street controls established/reestablished.
- D. Contractor shall supply Caltrans Survey all field survey information/mapping related to the final alignments (mainline freeway, arterial streets, and ramps).
- E. Consultant shall assist City and Caltrans with the post audits, as requested by the City and/or Caltrans.

EXHIBIT B

PAYMENT RATES AND SCHEDULE

U.S. 101/PALO COMADO CANYON ROAD INTERCHANGE PROJECT

	FEE PROPOSAL SUMMARY													
		TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8	TOTALS				
PARSONS	STRUCTURES/ROADWAY	\$141,782.57	\$75,848.23	\$343,502.15	\$155,613.61	\$77,411.05	\$18,675.69	\$57,258.47	\$13,915.16	\$884,006.94				
WKE	ROADWAY		\$47,063.68	\$168,651.29	\$82,627.76	\$70,610.73		\$26,691.33		\$395,644.79				
GROUP DELTA	GEOTECHNICAL		\$16,231.11	\$69,477.11						\$85,708.23				
PSOMAS	SURVEY		\$24,455.25	\$52,007.66						\$76,462.91				
LYNN CAPOUYA	LANDSCAPE			\$24,889.01	\$14,402.60	\$17,639.74				\$56,931.35				
	TOTALS	\$141,782.57	\$163,598.28	\$658,527.23	\$252,643.97	\$165,661.52	\$18,675.69	\$83,949.80	\$13,915.16	\$1,498,754.22				

Task 1 (I and II): Task 2 (III): Task 3 (IV): Task 4 (V): Task 5 (VI): Task 5 (VI): Task 6 (VII): Task 7 (VIII): Task 8 (IX): Project Management/Coordination/Administration 35% PS&E Submittal 55% PS&E Submittal PS&E (65%)Submittal Initial PS&E (95%) Submittal Final PS&E (100%) Submittal Construction Bidding Phase Construction Support Phase Project Closeout

3/20/2013

COMPANY:	SCOPE OF WORK				DATE:	REV:
PARSONS	Project Summary	- PS&E			3/20/2013	1
ROJECT:	N ROAD INTERCHANGE PROJEC	ст			TASK/PROJECT S	UMMARY:
U.S. 1017FALO COMADO CANTO	IN ROAD INTERCHANGE PROJEC				All Tasks	
DIRECT LABOR						
PERSONNEL	FUNCTION	HOURS	TELL T	RATE	AMOUNT]
T. Sardo	Project Manager	548	0	\$100.96	\$55,326.08]
B. Fardi	QA/QC Manager	44	0	\$76.88	\$3,382.72	1
J. Harake	Transportation Manager	80	0	\$96.15	\$7,692.00	1
STAFF 1	Senior Project Engineer	518	Q	\$63.41	\$32,843.79	
STAFF 2	Roadway Engineer	968	0	\$53.33	\$51,623.44	1
STAFF 3	Clerical/Admin	112	œ	\$34.68	\$3,884,16	1
STAFF 4	Drainage Engineer	194	0	\$62.73	\$12,170.27	1
STAFF 5	Senior Noise Planner	32	0	\$97.02	\$3,104.64	1
STAFF 6	Traffic Engineer	320	0	\$56.34	\$18,028.80	1
STAFF 7	Senior Bridge Engineer	954	0	\$67.11	\$64,018.17	-
STAFF 8	Structures Engineer	956	0	\$43.74	\$41,815.44	4
STAFF 9	Bridge Drafter	510	0	\$30.00	\$15,300.00	
	TOTAL HOURS	5236		in the second	DIRECT LABOR	\$309,189,51
MULTIPLIERS OVERHEAD @	86.81% (of Total Direct La		,		\$268,407.41	1
PAYROLL ADDITIVES @	57.47% (of Total Direct La	abor + Escala	tion)		\$177,691.21 L MULTIPLIERS	
-	••• Billed at Actual Cost •••					
OTHER DIRECT EXPENSES ITEM Travel Plots/Reproduction (11"x17")	QUANTITY 12,800	UNIT miles	0	UNIT COST \$0.55 \$1.20	AMOUNT \$7,040.00	
ITEM Travel Plots/Reproduction (11"x17")	QUANTITY 12,800 13,600	miles each	0	\$0.55 \$1.20	\$7,040.00 \$16,320.00	
ITEM	QUANTITY 12,800	miles		\$ 0.55	\$7,040.00	
ITEM Travel Plots/Reproduction (11"x17") Exhibits/Reports	QUANTITY 12,800 13,600 430	miles each each	8	\$0.55 \$1.20 \$50.00	\$7,040.00 \$16,320.00 \$21,500.00 \$8,330.00	\$53,190.00
ITEM Travel Plots/Reproduction (11"x17") Exhibits/Reports Mail, overnight mail, courier OUTSIDE SERVICES (w/o fee)	QUANTITY 12,800 13,600 430 490	miles each each each	0	\$0.55 \$1.20 \$50.00 \$17.00	\$7,040.00 \$16,320.00 \$21,500.00 \$8,330.00 ECT EXPENSES	\$53,190.00
ITEM Travel Plots/Reproduction (11"x17") Exhibits/Reports Mail, overnight mail, courier OUTSIDE SERVICES (w/o fee) COMPANY	QUANTITY 12,800 13,600 430 490 490	miles each each each MULTIPLIEF	0 0 0	\$0.55 \$1.20 \$50.00 \$17.00 TOTAL OTHER DIR EXPENSES	\$7,040.00 \$16,320.00 \$21,500.00 \$8,330.00 ECT EXPENSES TOTAL	\$53,190.00
ITEM Travel Plots/Reproduction (11"x17") Exhibits/Reports Mail, overnight mail, courier OUTSIDE SERVICES (w/o fee) COMPANY WKE	QUANTITY 12,800 13,600 430 490 LABOR \$146,071.24	miles each each each MULTIPLIEF \$219,118.5	@ @ @	\$0.55 \$1.20 \$50.00 \$17.00 TOTAL OTHER DIR EXPENSES \$30,455.00	\$7,040.00 \$16,320.00 \$21,500.00 \$8,330.00 ECT EXPENSES TOTAL \$395,644.79	\$53,190.00
ITEM Travel Plots/Reproduction (11"x17") Exhibits/Reports Mail, overnight mail, courier OUTSIDE SERVICES (w/o fee) COMPANY WKE GROUP DELTA	QUANTITY 12,800 13,600 430 490 LABOR \$146,071.24 \$19,288.29	miles each each each \$219,118.5 \$37,509.9	@ @ @ \$5 4	\$0.55 \$1.20 \$50.00 \$17.00 TOTAL OTHER DIR EXPENSES \$30,455.00 \$28,910.00	\$7,040.00 \$16,320.00 \$21,500.00 \$8,330.00 ECT EXPENSES TOTAL \$395,644.79 \$85,708.23	\$53,190.00
ITEM Travel Plots/Reproduction (11"x17") Exhibits/Reports Mail, overnight mail, courier OUTSIDE SERVICES (w/o fee) COMPANY WKE GROUP DELTA PSOMAS	QUANTITY 12,800 13,600 430 490 LABOR \$146,071.24 \$19,288.29 \$23,034.44	miles each each each \$219,118.5 \$37,509.9 \$48,874.4	@ @ @ \$5 \$5 4 7	\$0.55 \$1.20 \$50.00 \$17.00 FOTAL OTHER DIR EXPENSES \$30,455.00 \$28,910.00 \$4,554.00	\$7,040.00 \$16,320.00 \$21,500.00 \$8,330.00 ECT EXPENSES TOTAL \$395,644.79 \$85,708.23 \$76,462.91	\$53, 190.00
Travel Plots/Reproduction (11"x17") Exhibits/Reports Mail, overnight mail, courier	QUANTITY 12,800 13,600 430 490 LABOR \$146,071.24 \$19,288.29	miles each each each \$219,118.5 \$37,509.9	@ @ @ \$5 \$5 4 7	\$0.55 \$1.20 \$50.00 \$17.00 TOTAL OTHER DIR EXPENSES \$30,455.00 \$28,910.00	\$7,040.00 \$16,320.00 \$21,500.00 \$8,330.00 ECT EXPENSES TOTAL \$395,644.79 \$85,708.23	\$53,190.00
ITEM Travel Plots/Reproduction (11"x17") Exhibits/Reports Mail, overnight mail, courier OUTSIDE SERVICES (w/o fee) COMPANY WKE GROUP DELTA PSOMAS LYNN CAPOUYA	QUANTITY 12,800 13,600 430 490 LABOR \$146,071.24 \$19,288.29 \$23,034.44	miles each each each \$219,118.5 \$37,509.9 \$48,874.4	@ @ @ \$5 \$5 4 7	\$0.55 \$1.20 \$50.00 \$17.00 TOTAL OTHER DIR EXPENSES \$30,455.00 \$28,910.00 \$4,554.00 \$1,000.00	\$7,040.00 \$16,320.00 \$21,500.00 \$8,330.00 ECT EXPENSES TOTAL \$395,644.79 \$85,708.23 \$76,462.91	
ITEM Travel Plots/Reproduction (11"x17") Exhibits/Reports Mail, overnight mail, courier OUTSIDE SERVICES (w/o fee) COMPANY WKE GROUP DELTA PSOMAS LYNN CAPOUYA FEES	QUANTITY 12,800 13,600 430 490 LABOR \$146,071.24 \$19,288.29 \$23,034.44 \$17,294.79	miles each each each \$219,118.5 \$37,509.9 \$48,874.4 \$38,636.50	2 2 2 5 5 4 7 5	\$0.55 \$1.20 \$50.00 \$17.00 TOTAL OTHER DIR EXPENSES \$30,455.00 \$28,910.00 \$4,554.00 \$1,000.00 TOTAL OUT	\$7,040.00 \$16,320.00 \$21,500.00 \$8,330.00 ECT EXPENSES TOTAL \$395,644.79 \$85,708.23 \$76,462.91 \$56,931.35 SIDE SERVICES	\$53,190.00
ITEM Travel Plots/Reproduction (11"x17") Exhibits/Reports Mail, overnight mail, courier OUTSIDE SERVICES (w/o fee) COMPANY WKE GROUP DELTA PSOMAS LYNN CAPOUYA	QUANTITY 12,800 13,600 430 490 LABOR \$146,071.24 \$19,288.29 \$23,034.44	miles each each each \$219,118.5 \$37,509.9 \$48,874.4 \$38,636.50	2 2 2 5 5 4 7 5	\$0.55 \$1.20 \$50.00 \$17.00 TOTAL OTHER DIR EXPENSES \$30,455.00 \$28,910.00 \$4,554.00 \$1,000.00 TOTAL OUT	\$7,040.00 \$16,320.00 \$21,500.00 \$8,330.00 ECT EXPENSES TOTAL \$395,644.79 \$85,708.23 \$76,462.91 \$56,931.35	

MANHOUR WORKSHEET			10.00
COMPANY:	SCOPE OF WORK	DATE:	REVISION:
PARSONS	Project Summary - PS&E	3/20/2013	1
PROJECT: AVENUE 56/UPRR GRADE SEPARATION PROJECT		TASK/PROJECT SUMM	ARY
U.S. 101/PALO COMADO CANYON ROAD INTERCHAN	Project Summary		

PARSONS Summary

TASK	Principal in Charge	Project Manager	GAVOC Manager	Transportation Manager	Benier Project Engineer	Roadway Engineer	ChricaliAdmin	Draksoge Engineer	Senior biolos Planner	Tratlic Engineer	Senior Schige Engineer	Structures Engineer	Bridge Drafter	TOTAL
Task 1 Subtotal		362		14	94		82				72	201 A-1 40 - 47,74	CONTRACTOR	624
Task 2 Subtotal		10		28	44	92	16		32		100	48	56	426
Task 3 Subtotal		44	24	24	136	430	6	146		160	440	620	300	2,330
Task 4 Subtotal		46	12	14	76	182	8	32		112	220	148	80	830
Task 5 Subtotal		20	8		74	124		16		48	60	56	34	440
Task 6 Subtotal		20			16	12					12	16		76
Task 7 Subtotai		30			50	120					42	64	40	346
Task 8 Subtotal		16			28	8					8	4		64
Totals	S	548	44	80	518	968	112	194	32	320	954	956	510	5,236

WKE Summary

	Engineering Lood	Senior Project Manager	Senior Exgloser	Lenior Engineer	Engineer/Dest gner						TOTAL
Task 2 Subtotal	72	6	56	40	64						238
Task 3 Subtotal	212	80	120	184	420						1,016
Task 4 Subtotal	114	58	50	80	152						454
Task 5 Subtotal	96	54	40	58	80						328
Task 7 Subtotal	36		32	40	48						156
Totals	530	198	298	402	764	 	 		i.	d	2,192

GROUP DELTA Summary

		Project Messager	Principal Engineer	Senior Engineer	Project Engineer	Stall Engineer	图测量	and the second	1941-9	No.	6	可調整	TOTAL
Task 2 Subtotal		4	12	24	17	90			-				147
Task 3 Subtotal		12	46	80	90	70							318
Tot	als	16	58	104	107	160					•		465

PSOMAS Summary

の理想に行動の自	Starvey Manager	Field Supervisor	Survey Crew (2 man)	Project Surveyor	Sorvey Tech		的现象				TOTAL
Task 2 Subtotal	8	7	57	18	47						137
Task 3 Subtotal	30	5	40	36	154						373
Totals	38	12	97	54	201	·	•	•		 · 1	510

LYNN CAPOUYA Summary

	Principal	Project Ngr	Project Designer	Intigation Designer	Job Captain	《新教》	and the second second	Sec.		编制	TOTAL
Task 3 Subtotal		19	33	26	16						254
Task 4 Subtotal		3	20	18	10						153
Task 5 Subtotal	1	8	17	37	7						180
Tota	ls 1	30	70	81	. 33	4 <u></u>	I	1	Lasen	·]	587