CONTRACT FOR SERVICES

THIS CONTRACT is entered into this the __ day of ___, 20__, by and between Schlesinger Consulting Engineering, PLLC (hereinafter known as “Contractor”), a Engineering Consulting Firm authorized to do business in the state of Arizona, whose address is 510 E 4th Street, Tucson, AZ 85705, and the City of Casa Grande (hereinafter known as “City”), an Arizona municipal corporation, whose address is 510 East Florence Boulevard, Casa Grande, Arizona 85122.

The City engages the Contractor to perform services for a project known and described as “Thornton Road Reconstruction”.

1. Scope of Contractor's Services.

The contractor agrees to provide services to the City to complete the design of a roadway, consistent with the Scope of Work and in the timeframe identified as Exhibit "A" and incorporated herein by reference. No material, labor, or facilities will be furnished by the City, unless otherwise provided for in the Agreement.

2. Accounting and Payment for Contractor Services.

Payment to the Contractor for services rendered under this Agreement shall be a sum total of $222,265 (which includes $700.00 for reimbursable expenses), as set forth in Exhibit "B". Where Exhibit "B" requires payments by City on a monthly basis for the percentage of the work completed, payment shall be based upon billings supported, unless otherwise provided in Exhibit "B", by itemized documentation of units of work actually performed and amounts earned (including where appropriate, the actual number of days worked each month and total number of hours for the month), equipment or materials supplied or used, and the total dollar payment requested. Unless specifically stated in Exhibit "B" or approved in writing in advance by the City, the City will not reimburse the Contractor for any costs or expenses incurred by the Contractor in the performance of this contract that are not part of the agreed upon reimbursable expenses. Where required, the City shall, upon receipt of appropriate documentation, compensate the Contractor no more often than monthly through the City voucher system for the Contractor's service pursuant to the fee schedule set forth in Exhibit "B".

3. Assignment and Subcontracting.

No portion of this contract may be assigned or subcontracted to any other individual, firm, or entity without the express and prior written approval of the Contracting Officer. It will be the responsibility of the Contractor to ensure that any and all subcontractors comply with the terms and conditions of this agreement and that City of Casa Grande is named as express third-party beneficiary of such subcontracts with full rights as such.

4. Independent Contractor.

The Contractor's services shall be furnished by the Contractor as an independent Contractor and nothing contained herein shall be construed to create a relationship of employer-
employee or master-servant, but all payments made hereunder and all services performed shall be made and performed pursuant to this Agreement by the Contractor as an independent Contractor.

5. No Guarantee of Employment.

The performance of all or part of this contract by the Contractor shall not operate to vest any employment rights whatsoever and shall not be deemed to guarantee any employment of the Contractor or any employee of the Contractor or any subcontractor or any employee of any subcontractor by the City at the present time or in the future.

6. Taxes.

The Contractor understands and acknowledges that the City will not withhold federal or state income taxes. Where required by state or federal law, the Contractor authorizes the City to make withholding for any taxes other than income taxes (i.e., Medicare). All compensation received by the Contractor will be reported to the Internal Revenue Service at the end of the calendar year in accordance with the applicable IRS regulations. It is the responsibility of the Contractor to make the necessary estimated tax payments throughout the year, if any, and the Contractor is solely liable for any tax obligation arising from the Contractor's performance of this Agreement. The Contractor hereby agrees to indemnify the City against any demand to pay taxes arising from the Contractor's failure to pay taxes on compensation earned pursuant to this Agreement.

The City will pay sales and use taxes imposed on goods or services acquired hereunder as required by law. The Contractor must pay all other taxes including, but not limited to, Business or Occupation Tax, taxes based on the Contractor's gross or net income, or personal property to which the City does not hold title.

7. Regulations and Requirement.

This Agreement shall be subject to all laws, rules and regulations of the United States of America, the State of Arizona, and the City of Casa Grande.

8. Right to Review.

This contract may be subject to review by any federal or state auditor. The City or its designee shall have the right to review and monitor the financial and service components of this program by whatever means are deemed expedient by the City. Such review may occur with or without notice, and may include, but is not limited to, on site inspection by City Agents or employees, inspection of all records or other materials which the City deems pertinent to the Agreement and its performance, and any and all communications with or evaluations by service recipients under this Agreement. The Contractor shall preserve and maintain all financial records and records relating to the performance of work under this Agreement for five (5) years after contract termination in accordance with A.R.S. §35-214 and shall make them available for such review within the City of Casa Grande, State of Arizona, upon request.

Either party may request changes in the Agreement. Any and all agreed modifications shall be in writing, signed by each of the parties.

10. Termination for Default.

If the Contractor defaults by failing to perform any of the obligations of the contract or becomes insolvent or is declared bankrupt or commits any act of bankruptcy or insolvency or makes an assignment for the benefit of creditors, the City may, by depositing written notice to the Contractor in the U.S. mail, postage prepaid, terminate the contract, and at the City's option, obtain performance of the work elsewhere. If the contract is terminated for default, the Contractor shall not be entitled to receive any further payments under the contract until all work called for has been fully performed. Any extra cost or damage to the City resulting from such default(s) shall be deducted from any money due or coming due to the Contractor. The Contractor shall bear any extra expenses incurred by the City in completing the work, including all increased costs for completing the work, and all damage sustained, or which may be sustained by the City by reason of such default. If a notice of termination for default has been issued and it is later determined for any reason that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the notice of termination has been issued pursuant to the Termination for Public Convenience paragraph hereof.

11. Termination for Public Convenience.

The City may terminate the contract in whole or in part whenever the City determines, in its sole discretion, that such termination is in the best interests of the City. Whenever the contract is terminated in accordance with this paragraph, the Contractor shall be entitled to payment for actual work performed at unit contract prices for completed items of work. An equitable adjustment in the contract price for partially completed items of work will be made, but such adjustment shall not include provisions for loss of anticipated profit on deleted or uncompleted work. Termination of this contract by the City at any time during the term, whether for default or convenience, shall not constitute a breach of contract by the City.


This Agreement, and the parties thereto, shall comply with the provisions of Arizona Executive Order 75-5 as amended by Arizona Executive Order 99-4 as they relate to equal opportunity.


In the event that any litigation should arise concerning the construction or interpretation of any of the terms of this Agreement, the venue of such action of litigation shall be in the courts of the State of Arizona in and for the County of Pinal. This Agreement shall be governed by the laws of the State of Arizona.

14.1 Contractor Liability Insurance. Upon signing of the Agreement and so long as it shall remain in effect, contractor, at its cost and expense, shall purchase and maintain the insurance described in this subsection 14. The insurance shall be purchased and maintained in companies duly licensed or otherwise approved by the State of Arizona, with forms acceptable to the City of Casa Grande, and shall be primary with no right of contribution. The contractor’s insurer shall have a minimum A.M. Best’s rating of A-VIII. Use of alternative insurers requires prior approval for the City of Casa Grande.

The insurance coverages to be purchased and maintained are:

14.1.1 Workers' Compensation. Contractor shall provide workers’ compensation insurance as required by state and federal laws having jurisdiction over Contractor’s employees engaged in the performance of the Services within this Agreement.

14.1.2 General Liability. Contractor shall maintain a Commercial General Liability (Occurrence) policy that includes coverage for premises and operations, products and completed operations, contractual liability, broad form property damage, and personal injury liability. The policy shall have limits of not less than:

- $1,000,000 for each occurrence of bodily injury and property damage; and
- $1,000,000 for personal injury;

14.1.3 Automobile Liability. Contractor shall maintain an Automobile Liability policy with a combined single limit for bodily injury and property damage of not less than $1,000,000 for each accident. The policy shall cover all owned, hired, and non-owned automobiles used in connection with the Agreement for the performance of Contractor’s services.

14.1.4 Property Insurance. A policy or policies of fire and extended coverage property damage insurance covering the full insurable value of all tools and equipment used by contractor from time to time on the lands of City of Casa Grande pursuant to the Agreement, including mobile equipment. Contractor shall also require its agents, contractors, licensees and others performing the obligations, or exercising the rights, of Contractor under the Agreement to carry such property damage insurance. Such policy or policies shall cover the full insurable value of such tools and equipment.

14.1.5 Adjustment of Liability Limits. If the initial term of the Agreement shall exceed ten years or if the aggregate term of the Agreement, including any extension or renewal terms agreed to by the parties or provided for in the Agreement shall exceed ten years, on each tenth anniversary of the date of the Agreement, the liability limits provided for in sections 14.1.2 and 14.1.3 shall be increased by an amount proportional to the
increase in the US consumer price index occurring since the date of the Agreement or the date of the last such increase as appropriate.

14.1.6 Professional Liability. The Contractor retained by the City to provide the engineering services required by the Agreement will maintain Professional Liability insurance covering errors and omissions arising out of the Services performed by the Contractor or any person employed by him, with an unimpaired limit of not less than $1,000,000 each claim and $2,000,000 all claims, or 10% for the construction budget, whichever is larger. In the event the insurance policy is written on a “claims made” basis, coverage shall extend for two years past completion and acceptance of Services as evidenced by annual Certificates of Insurance.

14.2 Insurance Certificate. Contractor shall not exercise any of its rights under the Agreement until it delivers to City of Casa Grande's designated recipient certificates from contractor’s insurers showing that the coverage required above has been obtained.

14.2.1 The insurance certificates must show City of Casa Grande, its subsidiaries, affiliates directors, officers, and employees as additional insured parties in respect of all liability coverage except workers' compensation. The policy shall provide and the certificate shall reflect that the insurance afforded applies separately to each insured against whom claim is made or suit is brought except with respect to the limits of the company's liability.

14.2.2 The insurance certificate shall provide on its face that the policies it represents will not be terminated, amended, or allowed to expire without 30 days prior written notice to City of Casa Grande.

14.2.3 Failure of City of Casa Grande to demand the insurance certificate or other evidence of full compliance with these insurance requirements or failure of City of Casa Grande to identify a deficiency from any certificate provided to it shall not be construed as a waiver of Contractor’s obligation to maintain such insurance.

14.3 Severability of Interests. The policies referenced in 14.1.2. and 14.1.3. shall contain a severability of interests clause, generally providing, "the insurance afforded applies separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the company's insurance."

14.4 Waiver of Subrogation. Contractor hereby waives any and all rights that it might have against City of Casa Grande, its employees, officers and directors, to recover all or part of any loss or damage insured or insurable by the insurance policies carried or required to be carried by it pursuant to the Contract Documents. Contractor shall require each of its agents, contractors, licensees and others performing the obligations, or exercising the rights, of Contractor under the Agreement to provide a similar waiver for City of Casa Grande’s benefit.

14.5 Deductibles. Contractor may purchase the required insurance policies with deductibles which are reasonable in light of the contractor's financial condition; provided that any loss not covered due to the deductible will be paid by Contractor. Contractor shall also
require its agents, contractors, licensees and others performing the obligations, or exercising the rights, of contractor under the Agreement to carry such property damage insurance. Such policy or policies shall cover the full insurable value of such tools and equipment.

15. Withholding Payment.

In the event the Contractor has failed to perform any substantial obligation to be performed by the Contractor under this Agreement and said failure has not been cured within the times set forth in this Agreement, then the City may, upon written notice, withhold all monies due and payable to Contractor, without penalty, until such failure to perform is cured or otherwise adjudicated.

16. Future Non-Allocation of Funds.

If sufficient funds are not appropriated or allocated for payment under this contract for any future fiscal period, the City will not be obligated to make payments for services or amounts incurred after the end of the current fiscal period. No penalty or expense shall accrue to the City in the event this provision applies.

17. Protection of Licensee Data.

Contractor warrants that the Contractor’s installation, maintenance, and upgrade of any software provided hereunder shall not result in the use or disclosure by Contractor of any information concerning a patient/client obtained by the City in providing service in violation of any State laws, Federal laws, including, but not limited to, the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), and any federal regulations governing privacy, including, but not limited to, 45 CFR Section 160-164, as well as other applicable federal and state statutes and regulations.

18. Contractor Commitments, Warranties and Representations.

Any written commitment received from the Contractor concerning this Agreement shall be binding upon the Contractor, unless otherwise specifically provided herein with reference to this paragraph. Failure of the Contractor to materially fulfill such a commitment shall result in a breach of this Contract. A commitment includes, but is not limited to any representation made prior to execution of this Agreement, whether or not incorporated elsewhere herein by reference, as to performance of services or equipment, prices or options for future acquisition to remain in effect for a fixed period, or warranties.


Contractor will defend and indemnify the City from any claimed action, cause or demand brought against the City, to the extent such action is based on the claim that information supplied by the Contractor infringes any patent or copyright. The Contractor will pay those costs and damages attributable to any such claims that are finally awarded against the City in any action. Such defense and payments are conditioned upon the following:
a. That Contractor shall be notified promptly in writing by City of any notice of such claim; and

b. Vendor shall have the right, hereunder, at its option and expense, to obtain for the City the right to continue using the information, in the event such claim of infringement is made, provided no reduction in performance or loss results to the City.

20. Disputes.

20.1 General. Differences between the Contractor and the City, arising under and by virtue of the Contract Documents shall be brought to the attention of the City at the earliest possible time in order that such matters may be settled or other appropriate action promptly taken. Except for such objections as are made of record in the manner hereinafter specified and within the time limits stated, the records, orders, rulings, instructions and decisions of the Contracting Officer, shall be final and conclusive.

20.2 Notice of Potential Claims. The Contractor shall not be entitled to additional compensation which otherwise may be payable, or to extension of time for (1) any act or failure to act by the City, or (2) the happening of any event or occurrence, unless the Contractor has given the City a written Notice of Potential Claim within 10 days of the commencement of the act, failure, or event giving rise to the claim, and before final payment by the City. The written Notice of Potential Claim shall set forth the reasons for which the Contractor believes additional compensation or extension of time is due, the nature of the cost involved, and insofar as possible, the amount of the potential claim. Contractor shall keep full and complete daily records of the Work performed, labor and material used, and all costs and additional time claimed to be additional.

20.3 Detailed Claim. The Contractor shall not be entitled to claim any such additional compensation, or extension of time, unless within 30 days of the accomplishment of the portion of the work from which the claim arose, and before the final payment by the City, the Contractor has given the City a detailed written statement of each element of cost or other compensation requested and of all elements of additional time required, and copies of supporting documents evidencing the amount or the extension of time claimed to be due.


All writings, programs, data, public records or other materials prepared by the Contractor and/or its Contractors or subcontractors, in connection with the performance of this Agreement shall be the sole and absolute property of the City.

22. Conflict of Interest.

The Contractor agrees to promptly disclose any financial or economic interest in the Project property, or any property affected by the Project, existing prior to the execution of this Contract. Further, the Contractor agrees to promptly disclose any financial or economic interest with the Project property, or any property affected by the Project, if the Contractor gains such interest during the course of this Contract.
If the Contractor gains any financial or economic interest in the Project during the course of this Contract, this may be grounds for terminating this Contract at the sole discretion of the City.

The Contractor shall not engage the services on the Contract of any present of former City employee who was involved as a decision maker in the selection or approval processes, or who negotiated or approved billings or contract modifications for this Contract.

The Contractor agrees that it shall not perform services on this Project for the contractor, sub-contractor, or any supplier.

The Contractor shall not negotiate, contract, or make any agreement with the contractor, sub-contractor, or any supplier with regard to any of the work under this Project, or any services, equipment or facilities to be used on this Project.

This Agreement is subject to the cancellation provisions for conflicts of interest pursuant to A.R.S. §38-511.

23. Covenant Against Contingent Fees.

The Contractor affirms that he has not employed or retained any company or person, other than a bona fide employee working for the Contractor to solicit or secure this Contract, and that he has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the Contract. For breach or violation of this clause, the City may terminate this Contract without liability, or in its discretion may deduct from the Contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage brokerage fee, gift, or contingent fee.

24. Indemnification.

To the fullest extent permitted by law, the Contractor, its successors, assigns and guarantors, shall defend, indemnify and hold harmless the City of Casa Grande, its agents, officers, officials and employees from and against all allegations, demands, proceedings, actions, claims, damages, losses, expenses, judgments, including but not limited to, attorney fees, court costs, and the cost of appellate proceedings, and all claim adjusting, relating to, arising out of, or resulting from any acts, errors, mistakes, omissions, work or services of the Contractor, its agents, employees, or any tier of Contractor's subcontractors in the performance of this Contract.

Contractor's duty to defend, indemnify and hold harmless the City of Casa Grande, its agents, officers, officials and employees shall arise in connection with any allegation, demand, proceeding, action, claim, damage, loss, expense or judgment that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property including loss of use resulting there from, caused by Contractor's acts, errors, mistakes, omissions, work or services in the performance of this Contract including any employee of the Contractor, any tier of Contractor's subcontractors or any other person for whose acts, errors, mistakes, omissions, work or services the Contractor may be legally liable. The amount and type of insurance requirements
set forth herein will not be construed as limiting the scope of the indemnity provisions of this Contract.

To the fullest extent permitted by law, the City agrees to indemnify and hold the Contractor harmless from any damage, liability or cost (including reasonable attorney’s fees and costs of defense) to the extent caused by the City’s negligent acts, errors or omissions and those of his or her contractors, subcontractors or consultants or anyone for whom the City is legally liable, and arising from the project that is the subject of this Agreement. The Contractor is not obligated to indemnify the City in any manner whatsoever for the City’s own negligence.

25. Confidentiality.

The Contractor, its employees, subcontractors, and their employees shall maintain the confidentiality of all information provided by the City or acquired by the Contractor in performance of this Agreement, except upon the prior written consent of the City Attorney, or an order entered by a court after having acquired jurisdiction over the City. Contractor shall immediately give to the City notice of any judicial proceeding seeking disclosure of such information. Contractor shall indemnify and hold harmless the City, its officials, agents or employees from all loss or expense, including, but not limited to settlements, judgments, setoffs, attorneys' fees and costs resulting from Contractor's breach of this provision.


In the event of a public records request to the City for the Licensed Program or Licensed Documentation, the City shall promptly provide a copy of such request to Contractor so that it has at least 7 days from Contractor’s receipt of such request in which to seek an order restraining the City from disclosing the Licensed Program and Documentation pursuant to such public records request. If Contractor does not obtain a restraining order within such period of time, the City may disclose the Licensed Program and Licensed Documentation pursuant to such public request as the City deems appropriate to comply with Arizona’s Public Records Laws.

27. Notice.

Except as set forth elsewhere in the Agreement, for all purposes under this Agreement, except service of process, notice shall be given by the Contractor to the department head of the department for whom services are rendered and to the City Attorney’s Office. Notice may be given by delivery or by depositing in the U.S. Mail, first class, postage prepaid.

28. Severability.

If any term or condition of this contract or the application thereof to any person(s) or circumstance(s) is held invalid, such invalidity shall not affect other terms, conditions or applications which can be given effect without the invalid term, condition or application. To this end, the terms and conditions of this contract are declared severable.
29. Waiver.

Waiver of any breach or condition of this contract shall not be deemed a waiver of any prior or subsequent breach. No term or condition of this contract shall be held to be waived, modified or deleted except by an instrument, in writing, signed by the parties hereto.

30. Survival.

The provisions of paragraphs, 4, 6, 8, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 24, 25, 26, 27, 33 and 34 and the provisions of any non-collusion affidavit, shall survive, notwithstanding the termination or invalidity of this Agreement for any reason.

31. Discrimination.

Contractor shall not unlawfully discriminate against any employee, applicant for employment, recipient of services or programs, or applicant for services or programs, on the basis of race, creed, color, sex, age, marital status, national origin or the presence of any sensory, mental or physical handicap. Contractor shall comply with the Americans with Disabilities Act.

32. Entire Agreement.

This written contract represents the entire Agreement between the parties and supersedes any prior oral statements, discussions or understandings between the parties.

33. E-Verify.

To the extent applicable under ARIZ. REV. STAT. § 41-4401, the Contractor and its subcontractors warrant compliance with all federal immigration laws and regulations that relate to their employees and compliance with the E-verify requirements under ARIZ. REV. STAT. § 23-214(A). The Contractor’s or subcontractor's breach of the above-mentioned warranty shall be deemed a material breach of the Agreement and may result in the termination of the Agreement by City. The Contractor agrees to insert language similar to this paragraph in all contracts in which they engage with subcontractors on this project to ensure that those subcontractors are meeting the requirements of the above-mentioned statutes. City retains the legal right to randomly inspect the papers and records of the Contractor and its subcontractors who work on the Agreement to ensure that the Contractor and its subcontractors are complying with the above-mentioned warranty. The Contractor and its subcontractors warrant to keep the papers and records open for random inspection during normal business hours by City. The Contractor and its subcontractors shall cooperate with City’s random inspections including granting City entry rights onto its property to perform the random inspections and waiving their respective rights to keep such papers and records confidential.
34. Compliance with A.R.S. §35-391.06 and 35-393.06

Contractor, and his/her firm, certifies that it does not have, nor will it for the duration of this contract have, scrutinized business operations in Sudan or Iran as defined in A.R.S.§ 35-391.06 and 35-393.06.

Dated this the __________ day of __________, 20__.

City of Casa Grande, an Arizona ________________
municipal corporation.

By: ______________________________

James V. Thompson,
City Manager

By: ______________________________

Attest:

______________________________

Gloria Leija, City Clerk CMC/AAE

Approved as to form:

______________________________

Brett Wallace, City Attorney

State of ________________ )

) ss

County of ________________ ) Acknowledgment

On this ____ day of ____, ____, ____ personally appeared before the undersigned and acknowledged ____self to be the ____ of _____. being authorized so to do, executed the Agreement between ____ and the City (identified in City of Casa Grande records as C.G. Contract No. ____ ) in the capacity therein stated and for the purposes therein contained by signing his/her name.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

______________________________

Notary Public

My commission expires: __________________
Environmental

- **Task 1.1 404 Permit.** SCE will confirm that there are no 404 permitting requirements. SCE assumes that no 404 permit application will have submitted.

- **Task 1.2 Cultural Investigation.** SCE will coordinate with EcoPlan Associates to perform a Cultural Investigation. Refer to the EcoPlan Associates proposal for a detailed description of the scope of work for this task.

- **Task 1.3 Biological Evaluation.** SCE will coordinate with EcoPlan Associates to perform a Biological Investigation. Refer to the EcoPlan Associates proposal for a detailed description of the scope of work for this task.

Right-of-Way

- **Task 2.1 Field Surveys.** SCE will coordinate with Souder Miller & Associates to perform field surveys necessary to develop a digital terrain model and to complete the design of the project. Refer to the Souder Miller & Associates proposal for a detailed description of the scope of work for this task.

  - **Task 2.2 Right-of-Way Plans.** SCE will coordinate with Souder Miller & Associates to prepare Right-of-Way plans that show existing right-of-way and easements and adjacent property ownership information. It is assumed no additional right-of-way will be acquired and that no legal descriptions will be developed. Refer to the Souder Miller & Associates proposal for a detailed description of the scope of work for this task.

Planning

- **Task 3.1 Project Administration/Meetings.** The SCE Project Manager for the consultant team will coordinate all sub consultant efforts and be the point of contact for the COCG project manager. The SCE project manager will coordinate with the COCG to develop a project schedule and budget and monitor both during the project. The project manager and selected team members will attend a project kickoff meeting, up to three (3) plan review meetings and up to five (5) coordination/design meetings.

- **Task 3.2 Public Participation.** SCE will work with the COCG to develop a list of pertinent stakeholders and a public participation plan. SCE will document all stakeholder communication, stakeholder request for information and responses to stakeholder request for information. SCE will attend up to five (5) meetings with stakeholders. SCE will attend one study session with the COCG City Council. SCE will attend up to two (2) public meetings and/or media interviews.

- **Task 3.3 Utility Coordination.** SCE will utilize a utility locating service to obtain designate and locate existing utilities. See Task 3.6 for a detailed scope of work. SCE will submit 50% plans to all utilities with facilities within the project limits. SCE will coordinate with utilities to identify potential conflicts, provide the utilities information regarding the roadway design and monitor the design and construction of any necessary utility relocations. SCE assumes that no utilities, except those within UPRR and ADOT right-of-way, have
prior rights unless the utilities provide documentation otherwise. It is assumed that SCE will not research or
determine prior rights.

- **Task 3.4 UPRR Coordination.** SCE will arrange for and attend a kickoff meeting with the COCG and
  UPRR. SCE will attend up to two (2) additional meetings with UPRR. SCE will submit plans and
  specifications to UPRR and respond to UPRR review comments. SCE will provide supporting information
  for, and assist in the development of UPRR right-of-way permit applications.

- **Task 3.5 ADOT Coordination.** SCE will arrange for and attend a kickoff meeting with the COCG and the
  ADOT Tucson District Permits Office. SCE will attend up to two (2) additional meetings with ADOT. SCE will
  submit plans and specifications to ADOT and respond to ADOT review comments. SCE will provide
  supporting information for, and assist in the development of ADOT right-of-way permit applications.

- **Task 3.6 Pavement Alternatives Memo.** SCE will coordinate with NCS Consultants to perform a pavement
  alternative analysis. Refer to the NCS Consultants proposal for a detailed description of the scope of work
  for this task. SCE will utilize the geotechnical and pavement design information presented in the Project
  Assessment (PA) to perform a pavement structure alternatives analysis based on performance, costs,
  constructability, maintainability and other qualitative factors. The analysis will evaluate the alternative
  pavement structures presented in the PA and up to four (4) additional pavement structure alternatives. SCE
  will document the results of the alternatives analysis and the recommended pavement structure in a
  technical memo.

- **Task 3.7 Drainage Report.** SCE will coordinate with Parsons Brinkerhoff to develop a Drainage Report
  that documents existing and final drainage volumes and flow patterns. Refer to the Parsons Brinkerhoff
  proposal for a detailed description of the scope of work for this task.

- **Task 3.8 Utility Locating.** SCE will coordinate with Cardno TBE to perform a Subsurface Utility
  Engineering. Refer to the Cardno TBE proposal for a detailed description of the scope of work for this task.

### Design

- **Task 4.1 50% Plans.** SCE will coordinate with Parsons Brinkerhoff to perform design services. SCE will
  direct Parsons Brinkerhoff in the development of the digital terrain models and design files. SCE will utilize
  the models and design files to produce design plans. Refer to the Parsons Brinkerhoff proposal for
  additional details of the scope of work for this task.

  All plans submittals will consist of two separate sets of plans, specifications and estimates based on the
  phasing limits specified by the COCG. All plans will utilize MAG standard details and specifications. The
  SCE team will prepare 50% plans that incorporate the input provided by the COCG during all
  coordination/design meetings leading up to the 50% submittal. It is assumed that no significant changes will
  be made to the alignment, profile or typical sections after the 50% plan review. It is assumed that there will
  be only minor modifications to the curbs, sidewalks and storm drain system. It is assumed that no utility
  relocation design will be a part of this scope of work.

  The 50% plans will consist of the following components.
  
  - Cover Sheet
  - Note Sheet
  - Typical Sections and Pavement Structure
  - Roadway Plans and Profile
  - Pavement Marking Plans
  - Drainage Improvements shown in plans view
  - Environmental Reports
  - Preliminary Cost Estimate
- **Task 4.2 90% Plans.** It is assumed that there will be only minor modifications to traffic signal and street light systems. It is assumed that no legal descriptions will be developed by the SCE team. The SCE team will prepare 90% plans that incorporate the input provided by the COCG during all coordination/design meetings leading up to the 90% submittal and all 50% review comments. The 90% plans will consist of the following components in addition to those included in the 50% plans:
  - Roadway Details/Side Street and Driveway Details/Staking Plans
  - Drainage Improvements shown in profile
  - Demolition Plans
  - Signing Plans
  - SWPPP
  - Traffic Signal Modifications
  - Street Light Modifications
  - Draft Final Cost Estimate
  - Draft Special Provisions
  - Draft Final Right-of-Way Plans

- **Task 4.3 100% Plans.** The SCE team will prepare 100% plans that incorporate the input provided by the COCG during all coordination/design meetings leading up to the 100% submittal and all 90% review comments. The 100% plans will consist of the following components in addition to those included previous plan submittals:
  - Final Plans
  - Final Cost Estimate
  - Final Special Provisions
  - Final Right-of-Way Plans

- **Task 4.4 Sealed Plans.** The sealed plans, special provisions and estimate will incorporate all 100% review comments and be ready for bid advertisement.

- **Task 4.5 Estimate.** Cost Estimates will be prepared for each submittal. A contingency will be included reflecting the level of detail of the cost estimate.

- **Task 4.6 Specifications.** Draft special provisions will be submitted with the 90% plans. Final special provisions will be submitted with the 100% plans. Sealed special provisions will be submitted with the sealed plans.
<table>
<thead>
<tr>
<th>Plan Component</th>
<th>Scale</th>
<th>No. of Sheets Phase I</th>
<th>No. of Sheets Phase II</th>
<th>Format</th>
<th>50% Submittal</th>
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SCOPE OF WORK – SOUDER, MILLER & ASSOCIATES

THORNTON ROAD – GILA BEND HWY TO COTTONWOOD, CITY OF CASA GRANDE

TOPOGRAPHIC/DESIGN AND RIGHT-OF-WAY SURVEY SERVICES

1. Topographic/Design Surveys and Mapping
   a. Establish horizontal and vertical control tied to City monumentation and control (Arizona State Plane Coordinates NAD 83 and NAVD 88 vertical datum) using GPS and differential leveling.
   b. Request underground utility blue stakes from Arizona 811.
   c. Notify and request entry into Union Pacific right-of-way. Obtain Contractor Orientation (www.contractororientation.com) certification by all crew members.
   d. Perform ground topographic surveys from right-of-way line to right-of-way along Thornton Road from Gila Bend Highway to Cottonwood. General items to include:
      i. Drainage features - Curbs, gutters, valley gutters, culverts, ditches (lined and unlined), inlets and manholes (rims and invert).
      ii. Pavement shots – centerline and edge of asphalt for roadway, crossings, driveways or turnouts.
      iii. Utilities – Power poles, electric lines, gas lines, communication/CTV lines, underground electric lines and all spots by Arizona 811.
      iv. Entrances & cross streets – 9th Street intersection west 100 feet (including Price entrance drive), Main Street crossing (parallel to RR tracks), Diamond Plastics entrance and guard house, all other driveways or turnouts.
      v. UPRR Railroad Crossing – detailed shots along railroad crossing profile, fencing, signals and location of tracks east and west 100 feet.
      vi. Apparent right-of-way lines – fences, monuments, gates, walls, etc.
      vii. Irrigation systems – wells, lines, ditches, etc. on farmland between railroad and Cottonwood.
      viii. Other miscellaneous features include traffic and commercial signs, striping, sidewalks, retaining walls, landscaping, or features requested by the Engineer.
   e. Perform ground topographic surveys of the Gila Bend and Cottonwood intersections and 100 feet in all directions N, S, E & W to include the items in Item 1.d. above. Detail of Express Stop business (drives, landscape, curbs, sidewalks, etc.) will be obtained. Detailed top of pavement spot shots will be gathered on a grid to determine cross-drainage.
   f. Prepare final topographic map (planimetric and DTM) in AutoCAD Civil 3D (2014 or 2015) to design quality standards, as requested by the Engineer.

2. Right-of-Way Surveys and Platting
a. Research approximately 14 parcels of land abutting Thornton Road from the Gila Bend intersection (4 corners included), to the Cottonwood intersection (4 corners included) at the County Assessor's and Recorder's offices.

b. Perform land surveys to determine Thornton Road right-of-way and intersecting property ownership lines.

c. Tie all surveys to the US Public Land Survey System (section ties)

**Project: Thornton Road Reconstruction**  
**Client: City of Casa Grande**  
**Contract Type: Lump Sum**  
**Date: 5/15/2014**

### Labor

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Total Labor Cost: $29,488.00

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Total Direct Cost: $1,690.00

### Subconsultants

None

Total Subconsultant Cost: $0.00

### Total Fee

Total Fee: $31,178.00

**Work Not Included in Scope of Work:**

1. We will do the best we can to locate underground utilities, but cannot be liable for utilities not located.
2. Right-of-Way Plans do not include any parcel takes, legal descriptions or monumentation.
## Task Summary

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2. Control Survey
- a. Horizontal establishment
- b. Vertical establishment
- c. Photo control - set and survey

3. Pre-Project Tasks
- a. Submit Blue Stake Request
- b. Research and document download
- c. Cient and Kick-Off meetings
- d. Other:

4. Topo/Design Surveys
- a. Existing boundary location
- b. Topographic survey
- e. Gila Bend & Cottonwood Intersections
- d. CADD drafting of surface and planimetrics
- e. Other:

5. Right-of-Way Maps (+/- 10 parcels)
- a. Boundary/ROW survey
- b. Research and document download
- c. Prepare plats or maps
- d. Address comments and revisions
Cardno TBE
May 21, 2014

Mr. William Schlesinger, P.E.
Schlesinger Consulting Engineering, PLLC
510 E 4th Street
Tucson, AZ  85705

Re: Thornton Rd: Gila Bend Highway to Cottonwood Lane
City of Casa Grande, AZ
Proposal for Subsurface Utility Engineering Services

Dear Mr. Schlesinger:

TBE Group, Inc. (d/b/a Cardno TBE) is pleased to submit this proposal to provide professional Subsurface Utility Engineering (SUE) services for the above referenced project to Schlesinger Consulting Engineering, PLLC (Client). The scope of work and fee structure are as follows:

SCOPE OF WORK

Project Limits

The project limits for Subsurface Utility Engineering services include the public right of way of the following:

- Thornton Road from approximately 200 ft. south of the center of Gila Bend Highway (SR 84) to approximately 200 ft. north of the center of Cottonwood Lane.
- Gila Bend Highway from approximately 200 ft. west of the center of Thornton Road to approximately 200 ft. east of the center of Thornton Road.
- 9th St. from the center of Thornton Road west for approximately 200 ft.
- Main St. from the center of Thornton Road west for approximately 200 ft.
- The Union Pacific Railroad right of way from approximately 200 ft. west of the center of Thornton Road to approximately 200 ft. east of the center of Thornton Road.
- Cottonwood Lane from approximately 200 ft. west of the center of Thornton Road to approximately 200 ft. east of the center of Thornton Road.

Subsurface Utility Engineering

Cardno TBE will provide Quality Level ‘D’ and ‘C’ SUE services within the project limits as described above for existing subsurface utilities in accordance with the Quality Level definitions provided below and requirements of the CI/ASCE 38-02 publication entitled “Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data”.

- **Quality Level ‘D’ (QLD):** Cardno TBE will provide records research of existing subsurface and overhead utilities within the project limits by contacting each utility owner and obtaining their available facility records. Part of this process involves contacting Blue Stake for a design ticket; Cardno TBE will document the Blue Stake ticket number in the project files. Included in this task is a field investigation to substantiate necessary records are obtained. QLD mapping is based on information obtained from record drawings and includes utility type, ownership, size and material composition. Cardno TBE will provide one copy of each utility record obtained along with contact list of utility owners.

- **Quality Level ‘C’ (QLC):** Inclusive of QLD effort. Cardno TBE will provide QLC mapping of existing untraceable subsurface utilities by correlating surveyed surface evidence to the QLD utility records to obtain the utility location. QLC mapping includes utility type, ownership, size and material composition based on available record information. Survey is not part of the requested scope for the QLD QLC Utility Mapping. Cardno TBE will rely on Client’s surveyor to provide surveyed information of all visible utility appurtenances within the project area.
QLD, QLC and QLB utility investigation services includes major laterals and commercial service lines, but excludes landscape irrigation systems, residential services, traffic signal loop detection devices and underground storage tanks or septic systems. Prior to providing QLD and QLC Utility Mapping services, Cardno TBE will request to be provided with the project CAD Standards and conventions along with CAD files of the project: topographic base mapping, existing and proposed right-of-way, and existing monument lines.

- **Utility Locating (Potholing):** Cardno TBE will provide ten (10) vacuum excavation potholes (testholes) with survey of existing subsurface utilities at locations yet to be determined. The utility data obtained through our standard potholing procedure includes the depth, horizontal and vertical location tied to project datum via survey, size and material composition of the utility exposed. Our standard potholing procedure includes backfill of excavated potholes using compacted native material, 12” x 12” pavement restoration using “Perma-Patch” brand permanent asphalt cold patch for testholes excavated in existing pavement, and 12” x 12” concrete restoration of potholes excavated in concrete sidewalks using bagged pre-mixed concrete.

Prior to beginning Locating services, Cardno TBE will request to be provided the following:

- A pothole request list in spreadsheet format identifying the pothole number (numbered without alpha characters), horizontal location in coordinate format, and the anticipated size and type of utility to be potholed.
- One set of 11” x 17” plan sheets displaying background topography, existing utilities, and pothole locations clearly marked and annotated with the corresponding pothole number.
- Horizontal and vertical survey control data in spreadsheet format for a minimum of three non-linear control points signed and sealed by an Arizona RLS adequate to stake the pothole locations utilizing RTK GPS technology along with a location map displaying the control points. The list shall identify point number, horizontal location in coordinate format, and a physical description of each monument. Please note, electronic CAD files from which the survey monument data must be extracted is not considered acceptable survey control.

**DELIVERABLES**

For the QLD QLC Utility Mapping, Cardno TBE will provide one copy of the QLD records obtained, a list of utility contacts and contact information for the various utilities, and the QLD, QLC utility mapping in appropriate electronic CAD format compatible with the project topographic files. Pertinent Utility Data for the Utility Locating (Potholing) services will be presented in electronic format on our standard “Testhole Data Summary” form and individual “Testhole Data Forms” sealed by an Arizona Registered Land Surveyor or Arizona Registered Professional Engineer that includes the depth, horizontal coordinates, vertical elevation, size, and material composition of the utility line exposed at each pothole. Testhole Data Summary information will be submitted in both sealed hard copy format and electronic Excel format.

**SCHEDULE**

Cardno TBE will work closely with the project team to provide deliverables in a timeframe consistent with the overall project schedule. For scheduling purposes of the QLD, QLC Utility Mapping, please allow three weeks for Utility Records Research, and three weeks for data processing and deliverable preparation.

**ESTIMATED FEE**

Cardno TBE proposes compensation for the QLD, QLC Utility Mapping services on an Hourly Basis as follows:

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<tbody>
<tr>
<td>QLD, QLC UTILITY MAPPING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUE Project Manager</td>
<td>4</td>
<td>$125</td>
<td>$500.00</td>
</tr>
<tr>
<td>SUE Supervisor</td>
<td>16</td>
<td>$95</td>
<td>$1,520.00</td>
</tr>
<tr>
<td>CAD/Survey Technician</td>
<td>24</td>
<td>$85</td>
<td>$2,040.00</td>
</tr>
<tr>
<td>Administrative/Technical Support</td>
<td>1</td>
<td>$65</td>
<td>$65.00</td>
</tr>
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</table>

**TOTAL ESTIMATED FEE QLD, QLC UTILITY MAPPING**

$4,125.00
Cardno TBE proposes compensation for the Utility Locating (Potholing) services on a Unit Rate basis as follows:

### UTILITY LOCATING (POTHOLING) 10 LOCATIONS

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Rate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air-Vacuum Utility Potholes with Survey</td>
<td>10</td>
<td>$575</td>
<td>$5,750.00</td>
</tr>
<tr>
<td>Possible Surcharge for Potholes Greater than 8 ft. depth - $45.00 per ft.</td>
<td>8</td>
<td>$45</td>
<td>$360.00</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>$6,110.00</strong></td>
</tr>
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</table>

**Reimbursable Expenses**

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
<th>Rate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casa Grande Right-of-Way Excavation Permit (Estimate)</td>
<td>--</td>
<td>--</td>
<td>$400.00</td>
</tr>
<tr>
<td>Traffic Control: Permits, Plans, and Control (Estimate) Cost + 10%</td>
<td>--</td>
<td>--</td>
<td>$1,000.00</td>
</tr>
</tbody>
</table>

**TOTAL ESTIMATED FEE 10 UTILITY POTHOLES** $7,510.00

The $575.00 unit rate for Air-Vacuum Potholes includes survey to establish horizontal and vertical position of potholes tied to project datum, project management, Blue Stake coordination, air-vacuum extraction excavation with two person crew, our standard backfill with compacted native material, our standard 12” x 12” pavement restoration with asphalt cold patch, 12” x 12” concrete sidewalk restoration using bagged pre-mixed concrete. The $575.00 unit rate covers potholes up to a maximum depth of 8 feet. If the depth exceeds 8 feet, a surcharge of $45.00 per foot of depth over 8 feet will be added to the price of said pothole. Dry holes excavated over Blue Stake marks in which no utility is found shall be invoiced at the $575.00 unit price; however prior to excavation Cardno TBE will utilize our geophysical utility detection equipment to designate the horizontal location of traceable utilities (metallic utilities or non-metallic utilities with trace wire) to keep the possible number of “Dry Holes” at a minimum. Pothole locations surveyed but not excavated due to Blue Stake “No Conflicts”, inaccessibility issues and/or any other unforeseen circumstance will be invoiced at $70.00 per location/occurrence. Please note that above fee schedule does not include such reimbursable expenses as uniformed police officers (if required), special backfill requirements, compaction testing, traffic control flag-men, replacement of full sections of concrete sidewalk, and or asphalt hot patch; if any of these items should be required, they will be considered a reimbursable item, submitted to client for pre-authorization, subcontracted, and billed separately. Please note that the above rates identified do not include excavation of potholes within the Union Pacific Railroad (UPRR) Right of Way, if any potholes are deemed to be needed within the UPRR ROW they will require additional permit fees as charged by the UPRR.

Cardno TBE will not exceed the estimated fee without prior authorization from Client. **An invoice will be prepared upon completion for the actual work completed up to the estimated budget amount.** We appreciate this opportunity to provide Subsurface Utility Engineering services for this project. Should you have any questions or require additional information, please do not hesitate to call.

Sincerely,

Dan Padilla
Senior Project Manager
NCS Consultants
May 20, 2014

William D. Schlesinger, P.E.
Schlesinger Consulting Engineering, PLLC
510 E 4th Street
Tucson, AZ 85705

Re: Cost Proposal for Geotechnical Services – Pavement Design for Thornton Road

Dear Mr. Schlesinger:

NCS Consultants, LLC (NCS) is pleased to provide this cost proposal to Schlesinger Consulting Engineering, PLLC (SCE) for geotechnical services associated with the pavement design along Thornton Road between Gila Bend Highway and Cottonwood Lane in the City of Casa Grande (COC). We look forward to providing quality and timely services to the SCE team and its client, COC.

Based on our discussions, the scope of work includes the following:

1. Develop up to three (3) pavement structure alternative analyses utilizing the geotechnical report included in the Project Assessment.
2. Attend one kickoff meeting in Casa Grande and up to two (2) coordination meetings in Tucson or via phone/internet conferencing.
3. Provide input and review for the pavement design memo. It is assumed that SCE will develop the memo.
4. Provide input and review for the pavement design special provisions, if needed. It is assumed that SCE will produce the special provisions.
5. Internal quality control for deliverables.

Based on the above scope of work, the cost for the proposed work is $6,059. Detailed breakdown of labor effort is attached.

Please contact the undersigned if you have any questions or comments or require any further information. We look forward to working with SCE team on this challenging project.

Sincerely,

NCS Consultants, LLC

Naresh C. Samtani, PhD, PE, D.GE, F.ASCE
President
DERIVATION OF COST PROPOSAL SUMMARY

ESTIMATED DIRECT LABOR

<table>
<thead>
<tr>
<th>Classification</th>
<th>Man-hours</th>
<th>Rate</th>
<th>Costs</th>
<th>Labor</th>
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</thead>
<tbody>
<tr>
<td>Project Principal</td>
<td>0</td>
<td>$235.00</td>
<td>$</td>
<td>-</td>
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<tr>
<td>Project Manager</td>
<td>12</td>
<td>$180.00</td>
<td>$2,160</td>
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</tr>
<tr>
<td>Senior Project Engineer</td>
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<td>$170.00</td>
<td>$170</td>
<td></td>
</tr>
<tr>
<td>Project Engineer</td>
<td>12</td>
<td>$125.00</td>
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</tr>
<tr>
<td>Engineer</td>
<td>15</td>
<td>$110.00</td>
<td>$1,650</td>
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<tr>
<td>Designer</td>
<td>6</td>
<td>$75.00</td>
<td>$450</td>
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<tr>
<td>Administrative</td>
<td>1</td>
<td>$59.00</td>
<td>$59</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>47</td>
<td></td>
<td>$5,989</td>
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</tr>
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</table>

Indirect Costs

Total Indirect Costs = $ -

ESTIMATED DIRECT EXPENSES

<table>
<thead>
<tr>
<th>Expense</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductions (outside)</td>
<td>$ -</td>
</tr>
<tr>
<td>Communications (Shipping)</td>
<td>$ -</td>
</tr>
<tr>
<td>Travel (Mileage)</td>
<td>$70</td>
</tr>
<tr>
<td>Lodging and Meals</td>
<td>$ -</td>
</tr>
<tr>
<td>Field Equipment and Materials</td>
<td>$ -</td>
</tr>
</tbody>
</table>

Subtotal Estimated Direct Expenses = $70

Total Direct Expense = $70

ESTIMATED OUTSIDE SERVICES AND CONSULTANTS

<table>
<thead>
<tr>
<th>Firm</th>
<th>No-markup Cost</th>
<th>Method of Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSI: Borings - cost proposal attached</td>
<td>$ -</td>
<td>LS</td>
</tr>
<tr>
<td>ConformaTech: Lab testing for borings - estimate attached</td>
<td>$ -</td>
<td>LS</td>
</tr>
</tbody>
</table>

Total Estimated Outside Services = $ -

Total Estimated Cost to Consultant = $ 6,059

Fixed Fee = $ -

ESTIMATED COST = $ 6,059
<table>
<thead>
<tr>
<th>TASK</th>
<th>TASK</th>
<th>Principal In-Charge</th>
<th>Project Manager</th>
<th>Sr. Project Engineer</th>
<th>Project Engineer</th>
<th>Engineer</th>
<th>Designer</th>
<th>Admin</th>
<th>SUB-TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Review PA geotech and develop up to 3 pavement alternatives</td>
<td>1</td>
<td>4</td>
<td>12</td>
<td>4</td>
<td>1</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Attend Kick-off meeting in Casa Grande (including prep and travel)</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Attend two meeting in Tucson (including prep and travel)</td>
<td>4</td>
<td>4</td>
<td></td>
<td>2</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Provide input and review for pavement memo developed by SCE</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>Provide input and review for special provisions developed by SCE</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td>Internal quality control</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL HOURS</td>
<td>0</td>
<td>12</td>
<td>1</td>
<td>12</td>
<td>15</td>
<td>6</td>
<td>1</td>
<td>47</td>
</tr>
</tbody>
</table>
Firm Name: NCS CONSULTANTS, LLC  
Thornton Road  
Pavement Input  

Project No: XXXXXXX  
New Contract: Yes  
Contract Mod: No  

**BREAKDOWN OF ESTIMATED DIRECT EXPENSES**

<table>
<thead>
<tr>
<th>Reproduction</th>
<th>Quantity</th>
<th>Unit rate,$</th>
<th>Cost, $</th>
<th>Total Cost, $</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.15</td>
<td>0</td>
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</tr>
<tr>
<td>Full Size Plans</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>8.5 x 11 Copies (B&amp;W)</td>
<td>0</td>
<td>0.07</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Other Reproduction</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Plotting</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>(to be provided by SCE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Communications                        |          |             |         |               |
| Overnight delivery (e.g. Fedex)       | 0        | 15          | 0       |               |
| Courier                               | 0        | 35          | 0       |               |
| Cell Phone                            |          |             |         |               |

| Travel                                |          |             |         |               |
| Mileage to site                       | 0        | 0.5         | 0       |               |
| Mileage for meetings                  | 140      | 0.5         | 70      |               |
| Mileage for samples to lab            | 0        | 0.5         | 0       | 70            |

| Lodging and Meals                     |          |             |         |               |
| Lodging - days                        | 0        | 0           | 0       |               |
| Meals - days                          | 0        | 0           | 0       |               |

| Field Equipment and Materials         |          |             |         |               |
| Vehicle lease/rent (truck)            | 0        | 55          | 0       |               |
| Film and developing (rolls)           | 0        | 15          | 0       |               |
| Misc drilling supplies (buckets, rings, etc) | 0 | (Ring samples, sample bags, etc.) | | |

**TOTAL ESTIMATED DIRECT EXPENSES** $  70

Notes:

1 Costs are rounded to the nearest dollar
EcoPlan Associates
May 20, 2014

William Schlesinger, P.E.
Schlesinger Consulting Engineering, PLLC.
510 East 4th Street
Tucson, Arizona 85705

Re: City of Casa Grande
    Design Engineering Services for Thornton Road Reconstruction
    EcoPlan No. 14-01035

Dear Mr. Schlesinger:

EcoPlan Associates, Inc. (EcoPlan) is pleased to submit the enclosed proposal for environmental services for the Thornton Road Reconstruction project in Casa Grande, Arizona.

We have included a detailed scope of work, assumptions and cost estimate in this proposal for your review and approval. We estimate the cost of our services will be $9,952. Invoices will be submitted monthly for work completed to date.

Please contact me at 480-733-6666, extension 117, or Sarah Beloshapka at extension 101 if you have any questions. Thank you for your time and consideration.

Sincerely,

[Signature]

George A. Ruffner, Ph.D.
President
Scope of Work

City of Casa Grande
Design Engineering Services for Thornton Road Reconstruction
EcoPlan No. 14-01035

Task 1.2 Cultural Investigation:
EcoPlan will conduct background research for prior cultural resource projects and reported cultural resources within one half-mile of the project area, invoke our Arizona Antiquities Permit for cultural resource survey on municipal lands, conduct a pedestrian field survey of the project's area of potential effects, document cultural resources encountered during the survey, summarize the results of the survey in a report meeting the requirements of the State Historic Preservation Office and Arizona Department of Transportation (in case Federal funds are applied for), and curate project records with AZSITE in compliance with permit requirements. The field survey will require no more than one day of effort by a two-person crew.

Known cultural resources within the project limits include two components of the Historic State Highway System (SR 84 and SR 238), the historic Southern Pacific Railroad (now Union Pacific), and a historic transmission line. An irrigation canal along the west side of Thornton Rd south of the railroad may also qualify as a cultural resource. No additional cultural resources will be identified.

Deliverables: Cultural Resources Survey Report

Task 1.3 Biological Investigation:
EcoPlan will prepare a letter report detailing the affects of the project on federally protected and special status species occurring in Pinal County. EcoPlan will conduct a site survey to determine the presence of protected migratory birds, including burrowing owl, and suitable habitat within the project limits. The letter report will include a project description, results of the site surveys, and any appropriate mitigation (e.g., burrowing owl surveys). The Arizona Game and Fish Department Online Environmental Review Tool and U.S. Fish and Wildlife Service Information, Planning, and Conservation System (IPaC) database will also be utilized and attached to the letter report.

Deliverables: Letter Report

Assumptions:

- Preparation of Section 106 consultation documents is not necessary.
- No new cultural resources will be identified.
## Cost Estimate Worksheet

**Prepared for:** Schlesinger Consulting Engineering, PLLC  
**Project Name:** Design Engineering Services for Thornton Road Reconstruction  
**EcoPlan #** 14-01035

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Billing Rate</th>
<th>Senior Environmental Planner III</th>
<th>Senior Biologist</th>
<th>Cultural Principal Investigator</th>
<th>Cultural Crew Chief</th>
<th>Quality Control Specialist / Editor</th>
<th>GIS Graphics Specialist</th>
<th>Total Hours</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task 1. Environmental</strong></td>
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<td>$94.05</td>
<td>$132.42</td>
<td>$59.82</td>
<td>$94.05</td>
<td>$73.02</td>
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<tr>
<td>Task 1.2 Cultural Investigation</td>
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<td>5</td>
<td>64</td>
<td>5</td>
<td>5</td>
<td>85</td>
<td>$5,968.17</td>
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</tr>
<tr>
<td>Task 1.3 Biological Investigation</td>
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<td>24</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>38</td>
<td>$3,520.71</td>
<td></td>
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<tr>
<td><strong>Subtotal:</strong></td>
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<td>24</td>
<td>5</td>
<td>64</td>
<td>10</td>
<td>10</td>
<td>123</td>
<td>$9,488.88</td>
<td></td>
</tr>
<tr>
<td><strong>Total Labor Hours:</strong></td>
<td>10</td>
<td>24</td>
<td>5</td>
<td>64</td>
<td>10</td>
<td>10</td>
<td>123</td>
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<tr>
<td><strong>Labor Subtotal:</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$9,488.88</td>
<td></td>
</tr>
</tbody>
</table>

### Direct Expenses

- **Mileage:** 184 miles @ $0.55/mile  
  - Total: $101.20
- **Per Diem (Breakfast only):** 1 day @ $7.00/day  
  - Total: $7.00
- **Other Direct Costs at Actual Reasonable Cost:**
  - Expendable Field Supplies: $15.00
  - Reproduction: $40.00
- **Arizona State Museum Fees:**
  - ASM Site File Review Fee (4 square miles @ $50/square mile of search area): $200.00
  - ASM Survey Registration Fee: $100.00
  - Total Direct Expenses: $463.20
- **Total Cost:** $9,952.00

14-01035 Cost Estimate
Thornton Road Reconstruction
City of Casa Grande

Parsons Brinckerhoff
Scope of Work = May 22, 2014

Street Improvements and Pavement Reconstruction

OVERVIEW

Schlesinger Consulting Engineering (SCE) has been awarded final design engineering services for the Thornton Road reconstruction project. Parsons Brinckerhoff (PB) will provide SCE with services for Roadway and Drainage design. The project is Thornton Road; The City of Casa Grande has requested that the project be broken up into two segments. Segment one is Thornton Rd, Gila Bend Highway to the south side of Union Pacific Railroad (UPRR) tracks. Segment Two will be from the south side of the UPRR track to Cottonwood lane within the City of Casa Grande, Pinal County, State of Arizona. The project length is approximately 1 mile long.

SCOPE OF WORK:

SCE has requested that PB conduct the roadway and drainage design for the project.

ROADWAY DESIGN:
Segment 1 (Gila Bend Highway to UPRR Crossing)
PB will perform the roadway design which will include modeling, horizontal and vertical alignments, roadway edges, cross sections, earthwork quantities and earthwork table.
Segment 2 (UPRR Crossing to Cottonwood Lane)
SCE will perform the roadway modeling efforts which PB will provide SCE oversight (over the shoulder design help with Inroads) and will also assist with roadway modeling efforts which will include cross sections and earthwork quantities. PB will provide engineering design for the roadway geometry including horizontal and vertical alignments and roadway edges.

DRAINAGE DESIGN:
The drainage design effort will include offsite and onsite hydrology & hydraulic (H&H) analyses. Design elements will include storm drain, culvert and roadside ditches. Hydrologic routing will be included in the form of retention/detention basin analyses and design with infiltration analyses to determine infiltration rates for retention basins. It is anticipated that the roadside ditches will be designed based on available right-of-way and not storm event; in-turn, the ditch analyses will be based on capacity rather than storm event.
The City also requested three submittals, 50%, 90% and 100%.

Design shall be in accordance with Maricopa Association of Governments (MAG) standards and requirements.

The following tasks describe the work to be included in the Scope of Work:

1. **PROJECT MANAGEMENT**
   
   1.1 **Project Initiation**
   Upon notice to proceed (NTP), The PB Project Manager (PM) will begin internal setup of financial processes and prepare PB specific documentation for internal management requirements.

   1.2 **Project Management Tracking**
   The PB PM will conduct weekly tracking of project progress.

   1.3 **Meetings**
   a. PB will attend four project meetings with the City of Casa Grande, three at 50% and one at 90% (2-PB Employees).
   b. PB will attend seven internal project team meetings with SCE, three at 50%, two at 90% and two at 100% (2-PB Employees).
   c. PB will attend the pre bid meeting (2-PB Employees).

2. **50% DESIGN**

   2.1 **Field Visit**
   PB will visit the project site and document existing conditions for internal use.

   2.2 **Data Gathering**
   PB will obtain, review and incorporate data received through various sources into the project design, SCE to provide.

   2.3 **Create DTM**
   PB will create project DTM from survey obtained through SCE. PB will review the survey file in regards to survey coverage.

   2.4 **Geometric Design**
   PB will create a vertical and a horizontal alignment and use InRoads to prepare model and create cross sections.

   2.5 **Roadway Design**
   PB will create roadway edges and include any curb and gutter, header, sidewalks and pedestrian access ramps, Based on SCE typical section.

   2.6 **Drainage Analysis & Design**
   a. Data Collection - PB anticipates that the City will provide all drainage reports and development/roadway improvement plans that are in the vicinity of the project limits. PB assumes that the aerial photographic, topographic and soils mapping required for the hydrologic analysis will be provided by the City of Casa Grande.
It is understood that the mapping is available from Pinal County and that the City will provide this data to PB. Soil data will be obtained through the NRCS websoil survey website.

b. Offsite H&H – PB will conduct offsite drainage analysis including both hydrologic and hydraulic analyses. PB anticipates one (1) site visit to review the watershed(s) and hydrologic land uses for the area contributing to Thornton Road. PB will use ‘HY-8’ to analyze 1 existing culvert & design 1 proposed culvert.

c. Onsite H&H – PB will conduct onsite drainage analysis including pavement drainage and storm drain design. PB will use ‘HY-8’ & HEC-22 methodologies to analyze a maximum of 8 catch basins with 8 pipes including existing and design storm drains.

d. Hydrologic Routing & Infiltration Analyses – PB will investigate the use of existing retention/detention basin(s) that are adjacent to the project site. PB will identify potential locations for additional retention/detention basin(s).

e. Drainage Design – PB will prepare MicroStation base files containing recommended grading and drainage facility line-work.

f. Draft Drainage Report – PB will document the drainage analyses and recommendations in a drainage report that will contain information on recommended facilities.

2.7 QA/QC All Deliverables
PB will conduct a QA/QC Review of all deliverables prior to submittal.

2.8 Construction Plan Review
PB will review plans prepared by SCE for verification of compliance with the PB design.

DELEVERABLES to SCE:
MicroStation Base files
  Geometry & Calculations
  Roadway & Calculations
  Drainage
Draft Drainage Report
Initial Earthwork Report & Table

3. 90% DESIGN
3.1 Comment Review & Response
PB will review comments from 50% submittal and prepare initial response. Two (2) PB employees will attend one (1) Comment Resolution meeting with Design team and City Staff.

3.2 Geometric Design
PB will incorporate Geometry review comments and progress the design to 90%.

3.3 Roadway Design
PB will incorporate Roadway review comments and progress the design to 90%.
3.4 Drainage Design
PB will incorporate comments associated with the drainage analyses/design to revise the base files and drainage report. PB will finalize draft drainage report and submit a final sealed drainage report.

3.5 QA/QC All Deliverables
PB will conduct a QA/QC Review of all deliverables prior to submittal.

3.6 Construction Plan Review
PB will review plans prepared by SCE for verification of compliance with the PB design

DELIVERABLES to SCE:
- MicroStation Base files
  - Geometry & Calculations
  - Roadway & Calculations
  - Drainage
- Final Drainage Report
- Draft Final Earthwork Report & Table

4. 100% DESIGN
4.1 Comment Review & Response
PB will review comments from 90% submittal and prepare initial response. Two (2) PB employees will attend one (1) Comment Resolution meeting with Design team and City Staff.

4.2 Geometric Design
PB will incorporate Geometry review comments and progress the design to 100%.

4.3 Roadway Design
PB will incorporate Roadway review comments and progress the design to 100%.

4.4 Drainage Design
PB will incorporate comments associated with the drainage analyses/design to revise the base files and drainage design. PB will prepare a drainage report addendum to incorporate design changes that warrant documentation.

4.5 QA/QC All Deliverables
PB will conduct a QA/QC Review of all deliverables prior to submittal.

4.6 Construction Plan Review
PB will review plans prepared by SCE for verification of compliance with the PB design.

DELIVERABLES to SCE:
- MicroStation Base files
  - Geometry & Calculations
  - Roadway & Calculations
  - Drainage

Page 4 of 5
Final Earthwork Report & Table

PROJECT SCHEDULE AND SUBMITTALS
PB anticipates receiving notice to proceed (NTP) in July or August 2014 with a project duration of one year.

50%, 90%, and 100% submittals will be uploaded to the SCE cloud as specified on the project schedule, no hard copies will be provided.

DIRECT EXPENSES

The direct expenses for the project will include miscellaneous plotting and printing costs. Mileage: Four (4) trips to Casa Grande for Progress Meetings, One (1) Trip for drainage field reconnaissance and one (1) Bid open meeting.
## Task & Manhour Summary Worksheet

<table>
<thead>
<tr>
<th>TASK</th>
<th>Task 1 - Project Management</th>
<th>Task 2 - 50% Design</th>
<th>Task 3 - 90% Design</th>
<th>Task 4 - 100% Design</th>
<th>Total Hours</th>
<th>Total Labor Cost</th>
<th>% of Total Labor Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.1 - Project Initiation</td>
<td>1.1.1 - Field Visit</td>
<td>3.1 - Comment Review</td>
<td>4.1 - Comment Review</td>
<td>2</td>
<td>$468</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.1.2 - Data Gathering</td>
<td>3.2 - 90% Geometric Design</td>
<td>4.2 - 100% Geometry</td>
<td>172</td>
<td>$20,812</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.1.3 - Meetings</td>
<td>3.3 - 90% Roadway Design</td>
<td>4.3 - 100% Roadway Design</td>
<td>76</td>
<td>$13,433</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(4Progress COCG 4-hrs, 7 Internal 1.5-hrs)</td>
<td>(modeling, cross sections &amp; utilities)</td>
<td>(modeling, cross sections &amp; utilities)</td>
<td>210</td>
<td>$18,008</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.4 - Drainage Design</td>
<td>4.4 - Drainage Design</td>
<td>66</td>
<td>$4,521</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.5 QA/QC and Revise</td>
<td>4.5 - QA/QC and Revise. 100% Submittal</td>
<td>36</td>
<td>$3,699</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.6 Construction Plan Review</td>
<td>4.6 - Construction Plan Review</td>
<td>562</td>
<td>$60,941</td>
<td>0%</td>
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<tr>
<td></td>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
<td>$468</td>
<td>$20,812</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$7,018</td>
<td>$3,535</td>
<td>$2,672</td>
<td>$7,744</td>
<td>$4,949</td>
<td>34%</td>
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<tr>
<td></td>
<td></td>
<td>$11,834</td>
<td>$2,192</td>
<td>$411</td>
<td>$11,834</td>
<td>$4,459</td>
<td>22%</td>
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<td></td>
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<td>$2,192</td>
<td>$411</td>
<td>$27,130</td>
<td>$4,114</td>
<td>$1,768</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>$2,672</td>
<td>$1,715</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$13,693</td>
<td>$2,192</td>
<td>$60,941</td>
<td>$3,699</td>
<td>$959</td>
<td>6%</td>
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<tr>
<td></td>
<td></td>
<td>$13,693</td>
<td>$2,192</td>
<td>$60,941</td>
<td>$959</td>
<td>$206</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Thornton Road Final Design Fee 22May14(REV_18JUN14)*
Task & Manhour Summary Worksheet

<table>
<thead>
<tr>
<th>TASK</th>
<th>Principal In Charge</th>
<th>Project Manager</th>
<th>Sen Proj Engineer</th>
<th>Engineer/Designer</th>
<th>Technical/ CADD</th>
<th>Admin./ Clerical</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal In Charge (JK)</td>
<td>$234.00</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>$468</td>
</tr>
<tr>
<td>Project Manager (KH)</td>
<td>$121.00</td>
<td></td>
<td>172</td>
<td></td>
<td></td>
<td></td>
<td>$20,812</td>
</tr>
<tr>
<td>Sr. Proj Engineer (GB)</td>
<td>$176.75</td>
<td></td>
<td>76</td>
<td></td>
<td></td>
<td></td>
<td>$13,433</td>
</tr>
<tr>
<td>Engineer/Designer (DR &amp; DL)</td>
<td>$85.75</td>
<td></td>
<td>210</td>
<td></td>
<td></td>
<td></td>
<td>$18,008</td>
</tr>
<tr>
<td>Technical/CADD (MC)</td>
<td>$68.50</td>
<td></td>
<td>66</td>
<td></td>
<td></td>
<td></td>
<td>$4,521</td>
</tr>
<tr>
<td>Secretary Clerical</td>
<td>$102.75</td>
<td></td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td>$3,699</td>
</tr>
</tbody>
</table>

Sub-Total (Hours & DL) 562 $60,941

Direct Expenses $500

Total Contract $61,441

6/19/2014 Date
Project: Thornton Road Reconstruction
Client: City of Casa Grande
Contract Type: Lump Sum
Date: 5/15/2014

**Labor**

<table>
<thead>
<tr>
<th>Category</th>
<th>Labor Rate</th>
<th>Hours</th>
<th>Total Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Principal/Manager</td>
<td>$125.00</td>
<td>118</td>
<td>$14,750.00</td>
</tr>
<tr>
<td>Project Engineer</td>
<td>$90.00</td>
<td>476</td>
<td>$42,840.00</td>
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<tr>
<td>Designer/Drafter</td>
<td>$65.00</td>
<td>640</td>
<td>$41,600.00</td>
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<tr>
<td>Clerical</td>
<td>$45.00</td>
<td>56</td>
<td>$2,520.00</td>
</tr>
</tbody>
</table>

Total Labor Cost: 1290 hours $101,710.00

**Direct Costs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel</td>
<td>$150.00</td>
</tr>
<tr>
<td>Plotting</td>
<td>$300.00</td>
</tr>
<tr>
<td>Reproductions</td>
<td>$250.00</td>
</tr>
</tbody>
</table>

Total Direct Cost: $700.00

**Subconsultants**

<table>
<thead>
<tr>
<th>Subconsultant</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Souder Miller &amp; Associates</td>
<td>$31,178.00</td>
</tr>
<tr>
<td>Cardno TBE</td>
<td>$11,635.00</td>
</tr>
<tr>
<td>NCS Consultants</td>
<td>$6,059.00</td>
</tr>
<tr>
<td>Ecopan Associates</td>
<td>$9,952.00</td>
</tr>
<tr>
<td>Parsons Brinkerhoff</td>
<td>$61,441.00</td>
</tr>
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</table>

Total Subconsultant Cost: $120,265.00

**Total Fee** $222,675.00
### Summary of Estimated Direct Costs

#### Reproductions

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Price per Sheet</th>
<th>Total per Sheet</th>
<th>Copies</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>50% Miscellaneous Plots check plots</td>
<td>30 @</td>
<td>$0.10 /sheet</td>
<td>$3.00 @</td>
<td>1</td>
<td>$3</td>
</tr>
<tr>
<td>50% Miscellaneous Plots check plots</td>
<td>20 @</td>
<td>$0.10 /sheet</td>
<td>$2.00 @</td>
<td>1</td>
<td>$2</td>
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<tr>
<td>50% Miscellaneous Plots check plots</td>
<td>10 @</td>
<td>$0.10 /sheet</td>
<td>$1.00 @</td>
<td>1</td>
<td>$1</td>
</tr>
</tbody>
</table>

**Total Reproductions:** $6

#### Transportation

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Mileage</th>
<th>Price per Mile</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 trips (to COCG) (140 mi round trip)</td>
<td>700 mi</td>
<td>$0.555 /mi</td>
<td>$389</td>
<td></td>
</tr>
<tr>
<td>7 trips (to SCE) (2 mi round trip)</td>
<td>14</td>
<td>$0.555 /mi</td>
<td>$8</td>
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</tr>
</tbody>
</table>

**Total Transportation:** $396

#### Miscellaneous Additional Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Subtotal:</td>
<td>$452</td>
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</tbody>
</table>

**TOTAL ESTIMATED DIRECT EXPENSES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Subtotal (Rounded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal</td>
<td>$500</td>
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</tbody>
</table>