



BOARD OF SUPERVISORS AGENDA ITEM REPORT AWARDS / CONTRACTS / GRANTS

☐ Award ☒ Contract ☐ Grant

Requested Board Meeting Date: 09/19/23

* = Mandatory, information must be provided

or Procurement Director Award: ☐

***Contractor/Vendor Name/Grantor (DBA):**

PSOMAS INC (Headquarters: Los Angeles, California)

***Project Title/Description:**

Design Engineering Services for West Valencia Road Improvements: Mission Road to Camino de la Tierra (4VALMR)

***Purpose:**

Award: Contract No. CT-CPO-24-080. This award of contract is recommended to the highest qualified consultant in the amount of \$3,515,275.29 for a contract term from 09/19/23 to 09/18/26 for the design of West Valencia Road Improvements: Mission Road to Camino de la Tierra (4VALMR). Administering Department: Project Design and Construction.

***Procurement Method:**

Solicitation for Qualifications No. SFQ-PO-2300012 was conducted in accordance with A.R.S. § 34-603 and Pima County Board of Supervisors Policy D 29.1. Three (3) responsive statements of qualifications were received and evaluated by a seven (7) member committee using the qualifications and experience-based selection criteria. Based upon the evaluation of the respondents' written representations of their qualifications and necessary due diligence, a short list of three (3) respondents were invited to interviews. As a result of the combined scoring of the written statements of qualifications and interviews, the highest qualified consultant is recommended for award.

Attachments: Notice of Recommendation for Award and Contract.

***Program Goals/Predicted Outcomes:**

This project will widen and reconstruct West Valencia Road from four lanes to six lanes from Mission Road to Camino de la Tierra. The project includes new bicycle, pedestrian, and transit facilities, drainage improvements, intersection improvements, street lighting, and traffic signal improvements to improve safety.

***Public Benefit:**

The improvements along this corridor will increase mobility and safety of access for nearby residential and commercial travelers.

***Metrics Available to Measure Performance:**

The performance will be measured using the consultant evaluation process as outlined in BOS Policy D29.1(E).

***Retroactive:**

No.

To: LOB 9-5-23(1)
Vers: 1
Pgs: 128

SEP05/23PM0118P0

THE APPLICABLE SECTION(S) BELOW MUST BE COMPLETED

Click or tap the boxes to enter text. If not applicable, indicate "N/A". Make sure to complete mandatory (*) fields

Contract / Award Information

Document Type: CT Department Code: CPO Contract Number (i.e., 15-123): 24-080
 Commencement Date: 09/19/23 Termination Date: 09/18/26 Prior Contract Number (Synergen/CMS): _____
☒ Expense Amount \$ 3,515,275.29 * ☐ Revenue Amount: \$ _____

***Funding Source(s) required:** Transportation CIP Projects

Funding from General Fund? ☐ Yes ☒ No If Yes \$ _____ % _____

Contract is fully or partially funded with Federal Funds? ☐ Yes ☒ No

If Yes, is the Contract to a vendor or subrecipient? _____

Were insurance or indemnity clauses modified? ☒ Yes ☐ No

If Yes, attach Risk's approval.

Vendor is using a Social Security Number? ☐ Yes ☒ No

If Yes, attach the required form per Administrative Procedure 22-10.

Amendment / Revised Award Information

Document Type: _____ Department Code: _____ Contract Number (i.e., 15-123): _____

Amendment No.: _____ AMS Version No.: _____

Commencement Date: _____ New Termination Date: _____

Prior Contract No. (Synergen/CMS): _____

☐ Expense ☐ Revenue ☐ Increase ☐ Decrease

Amount This Amendment: \$ _____

Is there revenue included? ☐ Yes ☐ No If Yes \$ _____

***Funding Source(s) required:** _____

Funding from General Fund? ☐ Yes ☐ No If Yes \$ _____ % _____

Grant/Amendment Information (for grants acceptance and awards)

☐ Award ☐ Amendment

Document Type: _____ Department Code: _____ Grant Number (i.e., 15-123): _____

Commencement Date: _____ Termination Date: _____ Amendment Number: _____

☐ Match Amount: \$ _____ ☐ Revenue Amount: \$ _____

***All Funding Source(s) required:** _____

***Match funding from General Fund?** ☐ Yes ☐ No If Yes \$ _____ % _____

***Match funding from other sources?** ☐ Yes ☐ No If Yes \$ _____ % _____

***Funding Source:** _____

***If Federal funds are received, is funding coming directly from the Federal government or passed through other organization(s)?**

Contact: Procurement Officer: Judy Cooper Digitally signed by Judy Cooper Date: 2023.08.23 16:58:49 -0700 Division Manager: Scott Loomis Digitally signed by Scott Loomis Date: 2023.08.24 17:06:46 -0700

Department: Procurement Director: Terri Spencer Digitally signed by Terri Spencer Date: 2023.08.28 12:35:56 -0700 Telephone: 520-724-3727

Department Director Signature: Sheila Holben Digitally signed by Sheila Holben Date: 2023.08.28 12:35:56 -0700

Deputy County Administrator Signature: 

Date: 8/29/2023

County Administrator Signature: _____ Date: 8/30/2023



NOTICE OF RECOMMENDATION FOR AWARD

Date of Issue: August 16, 2023

The Pima County Procurement Department hereby issues formal notice to respondents to **Solicitation No. SFQ-PO-2300012 for Design Engineering Services for West Valencia Road: Mission Road to Camino de la Tierra (4VALMR)** that the following listed respondent will be recommended for award as indicated below. The award action is scheduled to be performed by the Board of Supervisors, on or after, September 19, 2023.

Award is recommended to the Most Qualified Respondent.

AWARDEE NAME

PSOMAS

OTHER RESPONDENT NAMES

HDR Engineering, Inc.

Kimley-Horn and Associates, Inc.

NOTE: Pursuant to A.R.S. §34-603(H), only the names of the firms on the final list may be disclosed.

Issued by: /s/ Judy Cooper

Telephone Number: (520) 724-3727

This notice is in compliance with Pima County Procurement Code §11.20.010(C).

Copy to: Pima County SBE via e-mail at SBE@pima.gov

PIMA COUNTY PROJECT DESIGN AND CONSTRUCTION DEPARTMENT

PROJECT: DESIGN ENGINEERING SERVICES FOR WEST VALENCIA ROAD IMPROVEMENTS:
MISSION ROAD TO CAMINO DE LA TIERRA (4VALMR)

CONSULTANT: PSOMAS INC
333 E. Wetmore Road, Suite 450
Tucson, Arizona 85705

CONTRACT NO.: CT-CPO-24-080

AMOUNT: \$3,515,275.29

FUNDING: TRANSPORTATION CIP PROJECTS

CONSULTANT SERVICES CONTRACT

1. Parties, Background and Purpose.

- 1.1. Parties. This Contract is entered into between Pima County, a body politic and corporate of the State of Arizona, hereafter called County, and PSOMAS INC, hereinafter called Consultant, and collectively referred to as the Parties.
- 1.2. Authority. County requires the services of a Consultant registered in the State of Arizona and qualified to provide Architectural and Engineering Design Services for the West Valencia Road Improvements: Mission Road to Camino de la Tierra (4VALMR) ("Project").
- 1.3. Solicitation. County previously issued Solicitation No. SFQ-PO-2300012 for Design Engineering Services for West Valencia Road Improvements: Mission Road to Camino de la Tierra (4VALMR) (the Solicitation). Requirements and specifications contained in the Solicitation, all documents included in the Solicitation, and any information and documentation submitted by Consultant in response to the Solicitation, are incorporated into this Contract by reference.
- 1.4. Consultant's Response. Consultant's representations in response to Pima County Solicitation No. SFQ-PO-2300012, Consultant was determined to be the most qualified for this Project.

2. Term and Extension/Renewal/Changes.

- 2.1. Initial Term. This Contract, as approved by the Board of Supervisors, commences on September 19, 2023, and terminates on September 18, 2026, unless sooner terminated or further extended pursuant to the provisions of this Contract.
- 2.2. Extension Options. County has the option to extend the contract termination date for purposes of project completion. Any modification or extension of the contract termination date must be by formal written amendment executed by the Parties.

3. Scope of Services. Consultant agrees to provide Architectural and Engineering Design Services for the County as described in Exhibit A – Scope of Services (22 pages), an attachment to this contract, and to complete such services within the term and value of this contract as it may be modified in accordance with Section 5. Amendments and changes to the Scope must be approved by the Board of Supervisors or the Procurement Director before the work under the amendment commences.

4. Definitions.

- 4.1. Other Direct Costs. Other Direct Costs are those costs that can be specifically identified within this Contract, are required for performance of the Contract, and are actually incurred. This includes

Subcontract or Subconsultant costs; reproduction, copy and printing costs; courier services; and similar costs specifically necessary for this Contract and approved by County.

- 4.2. Cost Plus Fixed Fee. The modified Cost Plus Fixed Fee (CPFF) is a compensation method that provides compensation to Consultant for actual costs of Direct Labor, Indirect, and Other Direct Costs incurred up to a "not-to-exceed" amount, plus a fixed Fee amount for the successful performance of the work. The Fee amount may initially be determined as a percentage of the estimated not-to-exceed costs. Once negotiated, the Fee amount becomes fixed and does not vary with actual costs. The Fee may only be in accordance with Section 5.
- 4.3. Critical Path Method. The Critical Path Method (CPM) is a way of depicting the sequence of activities in a project, including interdependencies, and containing all activities needed for successful completion of the Work. Delay in the completion of activities on the critical path will extend the completion date.
- 4.4. Direct Labor Costs. Direct Labor Costs are the total number of allowable hours worked on the Project by each individual multiplied by the Labor Rate, identified in Exhibit B – Compensation Schedule (81 pages).
- 4.5. Fee. Fee is the amount, independent of actual costs, that the Consultant is allowed for assuming risk and to stimulate efficient contract performance. Fee includes compensation to Consultant for both profit and unallowable costs. Efficient cost control will allow Consultant to earn a higher profit margin without adjustment of the fee amount. Conversely, inefficient cost control will result in a lower profit margin.
- 4.6. Float. Float is the number of days by which an activity not on the critical path in a CPM network may be delayed before it extends the completion date.
- 4.7. Labor Rates. Labor rates are the actual cost of salary paid to employees of Consultant and identified in Exhibit B – Compensation Schedule.
- 4.8. Not to Exceed Cost. The Not to Exceed Cost for a task is the sum of the agreed Direct Labor costs, indirect costs, and other reimbursable costs of the task defined in the original Project Baseline. Actual Direct Labor costs may be invoiced based on hours worked, per discipline, per task, or a percent complete by task for the period. Consultant assumes all risk for providing the requested task/deliverables at or below the original estimated cost, unless an equitable adjustment to the scope and/or fee are made by amendment to the Contract. Any costs incurred by Consultant beyond the not-to-exceed amount identified which are not attributable to any change in the project baseline are unallowable. Unallowable costs are compensated through the Consultant's fixed Fee.
- 4.9. Indirect Costs. Indirect costs are at the overhead rate identified in Exhibit B – Compensation Schedule.
- 4.10. Project Baseline. The agreed Contract scope of services, total Not-to-Exceed Cost plus Fixed-Fee (CPFF), the allocation thereof among Contract tasks, and the accompanying schedule and expectations/assumptions upon which the scope of services and schedule are based, collectively constitute the Project Baseline.

5. Compensation and Payment.

- 5.1. Rates; Adjustment. County will pay Consultant on a modified Not-to-Exceed Cost plus Fixed Fee (CPFF) basis, not to exceed the total amount of this Contract. Cost is comprised of Consultant's Direct Labor Costs, Indirect Costs and Other Direct Costs. Consultant's fee will remain fixed and may be adjusted only as provided in Section 5 and Section 6.
- 5.2. Compensation Schedule. Consultant's total CPFF will be allocated among the major tasks contemplated by this Contract in such manner that each major deliverable will have associated with it a not-to-exceed cost, plus a fixed fee amount, incorporated herein as Exhibit B – Compensation Schedule. Consultant may invoice monthly for the actual costs incurred plus a pro-rata portion of the fee amount for each task. Consultant will calculate actual costs based on actual hours spent, to which the agreed overhead rate

may be applied, plus Other Direct Costs. Actual Costs may then be represented as percentage of the “not to exceed” cost amount associated with that task on the Consultant’s invoice for billing purposes. Calculations and supporting data will be made available to County at any time, upon request. The cumulative payment for the actual costs of any task may not be more than the “not to exceed” cost amount associated with that task. Upon completion of the Scope of Work, (including acceptance by County of all associated deliverables), County will pay the balance of the fixed fee to Consultant.

- 5.3. Hourly Rates. Hourly rates and all other rates included under this Contract will remain fixed throughout the term of the contract. County may consider adjustments to rates in connection with any extensions of the contract term.
- 5.4. Maximum Payment Amount. The total of all payments to Consultant for services provided under this Contract will not exceed \$3,515,275.29.
- 5.5. Timing of Invoices. Unless otherwise agreed, Consultant will submit invoices monthly.
- 5.6. Content of Invoices. All invoices will be accompanied by a narrative description of the work performed during the period covered by the invoice, time accounting information, and an allocation of all direct costs, including reimbursable costs and Subconsultant charges, to the tasks identified in the Scope of Services for which those costs were incurred. The time accounting information should be sufficient to show the workers and hours worked by day for the period covered by the invoice. Subconsultant charges must be supported by appropriate documentation with each separate invoice submitted.
- 5.7. Invoice Adjustments. For the period of record retention required under Section 25, County reserves the right to question any payment made under this Article and to require reimbursement by setoff or otherwise for payments determined to be improper or contrary to the Contract or law.
- 5.8. Additional Services. Consultant will not perform work in excess of the contract amount without prior authorization by an amendment executed by the Parties. Work performed in excess of the contract amount without prior authorization by amendment is at Consultant’s own risk. Additional Services identified in Exhibit B – Compensation Schedule, are services within the scope of this Contract but not included within the Tasks identified as of the effective date of this Contract. If ordered, Consultant will invoice additional Services at the rates incorporated into this Contract as in Exhibit B – Compensation Schedule. County may add additional services throughout the term of the Contract by providing notice in writing to Consultant. Hourly billable rates shown in Exhibit B – Compensation Schedule will only be adjusted by written amendment to the Contract. The Parties may add additional required professional classifications or disciplines to Exhibit A – Scope of Services by written amendment at any time.
- 5.9. Invoice Discrepancies. County has 10 calendar days from the date of invoice to notify Consultant of any invoicing discrepancies. County and Consultant will meet to resolve any discrepancies before the invoice is approved or rejected for payment. Subconsultant charges must be supported by appropriate documentation upon request by County.

6. Project Baseline and Adjustments.

- 6.1. Schedule. County and Consultant have agreed upon the Project scope and the total Cost Plus Fixed Fee, and will prepare a CPM-based schedule for the performance of the work. The schedule is based on assumptions and expectations agreed upon by the Parties. Schedule estimates for the timeframes associated with outside party activities, i.e. design and other reviews, and/or permits or other clearances do not represent commitments made by either outside agencies or the permit-granting entities of County. This Project Baseline represents a firm commitment by the Parties to complete the work within the schedule and total cost identified in the Baseline, subject to schedule variations by outside parties and other factors beyond the control of the Parties.
- 6.2. Project Baseline Adjustments. Although the Baseline reflects the best estimates and expectations of the Parties at the time of agreement, there is an element of uncertainty associated with the design process

that makes the actual schedule and effort required to complete the work difficult or impossible to establish in advance. Unusual citizen input, litigation, regulatory changes, significant delays by utilities or others, unforeseen decisions or commitments by policy makers, or other unanticipated events or factors beyond the control of the Parties that differ materially from the expectations of the Parties may delay or disrupt the schedule and/or require a change in the level of resources or effort. The Project Baseline may be adjusted as follows:

- 6.2.1. A delay in the work attributable to a failure by County to adhere to its estimates with respect to schedule is an excusable delay for which an adjustment may be made to the schedule. In any such case affecting a task on the critical path, the schedule of the affected task or activity may be extended one day for each day of County -caused delay; provided, however, that if the County -caused delay overlaps a period of delay attributable to any other cause, the extension for County -caused delay is limited to the number of non-overlapped days of County -caused delay.
 - 6.2.2. There is no adjustment for any delay in the work attributable to a failure by Consultant to adhere to its commitments with respect to schedule. In the event of a significant delay attributable to a failure by Consultant to adhere to its schedule expectations, Consultant will provide a recovery plan to County within five days of County's request. For the purposes of this paragraph, a delay arising from or attributable to a necessity for Consultant to make more than two submissions of plans or documents for approval is a failure by Consultant to adhere to its schedule commitments. Consultant's work associated with additional reviews is non-compensable.
 - 6.2.3. A delay in the work attributable to any other cause that differs materially from the expectations of the parties regarding that cause is an excusable delay for which the parties will negotiate an appropriate schedule adjustment. If the period of delay attributable to any cause under this paragraph overlaps a period of delay attributable to any other cause, the adjustment under this paragraph will be made first and the delay attributed to such other cause will be limited to that occurring outside of the overlap.
 - 6.2.4. If any of the causes of delay in subparagraphs 6.2.1 or 6.2.3 above affects a task or activity on the critical path, then the schedule adjustment may include adjustment to the completion date. If the cause does not affect a task or activity on the critical path, then the adjustment will be made from Float and the completion date will not change.
 - 6.2.5. If any of the causes of delay in subparagraphs 6.2.1 or 6.2.3 above results in material provable additional costs to the affected task or tasks as a result of disruption of the schedule, then the parties will negotiate an equitable adjustment to the cost for the affected task or tasks, but not to the fee.
 - 6.2.6. The Parties will negotiate an equitable adjustment of cost and fee for any task or tasks for which there is any significant change in the level of effort arising from additional or changed work requested or directed in writing by County that materially deviates from or adds to the baseline expectations or assumptions of the Parties with respect to the work.
 - 6.2.7. If any action, comment, cause, decision, or other event attributable to any third-party results in a change in requirements that differs materially from expectations, then the Parties will negotiate in good faith an equitable adjustment in the cost and fee for the affected task or tasks.
- 6.3 Completion Date. Consultant agrees to complete the work by the completion date in the schedule, as it may be adjusted under the preceding provisions of this Article. Costs incurred by Consultant to complete the work after the completion date in the schedule are not reimbursable under this Contract.

7. Reallocation of Funds.

- 7.1. Costs. Given the magnitude and complexity of the scope required by this Contract, the Parties understand that the actual cost to perform specific tasks may vary from the estimates reflected in Exhibit A – Scope of Services and Exhibit B – Compensation Schedule.
- 7.2. Tasks. If the actual cost to complete a task is less than the estimated amount for that task, the cost savings realized accrues to County. With the agreement of the Parties, County may reallocate the cost savings to other tasks in Exhibit A – Scope of Services and Exhibit B – Compensation Schedule as follows:
 - 7.2.1. Subtasks. Reallocation between subtasks in Exhibit A – Scope of Services under any one of the major task categories in Exhibit B – Compensation Schedule may be made between the County's department representative and the Consultant's project manager by written agreement.
 - 7.2.2. Procurement Director. County's Procurement Director may make a reallocation among the major tasks in Exhibit B – Compensation Schedule by a Contract amendment, provided that the transfer does not increase the total amount of the Contract.
 - 7.2.3. Board of Supervisors. The Board of Supervisors may make any reallocation or adjustment in Exhibit A – Scope of Services or Exhibit B – Compensation Schedule that increases the total contract amount through a Contract Amendment.
- 7.3. Cost and Fee. Costs and Fee may not be reallocated from any task on which work has not progressed significantly and which does not include actual or demonstrable savings or reductions in required effort such that the task may be completed for less than the balance of the task remaining after the transfer.

8. Insurance. The Insurance Requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. County in no way warrants that the minimum limits contained herein are sufficient to protect the Consultant from liabilities that arise out of the performance of the work under this Contract.

- 8.1. Ratings. Consultant's insurance will be placed with companies licensed in the State of Arizona or hold approved non-admitted status on the Arizona Department of Insurance List of Qualified Unauthorized Insurers. Insurers will have an "A.M. Best" rating of not less than A- VII. County in no way warrants that the above-required minimum insurer rating is sufficient to protect the Consultant from potential insurer insolvency.
- 8.2. Insurance Coverages and Limits.
 - 8.2.1. Minimum Scope and Limits of Insurance: Consultant will procure and maintain, until all of their obligations have been discharged, coverage with limits of liability not less than those stated below.
 - 8.2.1.1. Commercial General Liability (CGL) – Occurrence Form with limits of \$2,000,000 Each Occurrence and \$2,000,000 General Aggregate. Policy will include bodily injury, property damage, and broad form contractual liability coverage.
 - 8.2.1.2. Business Automobile Liability – Bodily Injury and Property Damage for any owned, hired, and/or non-owned automobiles used in the performance of this Contract with a Combined Single Limit (CSL) of \$1,000,000.
 - 8.2.1.3. Workers' Compensation and Employers' Liability - Statutory requirements and benefits. Coverage is compulsory for employers of one or more employees. Employer's Liability - \$1,000,000.

Note: The Workers' Compensation requirement will not apply to a Consultant that is exempt under A.R.S. § 23-901, and when such Consultant executes the appropriate County Sole Proprietor or Independent Consultant waiver form.

- 8.2.1.4. Professional Liability (Errors and Omissions) Insurance – This insurance is required when soliciting work from licensed professionals. The policy limits will be not less than \$2,000,000 Each Claim and \$2,000,000 Annual Aggregate. The policy will cover professional misconduct or negligent acts for those positions defined in the Scope of Work of this contract.
- 8.2.1.5. Claims-Made Coverage. In the event that the Professional Liability insurance required by this Contract is written on a claims-made basis, Consultant warrants that any retroactive date under the policy will precede the effective date of this Contract and, either continuous coverage will be maintained, or an extended discovery period will be exercised, for a period of three years beginning at the time work under this Contract is completed.

8.3. Additional Insurance Requirements:

The policies will include, or be endorsed to include, as required by this written agreement, the following provisions:

- 8.3.1. Additional Insured: The General Liability and Business Automobile Liability Policies will each be endorsed to include County, its departments, districts, boards, commissions, officers, officials, agents, and employees as additional insured's with respect to liability arising out of the activities performed by or on behalf of Consultant.
- 8.3.2. Subrogation: The General Liability, Business Automobile Liability and Workers' Compensation Policies will each contain a waiver of subrogation endorsement in favor of County, and its departments, districts, boards, commissions, officers, officials, agents, and employees for losses arising from work performed by or on behalf of Consultant.
- 8.3.3. Primary Insurance: Consultant's policies will stipulate that the insurance afforded Consultant will be primary and that any insurance carried by the Department, its agents, officials, employees or County will be excess and not contributory insurance.
- 8.3.4. Insurance provided by Consultant will not limit Consultant's liability assumed under the indemnification provisions of this Contract.

8.4. Notice of Cancellation:

Each required Insurance policy must provide, and certificates specify, that County will receive not less than 30 days advance written notice of any policy cancellation, except 10-days prior notice is sufficient when the cancellation is for non-payments of a premium. Notice shall include the County project or contract number and project description.

8.5. Verification of Coverage:

Consultant will furnish County with certificates of insurance as required by this Contract. An authorized representative of the insurer will sign the certificates.

- 8.5.1. All certificates and endorsements, as required by this written agreement, are to be received and approved by County before work commences. Each insurance policy required by this Contract must be in effect at, or prior to, commencement of work under this Contract. Failure to maintain the insurance coverages or policies as required by this Contract, or to provide evidence of renewal, is a material breach of contract.

8.5.2. All certificates required by this Contract will be sent directly to the Department. County project or contract number and project description will be noted on the certificate of insurance. County reserves the right to require complete copies of all insurance policies required by this Contract at any time.

8.6 Approval and Modifications:

The Pima County Risk Manager may modify the Insurance Requirements at any point during the Term of this Contract. This can be done administratively, with written notice from the Risk Manager and does not require a formal Contract amendment. Neither the County's failure to obtain a required insurance certificate or endorsement, the County's failure to object to a non-complying insurance certificate or endorsement, nor the County's receipt of any other information from the Consultant, its insurance broker(s) and/or insurer(s), constitutes a waiver of any of the Insurance Requirements.

9. Indemnification.

- 9.1. To the fullest extent permitted by law, Consultant will defend, indemnify, and hold harmless Pima County and any related taxing district, and the officials and employees of each of them (collectively, "Indemnitee") from and against any and all claims, actions, liabilities, losses, and expenses (including reasonable attorney fees) (collectively, "Claims") arising out of actual or alleged injury of any person (including death) or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, by any act or omission of Consultant or any of Consultant's directors, officers, agents, employees, volunteers, or subconsultants, but only to the extent caused by negligence, recklessness, or intentional wrongful conduct of Consultant. This indemnity includes any claim or amount arising or recovered under the Workers' Compensation Law or arising out of the failure of Consultant to conform to any federal, state or local law, statute, ordinance, rule, regulation or court decree. Consultant is responsible for primary loss investigation, defense and judgment costs for any Claim to which this indemnity applies. This indemnity will survive the expiration or termination of this Contract.
- 9.2. All warranty and indemnification obligations under this contract shall survive expiration or termination of the contract, unless expressly provided otherwise. The Parties agree that any indemnification provision inconsistent with A.R.S. § 34-226 is, in all cases, not void, but will be interpreted and applied as if it were consistent with A.R.S. § 34-226.
- 9.3. Upon request, Consultant may fully indemnify and hold harmless any private property owner granting a right of entry to Consultant for the purpose of completing the project, but only to the extent of Consultant's negligence, recklessness, or intentional wrongful conduct of Consultant. The obligations under this Article do not extend to the negligence of County, its agents, employees or indemnities.

10. Laws and Regulations.

- 10.1. Compliance with Laws. Consultant will comply with all federal, state, and local laws, rules, regulations, standards and Executive Orders, without limitation to those designated within this Contract.
- 10.2. Licensing. Consultant warrants that it is appropriately licensed to provide the services under this Contract and that its Subconsultants will be appropriately licensed.
- 10.3. Choice of Law; Venue. The laws and regulations of the State of Arizona govern the rights and obligations of the parties under this Contract. Any action relating to this Contract must be filed and maintained in Superior Court in Pima County.

11. **Status of Consultant.** Consultant is an independent Consultant. Neither Consultant, nor any of Consultant's officers, agents or employees will be considered an employee of Pima County for any purpose or be entitled to receive any employment-related benefits, or assert any protections, under the Pima County Merit System. Consultant is responsible for paying all federal, state and local taxes on the compensation received by

Consultant under this Contract and will indemnify and hold County harmless from any and all liability that County may incur because of Consultant's failure to pay such taxes.

12. Consultant's Performance.

12.1. Performance. Consultant will perform the work with the degree of care and skill required of any similarly situated Arizona registrant. Consultant will employ suitably trained and skilled professional personnel to perform all required services under this Contract. Prior to changing any key personnel, especially those key personnel County relied upon in making this contract, Consultant will obtain County's approval.

12.2. Responsibility. Consultant is responsible for the professional quality, technical accuracy, timely completion, and the coordination of all its effort and other services furnished by Consultant under this Contract. Without additional compensation, Consultant will correct or revise any errors, omission, or other deficiencies in all products of its efforts and other services provided. This includes resolving any deficiencies arising out of the acts or omissions of Consultant found during or after the course of the services performed by or for Consultant under this Contract, regardless of County having knowledge of or condoning/accepting the products or the services. Correction of such deficiencies will be at no cost to County.

13. **Non-Waiver**. The failure of County to insist in any one or more instances upon full and complete compliance with any of the terms and provisions of this Contract or to take any action permitted as a result is not a waiver or relinquishment of the right to insist upon full and complete performance of the same or any other covenant or condition either in the past or in the future. The acceptance by either party of sums less than may be due and owing it at any time is not an accord and satisfaction.

14. **Subconsultant**. Consultant will be fully responsible for all acts and omissions of its Subconsultant and of persons directly or indirectly employed by Subconsultant and of persons for whose acts any of them may be liable to the same extent that Consultant is responsible for the acts and omissions of persons directly employed by it. Nothing in this Contract creates any obligation on the part of County to pay or any Subconsultant, except as may be required by law.

15. **Non-Assignment**. Consultant will not assign its rights or obligations under this Contract in whole or in part, without County's prior written approval. County may withhold approval at its sole discretion.

16. **Non-Discrimination**. Consultant will comply with all provisions and requirements of Arizona Executive Order 2009-09, which is hereby incorporated into this contract, including flow-down of all provisions and requirements to any Subconsultants. During the performance of this Contract, Consultant will not discriminate against any employee, client or any other individual in any way because of that person's age, race, creed, color, religion, sex, disability or national origin.

17. **Americans with Disabilities Act**. Consultant will comply with Title II of the Americans with Disabilities Act (Public Law 110-325, 42 U.S.C. §§ 12101-12213) and the federal regulations for Title II (28 CFR Part 35).

18. **Cancellation for Conflict of Interest**. This Contract is subject to cancellation for conflict of interest pursuant to A.R.S. § 38-511, the pertinent provisions of which are incorporated into this Contract by reference.

19. Termination of Contract for Default.

19.1. Upon a failure by Consultant to cure a default under this Contract within ten days of receipt of notice from County of the default, County may, in its sole discretion, terminate this Contract for default by written notice to Consultant. In this event, County may take over the work and complete it by contract or otherwise. In such event, Consultant will be liable for any damage to the County resulting from Consultant's default, including any increased costs incurred by County in completing the work.

19.2. Default Events. The following constitutes an event of default:

- 19.2.1. Abandonment of or failure by Consultant to observe, perform or comply with any material term, covenant, agreement or condition of this Contract, or to prosecute the work or any separable part thereof with the diligence that will insure completion within the time specified in this contract, including any extension, or a failure to complete the work (or the separable part of the work) within the specified time;
- 19.2.2. Persistent or repeated refusal or failure to supply adequate staff, resources or direction to perform the work on schedule or at an acceptable level of quality;
- 19.2.3. Refusal or failure to remedy defective or deficient work within a reasonable time;
- 19.2.4. Loss of professional registration or business or other required license or authority, or any curtailment or cessation for any reason of business or business operations that would substantially impair or preclude Consultant's performance of this Contract;
- 19.2.5. Disregard of laws, ordinances, or the instructions of County or its representatives, or any otherwise substantial violation of any provision of the contract;
- 19.2.6. Performance of work hereunder by personnel that are not qualified or permitted under state law or local law to perform such services;
- 19.2.7. Commission of any act of fraud, misrepresentation, willful misconduct, or intentional breach of any provision of this Contract; or
- 19.2.8. If a voluntary or involuntary action for bankruptcy is commenced with respect to Consultant, or Consultant becomes insolvent, makes a general assignment for the benefit of creditors, or has a receiver or liquidator appointed in respect of its assets.

19.3. Termination. In the event of a termination for default:

- 19.3.1. All finished and unfinished drawings, specifications, documents, data, studies, surveys, drawings, photographs, reports and other information in whatever form, including electronic, acquired or prepared by Consultant for this project become County's property and will be delivered to County not later than five business days after the effective date of the termination;
- 19.3.2. County may withhold payments to Consultant arising under this or any other Contract for the purpose of set-off until such time as the exact amount of damage due County from Consultant is determined; and
- 19.3.3. Subject to the immediately preceding subparagraph 19.3.2, County's liability to Consultant will not exceed the Contract value of work satisfactorily performed prior to the date of termination for which County has not previously made payment.

19.4. Non-Termination. County will not terminate Contract for default or charge Consultant with damages under this Article if:

- 19.4.1. Except for subparagraph 19.2.8 in subsection 19.2 above, the event of default or delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of Consultant. Examples of such causes include:
 - 19.4.1.1. Acts of God or of the public enemy,
 - 19.4.1.2. Acts of County in either its sovereign or contractual capacity,

- 19.4.1.3. Acts of another Contractor in the performance of a contract with County,
- 19.4.1.4. Fires,
- 19.4.1.5. Floods,
- 19.4.1.6. Epidemics,
- 19.4.1.7. Quarantine restrictions,
- 19.4.1.8. Strikes,
- 19.4.1.9. Freight embargoes,
- 19.4.1.10. Unusually severe weather, or
- 19.4.1.11. Delays of Subconsultants at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both Consultant and the Subconsultant(s); and

19.4.2. Consultant, within seven days from the beginning of any event of default or delay (unless extended by County), notifies County in writing of the cause(s) therefor. In this circumstance, County will ascertain the facts and the extent of the resulting delay. If, in the reasonable judgment of County, the findings warrant such action, County may extend the time for completing the work.

19.5. Receipt of Notice. For the purposes of subsection 19.1 above, "receipt of notice" includes receipt by hand by Consultant's project manager, by facsimile transmission with notice of receipt, or under the Notices clause of this Contract.

19.6. Excusable. If, after termination of the Contract for default, County determines that the Consultant was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if County had terminated Contract for convenience as set forth in Section 20.

19.7. Rights and Remedies. The rights and remedies of County in this Article are cumulative and in addition to any other rights and remedies provided by law or under this contract.

20. **Termination for Convenience of County**. County may terminate this Contract at any time by giving written notice to Consultant of such termination and specifying the effective date thereof, at least 15 days before the effective date of such termination. In that event, all finished or unfinished documents and other materials will, at the option of the County, become its property. If County terminates the Contract as provided herein, County will pay Consultant an amount based on the time and expenses incurred by Consultant prior to the termination date, however, no payment will be allowed for anticipated profit on unperformed services.

21. **Non-Appropriation of Funds**. Notwithstanding any other provision in this Contract, this Contract may be terminated if for any reason the Pima County Board of Supervisors does not appropriate sufficient monies for the purpose of maintaining this Contract. In the event of such termination, County will have no further obligation to Consultant, other than payment for services rendered prior to termination.

22. **Notices**. Any notice required or permitted to be given under this Contract must be in writing and be served by delivery or by certified mail upon the other party as follows:

COUNTY:

Sheila Holben, Director
Project Design and Construction
150 W. Congress St., 5th Floor
Tucson, Arizona 85701
Tel: (520) 724-6567

CONSULTANT:

Kevin Thornton, PE, ENV SP
PSOMAS INC
333 E. Wetmore Road, Suite 450
Tucson, Arizona 85705
Tel: (520) 292-2300
Fax: (520) 292-1290

23. **Other Documents.** County and Consultant in entering into this Contract have relied upon information provided in Solicitation for Qualifications No. SFQ-PO-2300012, and on representations and information in the Consultant's response to said SFQ. These documents are hereby incorporated into and made a part of this Contract as if set forth in full herein, to the extent not inconsistent with the provisions of this Contract. Consultant will perform services in accordance with the terms of the Contract and at a level of care consistent with prevailing industry standards. In the event any provision of this contract is inconsistent with those of any other document, the contract provisions will prevail.
24. **Remedies.** Either party may pursue any remedies provided by law for the breach of this Contract, provided, however, that the procedures in Section 28 are first exhausted. No right or remedy is intended to be exclusive of any other right or remedy and each is cumulative and in addition to any other right or remedy existing at law or at equity or by virtue of this Contract.
25. **Severability.** Each provision of this Contract stands alone, and any provision of this Contract found to be prohibited by law is ineffective to the extent of such prohibition without invalidating the remainder of this Contract.
26. **Books and Records.**
- 26.1. Maintenance. Consultant will keep and maintain proper and complete books, records and accounts, which will be open at all reasonable times for inspection and audit by duly authorized representatives of County.
- 26.2. Retention. Consultant will retain all records relating to this contract at least five years after its termination or cancellation or until any related pending proceeding or litigation has been closed, if later. Alternatively, Consultant may, at its option, deliver such records to County for retention.
27. **Delays.** Neither party will be in default in the performance of its obligations to the extent that the performance of any such obligation is prevented or delayed by any cause, existing or future, which is beyond the reasonable control of such party.
28. **Disputes.**
- 28.1. Resolving Dispute. In the event of a dispute between the parties regarding any part of this Contract or the parties' obligations or performance hereunder, either party may request a special meeting between their respective representatives to resolve the dispute. If the dispute remains unresolved, then either party may request escalation of the issue to a meeting between the Director of the Pima County Department administering this Contract and Consultant's counterpart official, such meeting to be held within one week of the request, unless otherwise agreed. If the dispute is still not resolved after that meeting, then either party may pursue such remedy or remedies as may be available to them under the laws of the State of Arizona.
- 28.2. Performance. The parties will continue performance of their respective obligations under this Contract notwithstanding the existence of any dispute.
29. **Ownership of Documents.** Ownership of all original drawings, field data, estimates, field notes, plans, specifications, documents, reports, calculations, and other information developed by Consultant under this contract vests in and become the property of County and shall be delivered to County upon completion or

termination of the services, but Consultant may retain and use copies thereof. County agrees that the material will not be used for any project other than the project for which it was designed without the expressed permission of the Consultant.

30. Public Records.

30.1. Disclosure. Pursuant to A.R.S. § 39-121 et seq., and A.R.S. §§ 34-603(H), 604(H), in the case of construction or Architectural and Engineering services procured under A.R.S. Title 34, Chapter 6, all information submitted by Consultant in any way related to this contract, including, but not limited to, pricing, product specifications, work plans, and any supporting data becomes public information and upon request, is subject to release and/or review by the general public including competitors.

30.2. Records Marked Confidential.

30.2.1. Any information submitted related to this Contract that Consultant believes constitutes proprietary, trade secret or otherwise confidential information must be appropriately and prominently marked as Confidential prior to submittal to County and be accompanied by an index specifically identifying and describing the general contents of each page so marked. The index is a Public Record and must not include any information considered confidential.

30.2.2. Notwithstanding the above provisions, in the event records marked Confidential are requested for public release pursuant to A.R.S. § 39-121 et seq., County will release records marked Confidential 10 business days after the date of notice to the Consultant of the request for release, unless Consultant has, within the ten day period, secured a protective order, injunctive relief or other appropriate order from a court of competent jurisdiction in Arizona, enjoining the release of the records. For the purposes of this paragraph, the day of the request for release is not counted in the time calculation. County will notify Consultant of any request for such release on the same day of the request for public release or as soon thereafter as practicable. County is not, under any circumstances, responsible for securing a protective order or other relief enjoining the release of records marked Confidential, nor is County in any way financially responsible for any costs associated with securing such an order.

31. Legal Arizona Workers Act Compliance.

31.1. Compliance with Immigration Laws. Consultant warrants that it will at all times during the term of this Contract comply with all federal immigration laws applicable to Consultant's employment of its employees, and with the requirements of A.R.S. § 23-214 (A) (together the "State and Federal Immigration Laws"). Consultant will further ensure that each Subconsultant who performs any work for Consultant under this contract likewise complies with the State and Federal Immigration Laws.

31.2. Books & Records. County has the right at any time to inspect the books and records of Consultant and any Subconsultant in order to verify such party's compliance with the State and Federal Immigration Laws.

31.3. Remedies for Breach of Warranty. Any breach of Consultant's or any Subconsultant's warranty of compliance with the State and Federal Immigration Laws, or of any other provision of this section, is a material breach of this Contract subjecting Consultant to penalties up to and including suspension or termination of this Contract. If the breach is by a Subconsultant, and the subcontract is suspended or terminated as a result, Consultant must take such steps as may be necessary to either self-perform the services that would have been provided under the subcontract or retain a replacement Subconsultant, (subject to County approval if SBE or DBE preferences apply) as soon as possible so as not to delay project completion.

31.4. Subconsultants. Consultant will advise each Subconsultant of County's rights, and the Subconsultant's obligations, under this Article by including a provision in each subcontract substantially in the following form:

“Subconsultant hereby warrants that it will at all times during the term of this contract comply with all federal immigration laws applicable to Subconsultant’s employees, and with the requirements of A.R.S. § 23-214 (A). Subconsultant further agrees that County may inspect the Subconsultant’s books and records to insure that Subconsultant is in compliance with these requirements. Any breach of this paragraph by Subconsultant is a material breach of this contract subjecting Subconsultant to penalties up to and including suspension or termination of this contract.”

- 31.5. **Costs.** Any additional costs attributable directly or indirectly to remedial action under this Article are the responsibility of Consultant. In the event that remedial action under this Section results in delay to one or more tasks on the critical path of Consultant’s approved construction or critical milestones schedule, such period of delay is excusable delay for which Consultant is entitled to an extension of time, but not costs.
32. **Israel Boycott Certification.** Pursuant to A.R.S. § 35-393.01, if Consultant engages in for-profit activity and has 10 or more employees, and if this Contract has a value of \$100,000.00 or more, Consultant certifies it is not currently engaged in, and agrees for the duration of this Contract to not engage in, a boycott of goods or services from Israel. This certification does not apply to a boycott prohibited by 50 U.S.C. § 4842 or a regulation issued pursuant to 50 U.S.C. § 4842.
33. **Forced Labor of Ethnic Uyghurs.** Pursuant to A.R.S. § 35-394, if Consultant engages in for-profit activity and has 10 or more employees, Consultant certifies it is not currently using, and agrees for the duration of this Contract to not use (1) the forced labor of ethnic Uyghurs in the People’s Republic of China; (2) any goods or services produced by the forced labor of ethnic Uyghurs in the People’s Republic of China; and (3) any consultants, subconsultants or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People’s Republic of China. If Consultant becomes aware during the term of the Contract that the Company is not in compliance with A.R.S. § 35-394, Consultant must notify the County within five business days and provide a written certification to County regarding compliance within one hundred eighty days.
34. **Amendment.** Except for the amendment provision above in Section 4, this Contract may be modified, amended, altered or extended only by a written amendment signed by the Parties.
35. **Entire Agreement.** This document constitutes the entire agreement between the Parties and all prior or contemporaneous agreements and understandings, oral or written, are hereby superseded and merged herein.
36. **Effectiveness and Date.** This contract will become effective when all Parties have signed it. The date of this Contract will be the date the Contract is signed by the last Party to sign it (as indicated by the date associated with that Party’s signature).

Remainder of page intentionally left blank.


Each Party is signing this Contract on the date below that Party's signature.

PIMA COUNTY:

Chair, Board of Supervisors

Date

CONSULTANT:



Signature

Kevin T. Thornton, PE, Vice President

Name and Title (Please Print)

8/28/23

Date

ATTEST:

Clerk of the Board

Date

This contract template has been approved as to form by the Pima County Attorney's Office.

EXHIBIT A - SCOPE OF SERVICES (22 pages)

During the term of this Agreement, the engineering Consultant shall perform professional services for Pima County (County) in connection with the above referenced project. This scoping document shall be used to plan, conduct, and complete the Consultant's work on the project.

A. Background

Traffic volumes within the project limits exceed 40,000 average daily traffic (ADT), which in turn exceeds the capacity of the existing four-lane roadway, especially during peak hours. This roadway segment, and intersecting streets have become very congested, the roadway pavement is in poor condition, and there are limited bicycle, pedestrian, and transit facilities within the project corridor. The existing safety analysis of the corridor indicates that significant multimodal safety improvements are needed.

This project will widen and reconstruct West Valencia Road from four lanes to six lanes from Mission Road to Camino de la Tierra. New bicycle, pedestrian and transit facilities along this corridor will increase mobility and safety of access for nearby residential and commercial areas. Drainage improvements, intersection improvements, turn lanes, street lighting, landscaping, public art, traffic signal improvements, Broadband Conduits, and utility relocation are included in the project scope.

B. Project Description

This project consists of widening approximately 1.3 miles of West Valencia Road from an existing four lane roadway to a six-lane roadway between Mission Road and Camino de la Tierra. This effort is being pursued to improve safety and operations, increase mobility, and address accessibility/operational issues. Intersection improvements are included as part of this project, including flood control and drainage, as well as high speed multi-user Broadband Conduit.

The scope of work for this effort includes the Consultant providing Engineering Design services according to the current edition of the Pima County Roadway Design Manual (RDM) and this contract for:

- Engineering, to include development of a DCR and Initial Design Plans which will address issues such as alignment, channelization, drainage, right-of-way, streetscape, lighting, utilities, broadband conduit, multimodal facilities, major and minor structures, and cost estimates for West Valencia Road between Mission Road and Camino de la Tierra.
- Perform Detailed Design Phase services, which will include development of both Initial and Final Plans, Specifications & Estimate (PS&E) documents for construction (as referenced in the RDM) and Post-Design Construction phase services for the project. If a CMAR is brought on, it will be between 30% and 60% Design.

C. Design Criteria

The design of this project shall proceed in general conformance with the RDM, and other applicable design criteria as listed herein.

All Drainage Design will include water harvesting, retainage, and wildlife corridor movements.

D. Project Schedule

The design project is estimated to be 36 months in duration. An estimated timeframe for completion of the corridor DCR is 6 months. The Final Design effort is estimated to be 5 months. Post design services are then estimated to occur over the final 25 months of the contract.

E. Items and Services To Be Furnished By The County

The County will provide the items and services to the Consultant per the Solicitation for Qualifications and as modified in this scope of work. County will also provide Consultant with documents and data files received from previous reviews/studies of this corridor, which may or may not have been fully completed.

F. Abbreviations

The following abbreviations may be referred to throughout this scope of work:

AASHTO	American Association of State Highway and Transportation Officials
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
AGFD	Arizona Game and Fish Department
ASM	Arizona State Museum
Corps	U.S. Army Corps of Engineers
County	Pima County
DCR	Design Concept Report
EAMR	Environmental Assessment and Mitigation Report
EA	Environmental Assessment
EPG	Environmental Planning Group
ESR	Environmentally Sensitive Roadway
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GIS	Geographic Information System
LOS	Level of service
Manual	2013 Pima County Department of Transportation Roadway Design Manual
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
PAG	Pima Association of Governments
PCDOT	Pima County Department of Transportation
PCOCRHP	Pima County Office of Cultural Resources and Historic Preservation
PCRFC	Pima County Regional Flood Control District
PCRWRD	Pima County Regional Wastewater Reclamation Department
PLSS	Public Land Survey System
PS&E	Plans, specifications, and estimates
RDM	Roadway Design Manual
ROE	Right of Entry
SHPO	State Historic Preservation Office
SOQ	Pima County Solicitation
R/W	Right-of-way
TDM	Transportation Demand Management
USFWS	U.S. Fish and Wildlife Service Project Documentation

- G.** The documents listed as “**Deliverables**” in the Work Tasks, Section 1.0 of this scope of work, and other exhibits or presentations for the work covered by this Agreement and associated supplements, if necessary, will be furnished by the Consultant to the County upon completion of the various tasks of work. Whether the documents are submitted in electronic media or in tangible format, any use of the materials on another project or on extensions of this project beyond the use for which they were intended, or any modification of the materials or conversion of the materials to an alternate system or format will be without liability or legal exposure to the Consultant. The County will assume all risks associated with such use, modifications, or conversions. If the County uses materials other than how they were intended, then the Consultant may remove

from the electronic materials delivered to the County, all references to the Consultant's involvement and will retain a tangible copy of the materials delivered to the County, which will govern the interpretation of the materials and the information recorded. Electronic files are considered working files only; the Consultant is not required to maintain electronic files beyond 90 days after the project final billing and makes no warranty as to the viability of electronic files beyond 90 days from date of transmittal.

H. Work Tasks

Task 1.0 General

- 1.1** The level of effort for each phase and work task is limited to the amount of labor and expenses identified in a Project Budget spreadsheet (Fee Calculation). Costs are itemized to aid in project tracking purposes only. The budget may be transferred between tasks, provided the total contracted amount is not exceeded. Additional services beyond these limits will be considered Extra Work.
- 1.2** The Project duration is anticipated to be 6 months for the Conceptual Design, 5 months for Final Design and 25 months Post Design Services. The Consultant is responsible for meeting deadlines for their and their sub-Consultants' tasks only.
- 1.3** The analyses, design, plans, specifications, and estimate performed or prepared as part of the Project will be in English units. Metric units will not be used on this Project.
- 1.4** The plans will be prepared in accordance with Pima County design practices and standards as identified on the Pima County DOT website and RTA and PAG Standard Specifications for Public Improvements 2015 Edition with Amendments.
- 1.5** Design plans shall be developed using MicroStation Version 8 (V8) and PCDOT CAD drafting standards. Final plan submittals shall be in electronic (V8) and hardcopy format.
- 1.6** Survey file submittals (monumentation, horizontal and vertical control, right-of-way plans) shall be in most recent version of AutoCAD format and MicroStation Version 8 (V8).
- 1.7** Originals of all project deliverables will be delivered to the County.
- 1.8** Meeting summaries will be distributed electronically. Hard copies will not be provided.
- 1.9** Unless specified within individual tasks, an original, hard copy and electronic, and 8 hard copies of each report will be submitted to the County.

Task 2.0 Environmental Analysis and Mitigation Report

- 2.1** The RDM, Chapter 3 – 2013 3.17, includes specifics on the preparation and coordination for the Environmental Assessment and the Mitigation Report. This includes but is not limited to the identification of alternatives/project characteristics and an explanation for the reasons for their selection. Discuss the interaction of various design elements and the trade-offs that constitute the recommended course of action, along with recapping the overall benefits of the project. Reference RDM Chapter 3 – 2013 3.18 for details on the preparation of the Environmental Assessment and Mitigation Report. In order to be consistent in the development of the two primary project documents, the DCR and EAMR shall be developed jointly, or concurrently such that the elements and features that are contained within these documents are described and addressed consistently. The Consultant is responsible for meeting all Federal, State, and County Environmental evaluation, permit preparation, document preparation and public and agency requirements.

- 2.2** The Consultant should be prepared to describe how the 8 month Environmental Assessment and Mitigation Report (EAMR) will be met.

2.3 Documentation, Mitigation

The purpose of the EAMR is to document the results of the assessment undertaken to identify unavoidable adverse impacts of the recommended alternative on the physical, social, and economic environment located within the vicinity of the project, and to recommend measures to mitigate those adverse effects. Mitigation measures are separate from features of the proposed action that avoid or substantially reduce the environmental consequences of the proposed action. Mitigation includes measures that: Compensate for impacts by replacing or providing substitute resources or environments; Rectify impacts by repairing, rehabilitating, or restoring the affected environment; Minimize impacts by limiting the degree or magnitude of the action and its implementation; Avoid certain impacts altogether by not taking a certain action or by not incorporating selected elements of a proposed action. The Consultant must provide specific expertise in meeting Federal State and County requirements for the process, documentation, and coordination of the EAMR.

Deliverables:

- EAMR, Environmental Assessment, Environmental Permits

Task 3.0

The following tasks are organized and numbered to coincide as closely as possible with Chapter 3, Design Process, identified in the RDM.

Task 3.1 Project Management

- 3.1.1. Project Management.** Develop project design by coordinating design efforts. The anticipated management activities are as follows:

- a. Coordinate with all stakeholders through all means necessary, including but not limited to, phone, electronically, paper, face-to-face, etc. Coordination is expected to result in meaningful dialogue.
- b. Ensure that project team members are communicating and cooperating on project tasks.
- c. Generate and regularly update a project contact list.
- d. Establish and keep updated correspondence files for all correspondence, including electronic, phone, paper, etc.
- e. Manage all aspects of the project's scope schedule, budget, quality, and risk.
- f. Manage the project in accordance with ALL federal regulations and standards as well as County RDM, ADOT, and FHWA Standards.

Deliverables:

- Project Team Contact List.
- Correspondence files.
- Responses to all review comments.
- Monthly Project Management Reports

- 3.1.2. Meetings and Communication.** This task involves coordinating meeting times, inviting meeting participants, preparing for meetings, creating an agenda, facilitating meetings, and providing a meeting summary for all meetings. The anticipated design team meetings and activities are as follows:

- a. Conduct weekly meetings with the project team. Include a summary of meaningful public dialogue.

- b. Conduct sub-Consultant and in-house team meetings (as needed/required).
- c. Conduct pre-review overview meetings with County reviewers prior to major submittals, but no less than monthly, to deliver and explain submittals and project status.
- d. Conduct major review comment meetings to discuss review comments and responses with the County and the project team, no less than monthly.
- e. Conduct minor review comment meetings to discuss review comments and responses with individual reviewers for comments identified as needing additional resolution.
- f. Conduct other meetings including but not limited to, design, review, update, internal, external, etc. (as needed/required).

Deliverables:

- Meeting agendas and displays.
- Meeting summaries as required.
- Responses to all review comments.

- 3.1.3. Schedule.** Create a schedule to prepare DCR with Initial Design Phase, Final Design Phase Plans, Initial PS&E, and Final PS&E submittals within 10 business days of notice to proceed; update schedule monthly. Track and submit Consultant costs monthly.

Deliverables:

- Schedule for DCR, including Initial Design Phase Plans, EAMR, and Final Design Phase Plans, Initial PS&E, and Final PS&E.
- Monthly schedule updates using MS Project and include Critical path.
- Monthly invoices for work performed.
- Monthly update of three- month outlook budget projections. Include Performance Analysis.
- Monthly analysis of Critical Path
- Monthly analysis of Environmental Assessment progress
- Responses to all review comments.

- 3.1.4. Cost Estimating.** Consultant to develop a Base Estimate that identifies the major components of project scope and their cost, defines all components of scope, and describes all scope and cost assumptions within 10 business days of notice to proceed. Consultant will update the Cost by reviewing, updating, and documenting assumptions and costs for each item, and including contingency information in the report during major plan submittals.

Deliverables:

- Base Estimate - Incorporate risk analysis and contingency information into the estimate, identifying all assumptions.
- Estimates for Initial Design Phase thru Final PS&E submittals. Incorporate risk analysis and contingency information into the estimate. Identify all assumptions.

Task 3.2 Quality Control Plan

- 3.2.1. Quality Control Plan.** Develop a project-specific quality control plan that identifies responsible personnel, technical review, checking procedures, and monitoring process. Submit within 10 business days of notice to proceed. The process shall follow the tenets of the PCDOT Interactive Project Development Process. Each major submittal shall include verification of the quality control completed on said submittal.

Deliverables:

- Project-Specific Quality Control Plan.
- Verification of quality control shall be provided with each major submittal.
- Responses to all review comments.
- Dependent upon the construction federal funding source available and timing of

construction funds. the project may use a DBB or a CMAR project Delivery method.

- The design process will also include review of the pavement section selection process when the road was constructed 40 years ago to understand how the poor soils in the area were treated. National Resources Conservation Service data indicates that there may be collapsible soils in the area which could pose compaction issues. New processes for dealing with poor soils have been developed since the road was originally constructed, and if the CMAR process is used, it will allow the contractor to integrate analysis of soil remediation into the design process. Portions of the project could lend themselves to innovative geotechnical solutions such as geogrid or a layer of treated base or subbase.
- Project design will also incorporate a design stage Road Safety Assessment (RSA) to ensure that safety is delivered at the highest possible level for the project. The RSA will further ensure that detection, mitigation, and documentation of safety risks are fully investigated. Pima County is a key participant in the region's RSA program and has had great success with design and built environment RSAs throughout the network.

Task 3.3 Utility Coordination

Assumptions:

1. Resources to gather data for utilities is being provided under Task 3.3.1., not Task 3.7.1.
2. Resources for surveying Arizona 811 information are provided in Task 3.10.6.
3. Subsurface utility designations will be shown in the strip map derived in Task 3.10.6.
4. Cultural and Biological clearance required prior to any potholing and/or geological investigations.
5. Include cutting edge trench and conduit for Broadband

- 3.3.1. Data Gathering, Utility Designation, Letter of Acceptance.** The Consultant will verify that utility base maps and prior rights documentation are complete for each utility. For consistency, a utility coordinator will be designated to be the main point of contact for all utility coordination work. The Consultant will provide and maintain an online file sharing site for project and utility information and make it accessible to utilities, County, and project team members.

The Consultant and County will establish a Utility Relocation Date whereby utilities will be required to clear the project of utility impacts identified in Task 3.3.2 Design Coordination, Utility Impact Identification. All formal utility correspondence is to be reviewed and approved by the County prior to distribution. The Consultant will initiate and conduct meetings as needed with the utilities present in the corridor. Prior to the completion of Task 3.10.7 Cultural Surveys, the Consultant will request each utility to mark its facilities, providing the approximate horizontal position on the ground surface and provide electronic files of certified horizontal survey data associated with these ground surface markings and also their above grade facilities, including service connections, all of which being tied to an accepted County control and datum, being accurate to within six inches. The Consultant will coordinate utility markings with the scheduling of Task 3.10.7 Cultural Surveys such that the locating of culture and utility markings are concurrent. Consultant shall draft onto an Existing Utilities Mapping Package (40 scale) the horizontal data surveyed by Pima County and as horizontally designated by Consultant (if necessary) and provide the County with a Letter of Acceptance from each utility indicating that the representation of the utility's facilities on the Existing Utilities Mapping Package is accurate. All utilities will be designated, located, and mapped according to ASCE Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data (CI/ASCE 38-02). The Consultant will coordinate and conduct a field review of utility information shown on the Existing Utilities Mapping Package with appropriate county and utility personnel for consistency with utility base maps and utility field survey data.

- 3.3.2. Design Coordination, Utility Impact Identification.** The Consultant will monitor the project's design for utility impacts, distribute progress design drawings to utilities for review and

identification of utility impacts; and maintain a List of Utility Impacts, said list being available to the County upon request. The Consultant will update the County as necessary on the status of utility activities and notify the County immediately of any utility unable to meet the Utility Relocation Date. Initial and Final Design Phase Plans will be provided to all utilities for their review and comments. Resources are also being provided in this task for the Utility Coordinator to attend meetings and correspond with all utilities.

3.3.3. Utility Impact Mitigation. The Consultant will initiate, coordinate, and facilitate utility impact meetings with County, utility, and appropriate team members to develop mitigation measures acceptable to the County that will clear the project of utility impacts by the Utility Relocation Date. The Consultant will update utilities as to the status of all utility impacts by the Utility Relocation Date. The Consultant will compile a List of Utility Impacts and Approved Mitigation Measures.

3.3.4. Quality Control Review. The Consultant will provide quality control reviews of the deliverables listed below.

Deliverables:

- Utility Relocation Date
- Plans for distribution to utilities
- Broadband conduits and trench coordinated plans
- Letters of Acceptance
- Meeting minutes prepared, distributed to project team, and revised as needed.
- Design plans containing updated mapping of utility information, including potholing information.
- List of utility impacts and mitigation measures.
- Responses to all review comments.
- Existing Utilities Mapping Package

Task 3.4 Public Participation

3.4.1 Engage Community to Ensure Equity

The West Valencia Road project is located in a historically underserved area with a significant minority population (over 85% Hispanic and/or Native American). Further, the project passes through the Tohono O'odham Nation San Xavier District and is a part of the Pascua Yaqui Tribe's transportation program. It will be important to understand how the project can be tailored to best serve these historically underserved communities, and a strong public outreach program will help guide those decisions.

Pima County and the Consultant will follow Pima County Community Participation and Mitigation guidelines, which ensure that interested parties have the opportunity to express their views and that project decisions are made in the overall public interest. The County's and Consultant's approach to outreach will be consistent with the USDOT features of meaningful public involvement, from understanding demographics and involving a broad representation of the community to building relationships and sharing the community's impact on project decisions. The Consultant will follow County guidelines which specify when outreach should occur during the life of a project, how communication with the community should be handled, and what potential impacts should be addressed.

Pima County was recently awarded a Safe Streets for All (SS4A) grant, which will improve safety planning. The project area is considered a target community for the County, so the Consultant shall understand SS4A work and will include understanding safety issues and working with the community to develop solutions tailored to the area.

The Consultant will complete work in accordance with the Southwest Area Mobility Study and will quantify and document existing land use and transportation network facilities in the area and develop growth and transportation network strategies to best serve the area into the future. Full stakeholder engagement is a part of this process. Engagement plans will coincide with County plans for a website which will be launched, multiple in person meetings, pop-up events (such as providing a booth at a previously scheduled farmers market in the area), and bus rider surveys.

3.4.2 Coordination with Other Projects

As a growth area with several jurisdictions located along the corridor, it is important for the West Valencia Road project to coordinate with other development and improvement projects in the area. The Tohono O'odham Nation recently received \$10M in federal grants to be used for expanding broadband infrastructure and \$5M of Arizona Broadband Development Grants (ABDG). The County and Consultant will partner with the Tohono O'odham Nation to assist in the deployment of broadband access in the vicinity of the project. One example of this collaboration is that the West Valencia Road project will include construction of joint trenches, conduit, and fiber optics to support the broadband infrastructure efforts and benefit underserved communities.

Coordinating construction on the West Valencia Road project with the construction of the broadband infrastructure has a hugely positive time saving impact and is representative of maximizing the federal government's investment in both projects. Expanding broadband infrastructure will help to close the availability gap of economic, health, and educational opportunities in the Historically Disadvantaged Communities and Areas of Persistent Poverty in the project area.

Expanding broadband in this area will not only serve residents, but will support the new library and sheriff's substation located west of the project. The library will be located within the Pascua Yaqui tribal lands along Valencia Road, and will include community and workforce services as well as health services. A partnership with the Tohono O'odham Nation to develop a small business incubator and Marketplace at the Mission Road and Valencia Road intersection at the east end of the project is also underway and must be in coordination with the design and construction plans.

3.4.3. Public Participation Plan. In consultation with Pima County, in accordance with all Federal Environmental process requirements, the Consultant will develop and implement the Public Participation Plan for the project within 25 business days from the start of the contract.

3.4.4. Public Meetings. The Consultant will attend public participation meetings and public open houses and at least one public hearing in accordance with project needs and federal environmental regulations.

Deliverables:

- Displays/Roll plots as needed.
- A public Participation Strategy
- An Environmental Assessment agency and public participation strategy
- Public Participation monthly reports

3.4.3. Quality Control Review. The Consultant will provide quality control reviews of all the deliverables listed in Task 3.4.

Task 3.5 Federal, State, and Local Coordination

3.5.1. Coordinate Between Participating Agencies.

The Consultant will coordinate with agencies, as required. The Consultant will coordinate and attend two (2) Clean Water Act Section 404 pre-application meetings with Pima County and the U.S. Army Corps of Engineers, if needed. Meetings are anticipated prior to submittal of the Preliminary Jurisdictional Delineation and submittal of Nationwide Permit #14 application. The Consultant will identify and coordinate with other agencies. All coordination will be completed in accordance with Pima County and FHWA requirements for meaningful dialogue.

The Consultant will maintain an agency coordination log documenting coordination efforts.

Deliverables:

- Display materials as needed.
- Meeting Agenda, meeting minutes, and distributed to project team, and revised as needed.
- Record of communication that documents all coordination efforts.
- Responses to all review comments.

Task 3.6 Public Art

- 3.6.1. Coordination with Artist.** The Consultant will include the project artist on the design team at 60% Design and will coordinate the work of the artist with the overall design of the project. The Consultant will incorporate artist concepts into the design plans, DCR, and EAMR and will coordinate with the CMAR if that project delivery method is used.

Pima County will select and contract separately with the artist.

- 3.6.2. Quality Control Review.** The Consultant will provide quality control reviews of the deliverables listed below.

Deliverables:

- Project Plans, DCR, and EAMR will incorporate the artist's concepts.
- Responses to all review comments.

Task 3.7 Data Gathering

Assumptions:

1. Utility data to be gathered under Task 3.3.1.
2. Noise data will be gathered

- 3.7.1. Gather Existing Information.** The Consultant will obtain and review assessor maps, zoning maps, plats, reports, Broadband facility data, and other publicly available data described in Section 3.7 of the RDM for use in developing design plans.

- 3.7.2. Site Visits During Project Design.** The Consultant will visit the site as required to obtain necessary design information.

- 3.7.3. Quality Control Review.** The Consultant will provide quality control reviews of the deliverables listed below.

Deliverables:

- Data incorporated into the DCR, Initial Design Plans and EAMR with Final Design Plans, and the Initial and Final PS&E plans, along with all other reports and plans.
- Responses to all review comments.

Task 3.8 Environmental Impact Analysis

Pima County has a long-standing commitment to sustainability, climate change, and environmental justice as evidenced by several plans. In 2002, Pima County adopted the award-winning Sonoran Desert Conservation Plan that has conserved countless cultural and natural resources while maintaining economic vitality. In 2008, the County adopted the Sustainable Action Plan which has reduced greenhouse gas emissions, potable water use, and industrial and landfill waste while conserving wildlife, plants, and natural areas. The County also has adopted design guidelines for environmentally sensitive roadways to ensure that biological, cultural, historical, and visual resources are preserved and/or enhanced with any project. In accordance with these County initiatives, the Consultant will include the following in the project:

3.8.1 Reduce Air, Water, and Noise Pollution in Underserved Communities

The West Valencia Road project will help reduce emissions to adjacent Historically Disadvantaged Communities and Areas of Persistent Poverty by reducing traffic congestion and idling time at nearby intersections. The most impacted and vulnerable residences are located on Tohono O'odham Nation lands and are less than 100 feet from this road. The Consultant in partnership with Pima County, will evaluate and model noise levels for existing and future traffic and follow Arizona Department of Transportation Noise Abatement Requirements to determine where noise mitigation may be needed. Along the corridor, nearby low income and disadvantaged neighborhoods are also impacted by cut-through traffic as drivers seek to avoid congested intersections. This project will reduce congestion, reduce cut-through traffic, reduce emissions, and mitigate noise impacts to adjacent residential areas.

The anticipated total cost savings of emissions reductions over the life of the project will be \$3,761,896 (2021 dollars). This savings is due to avoiding nearly 26 short tons of NO_x, approximately one-quarter short ton of PM 2.5, and nearly 82,000 short tons of CO₂. This project will also make fundamental stormwater improvements to eliminate persistent roadway flooding, including new culverts, drainageways and water harvesting infrastructure in the median and along the roadway edges.

3.8.2 Increase Active Transportation

The project area is primarily commercial with grocery stores, pharmacies, convenience stores, take-out food, and other services. Many residential areas are located within walking distance; however, this segment lacks sidewalks and lighting to provide safe non-vehicular access to these essential services. Indeed, three of the five fatalities in the last five years have been pedestrians, and all occurred at night when visibility was poor. Within the project area, most bus stops are unsheltered and are not ADA compliant, thus discouraging ridership for commuters and those who cannot afford to own vehicles.

This project's design will add new pedestrian, bicycle, and transit facilities to connect nearby residential areas and provide improved access for all modes and all users in the adjacent Historically Disadvantaged Communities, Areas of Persistent Poverty, low income, and underserved communities. This project's design will incentivize more local travelers to choose active transportation to make shorter trips and more people will take advantage of reliable transit service for longer-distance trips. This project's design will include new buffered bike lanes along West Valencia Road to provide safer and lower stress routes for essential trips and

improved access to the Chuck Huckelberry Loop, the regional bikeway system connecting this disadvantaged community with parks, jobs, and schools throughout the Tucson metropolitan area.

3.8.3 Incorporate Energy Efficient Infrastructure

This project as part of a key regional transportation corridor providing access to Electric Vehicle (EV) charging infrastructure on nearby Interstate 10 and Interstate 19 will support future EV and zero emission infrastructure.

3.8.4 Improve Resilience and Avoid Adverse Environmental Impacts

A 2017 analysis determined that Pima County was the eighth deadliest county in the nation for flood related deaths in the preceding 20 years. The FEMA Flood Risk Map shown below includes flood areas along the project. There were over 25 separate incidents since October 2016 where the road or connected intersection was closed due to flooding or other weather-related event, causing nearly two weeks of time during which there were closures or traffic restrictions associated with the roadway.

This project will replace and improve critical floodway infrastructure to reduce flooding, improve emergency response times, and eliminate road closures. New infrastructure will carry the 100-year flood under the roadway and will ensure all-weather access. This approach reflects Pima County's designation as a Class-3 Community for going above and beyond the federal minimum requirements for floodplain management.

- 3.8.5** Drainage structures will be wildlife friendly, consistent with Pima County's commitment to the natural environment and endangered and sensitive species. Pima County design guidelines for Environmentally Sensitive Roadways will minimize impacts to all environmental resources. This project will also incorporate native, drought-tolerant plants from Pima County's Native Plant Nursery throughout the corridor. Trees will provide shade for bus and pedestrians.

- 3.8.6** A full National Environmental Policy Act (NEPA) analysis will be conducted for the new project, including the evaluation of climate change and all direct and indirect environmental impacts. Pima County will coordinate closely with the Tohono O'odham Nation, federal agencies, and the public to eliminate, reduce, and mitigate any unavoidable impacts. FHWA DOT Regulations 23 CFR 771 will be followed as well as CEQ Regulations.

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NEPA ANALYSIS SCHEDULE

The schedule of NEPA approval process is shown below.

Date	Action
July 23	Purpose & need, alternatives, scoping letters to multiple agencies, continuous and meaningful community and agency involvement for design and environmental processes (already started).
August 2023 - September 2023	Response to Agency Scoping. Complete environmental resource surveys, cultural surveys, 4(f), climate change, prepare any required documents for public process. Although the impacts are expected to be below a level of significance, continuous public involvement is expected, and a formal process will be included.
September - November 23	Complete Environmental Analysis, including climate change impacts and all categories of impact associated with NEPA and CEQ and in accordance with 23 CFR 771.
December 23	Release NEPA document to the public for formal public review.
Jan –Feb 24	Respond to comments and finalize document for approval.
March–April 24	Complete Environmental and all required permits.

Assumptions:

1. An Environmental Impact Analysis in the form of an Environmental Assessment will be required.
2. The Environmental Assessment and all required permits will be completed for Federal Approval by April 2024.

Task 3.9 Location Report

Assumption:

1. A Location Report is needed. Please reference RDM Section 3.9.

Task 3.10 Survey and Mapping

3.10.1. Initial Planning and Reconnaissance. The Consultant will hold a formal coordination meeting with Pima County Survey prior to the start of any survey efforts to identify/discuss survey mapping project requirements and procedures and how the Consultant survey efforts will be coordinated with Pima County. Pima County will Coordinate with tribal entities as needed for intergovernmental relations.

3.10.2. Horizontal Control. The Consultant will perform a Geodetic Control Survey based on NAD 83 and NAVD 88 datums. The Consultant will also field reference control points, and other found monuments, within the existing right-of-way and outside of the construction area where necessary for the control of the design and construction.

3.10.3. Vertical Control Traverse. The Consultant will establish a bench circuit originating from PC/COT GIS vertical control points to prescribed field accuracy. The work will include setting Benchmarks as defined in the Pima County RDM, Section 3.10.

- 3.10.4. Results of Survey Drawing.** The Consultant will prepare a Results of Survey Drawing showing existing section lines, right-of-way, ownership, and existing features. Property lines will be included on the Results of Survey by the Consultant as necessary. For easement or ROW acquisitions, the Consultant will perform parcel survey(s) as a contingent item.
- 3.10.5. Survey Report.** A Survey Report is required for this project.
- 3.10.6. Utility Surveys.** The Consultant will locate underground utilities. Arizona 811 and other utility features identification methods will be located during the cultural survey. Coordination for underground utilities will be by the Consultant in coordination with Pima County, see Task 3.3.
- 3.10.7. Cultural Surveys.** The Consultant in coordination with Pima County will locate all above ground improvements, including but not limited to fences, mailboxes, culverts and manholes, drainage features and flows, trees, large shrubs, and saguaros and match-in locations along the project length. The work will also include the Consultant downloading and converting field results into MicroStation V8 CAD format.
- 3.10.8. Right-of-way of Surveys.** After analyzing the initial field survey, The Consultant in coordination with Pima County will field locate all relevant survey monuments to determine the existing right-of-way including street monuments, property corners and occupation in defining the existing right-of-way.
- 3.10.9. Roadway Design Manual Survey Efforts.** The Consultant will complete other survey related tasks as identified by and provided within the RDM.
- 3.10.10 Legal Descriptions & Reference Maps.** The Consultant will prepare legal descriptions and maps for new right-of-way, drainage easements, temporary construction easements, and other land acquisition needs if needed and as requested by Pima County. Legal description should conform to the RDM requirements, Sec 3.19.
- 3.10.11. Quality Control Review.** The Consultant in coordination with Pima County will provide quality control reviews of the Survey and Mapping deliverables listed below.

Deliverables:

- Digital files (digital photo) to the County in .tif format and digital ASCII points files in comma delimited format.
- Results of right of way survey will be provided in accordance with the Pima County RDM in strip map format showing right-of-way data (including existing and proposed right-of-way lines, parcel lot lines, parcel numbers, locations of buildings close to or within right-of-way takes, etc.) with the preliminary Right-of-Way Plan submittal. Potential acquisition and easements will be identified on the drawing.
- Responses to all review comments.

Task 3.11 Drainage Report

Assumptions:

1. The Consultant will field survey drainage ways under Task 3.10.8.
2. The Consultant shall coordinate its activities with the Pima County Regional Flood Control District (PCRFCDD)

- 3.11.1. Review Existing Plans and Reports.** The Consultant will review available plans and reports for existing subdivisions and improvements along the project alignment and identify drainage features and flows.

3.11.2. Peak Discharge Determination. The Consultant will prepare a drainage map showing watercourses and associated drainage areas for drainage crossing or parallel to the roadway. The work will include determining basin areas and other hydrologic properties for offsite drainages impacting the project. The work will also include determining the 100-year peak discharges and precipitation-induced hydrographs at key points within the watershed using PCFCD methodology.

3.11.3. Existing Hydraulic Conditions. The Consultant will use Hydrologic Engineering Center River Analysis System HEC-RAS and other appropriate flow modeling software (e.g. - Flo-2D) to evaluate existing drainage conditions where needed for channels, culverts, or other flooding. The Consultant will use these models to determine impacts of proposed improvements on existing flooding conditions.

3.11.4. Drainage Reports. The Consultant will prepare a report in the phases described in Section 3.11 of the RDM. The work includes preparing and processing the three (3) submittals described below:

Initial Design Phase Submittal. The Consultant will prepare the Initial Design Phase Submittal per Section 3.11 of the Design Manual. A full hydraulic analysis, including evaluation of overtopping of roadway and upstream and downstream impacts, will be included. The Consultant will identify potential Clean Water Act 404 permitting and right-of-way acquisition needs for cross-drainage.

Final Design Phase Submittal. The Consultant will prepare the Final Design Phase Submittal per Section 3.11 of the Design Manual.

Final PS&E Phase Submittal. The Consultant will prepare the Final PS&E Phase Submittal for the project in response to Pima County's Final Design Phase Submittal comments as well as revisions to the final project design per Section 3.11 of the Design Manual.

3.11.5. FEMA Requirements. The Consultant will develop a design which does not have impacts to the approximate Zone D Special Flood Hazard Area downstream of the project.

3.11.6 There are watersheds contributing to flow within the project area conveying stormwater runoff. The Consultant will evaluate the direction and slope of runoff, the tributaries involved including the numerous smaller, unnamed washes. The overland drainage and soil system will be analyzed. Flows reaching the Valencia Road and resultant channelization will be assessed and mitigated with appropriate culvert size and location, expect that culverts will be undersized and in need of modification.

3.11.7 Proposed Improvements

Proposed improvements impacting drainage along the roadway include roadway profile changes, pavement widening, and addition of curb. As a result, and in order to meet or exceed County and Federal design standards, cross culverts will be resized or added, pavement inlets and storm drain systems will be constructed, and erosion protection will be provided at all outfalls.

In addition to box and pipe culvert modifications and additions, collector channels and ditches along Valencia Road and intersections will be constructed within the project area. These channels and ditches will collect and convey offsite flows as well as flows generated onsite. Proposed catch basins will be sited and designed appropriately.

- 3.11.8** Hydrologic analyses for all cross-drainage structures will be conducted utilizing a 100-year, one-hour design storm event. All-weather access is provided by designing culvert crossings to convey the 100-year storm event without flows overtopping the roadway. Culverts are designed to ensure a 0.10-foot or less rise in water surface elevation outside of the right-of-way.

Pavement drainage shall be designed to keep a minimum of one travel lane free from flow during a 10-year design storm event and to ensure that less than one foot of ponding or flow occurs within the roadway during a 100-year design storm event per the Regional Pima County Flood Control District Standards Manual for Drainage Design and Floodplain Management (SMDDFM). Inlets will be designed to account for a clogging factor of 1.5 for sump

- 3.11.9. Quality Control Review.** The Consultant will provide quality control reviews of the drainage report for each submittal.

- 3.11.10** The Consultant will meet all County, State and Federal standards as it pertains to drainage, water retention, water harvesting, and flood control.

Deliverables:

- Initial Design Phase Drainage Report per Section 3.11 of the RDM
- Final Design Phase Drainage Report per Section 3.11 of the RDM
- Final PS&E Phase Drainage Report per Section 3.11 of the RDM
- Responses to all review comments.

Task 3.12 Geotechnical Investigation

Assumptions:

1. Cultural and Biological clearance required prior to any potholing and/or geological investigations.

- 3.12.1. Geotechnical Testing and Analysis and Report.** The Consultant will provide geotechnical testing, analysis, and report per Section 3.12 of the Design Manual and the Preliminary Engineering & Design (PE&D) manual of the ADOT Material Group. The geotechnical effort will correspond to 100% of the final design effort and will include investigations to develop concepts and final designs.

The Consultant will provide appropriate laboratory testing for representative soil samples. Recommendations will be developed based on applicable PCDOT standards. The results of all investigations, as well as recommendations will be provided in one consolidated geotechnical report.

Note: Prior to performing any fieldwork, Consultant will obtain right-of-way permits from Pima County, contact Arizona Bluestake for underground utility location(s), and provide traffic control according to the permit while working.

- 3.12.2. Quality Control Review.** The Consultant will provide a quality control review on the Geotechnical Report.

Deliverables:

- Geotechnical report per Section 3.12 of the RDM.
- Responses to all review comments.

Task 3.13 Pavement Design Report

3.13.1. Pavement Design Report. The Consultant will perform pavement design following the updated PCDOT methodology. The Consultant will prepare the Pavement Design Report per Section 3.13 of the Design Manual and include the following:

- A summary of the general geotechnical characteristics of the soil;
- Traffic data considerations being used for the development of the pavement structure;
- Discussion concerning the procedures and results of the pavement structure design; and
- Recommended structural sections, including alternatives, with criteria such as cost, construction and other factors considered.

3.13.2. Quality Control Review. The Consultant will provide a quality control review on the Pavement Design Report.

Deliverables:

- Pavement Design Report per Section 3.13 of the RDM.
- Responses to all review comments.

Task 3.14 Bridge Structure Selection Study/Report

Assumption:

1. A Bridge Structure Selection Report is not required for this project.

Task 3.15 Traffic Engineering Report

3.15.1. Initial Traffic Engineering Report. The Consultant will complete an Initial Traffic Engineering Report for the project in accordance with the RDM.

3.15.2. Final Traffic Engineering Report. The Consultant will complete a Final Traffic Engineering Report for the project in accordance with the RDM. The Consultant, with the CMAR if one is selected, will include a safety during construction report and a traffic safety report for transition to normal traffic flow at the completion of construction.

3.15.3. Meetings. Consultant's Traffic Engineering Report Task Leader will attend project meetings, PCDOT Traffic meetings and public meetings as needed.

3.15.4. Quality Control Review. The Consultant will provide quality control review of the Traffic Engineering Report.

Deliverables:

- Initial Traffic Report
- Final Traffic Report
- Display materials as needed.
- Meeting minutes, distributed to project team, and revised as needed.
- Responses to all review comments.

Task 3.16 Arterial Street Lighting Design Report

3.16.1 Draft Lighting Design Report. The Consultant will prepare a Draft and Final Street Lighting Report in accordance with the Pima County Roadway Design Guideline.

3.16.2. Quality Control Review. The Consultant will provide quality control review of the Street Lighting Report.

Deliverables:

- Lighting Design Report per Section 3.16 of the RDM.
- Meeting minutes, distributed to project team, and revised as needed.
- Display materials as needed.
- Responses to all review comments.

Task 3.17 Design Concept Report

- 3.17.1. Executive Summary/Project Overview and Description.** The Consultant will prepare the executive summary and project overview and description for the Design Concept Report.
- 3.17.2. Project Area Characteristics (Existing Conditions).** The Consultant will prepare the description of existing conditions, including traffic and crash data for the DCR. The COUNSULTANT will include descriptions of conditions that could result in design modifications within the project study area.
- 3.17.3. Design Standards, Criteria and Features/Alternatives.** The Consultant will prepare the description of design standards and criteria and description of major design features and alternatives considered for the DCR.
- 3.17.4. Social, Economic, and Environmental Considerations/Public Involvement Efforts & Agency Coordination.** The Consultant will prepare the description of social, economic, and environmental considerations, summarize public involvement efforts, and describe agency coordination for the DCR
- 3.17.5. Design Concept Report with Conclusions and Recommendations.** The Consultant will compile information developed from this effort and from other studies and reports into a Design Concept Report. Additionally, the Consultant will prepare the conclusions and recommendations. The Consultant will identify, develop, evaluate, and describe roadway design and as and if applicable: project constraint avoidance alternatives; construction phasing concepts; and implementation strategy.
- 3.17.6. Cost Estimate.** The Consultant will prepare preliminary project cost estimate, with quantity take-off calculations based on approximate quantities of major cost items. Right-of-way costs will be provided by PCDOT.
- 3.17.7. Quality Control Review of DCR.** The Consultant will provide a quality control review of the Design Concept Report.

Deliverables:

- Draft and Final Design Concept Report per Section 3.17 of the RDM.
- Cost estimates and quantity take-off calculations.
- Responses to all review comments.

Task 3.19 Right-Of-Way Acquisition Support

Assumptions:

1. It is anticipated that limited right-of-way acquisition will be required on this Project.

- 3.19.1. Existing Right-of-Way and Easements.** The Consultant will provide PCDOT with a list of parcels from which right-of-way or easements will be required. PCDOT will furnish any title reports required for this project based on the Consultant's list. The Consultant will review title reports and other recorded information to determine current right-of-way and easements. The Consultant will perform any research, calculations, and additional survey needed to establish

existing property and right-of-way lines to be affected by this project and integrate into mapping. Following the research, a Centerline and Right-of-Way survey will be conducted to identify and locate the controlling right-of-way monumentation, property lines, or fence lines that intersect the right-of-way.

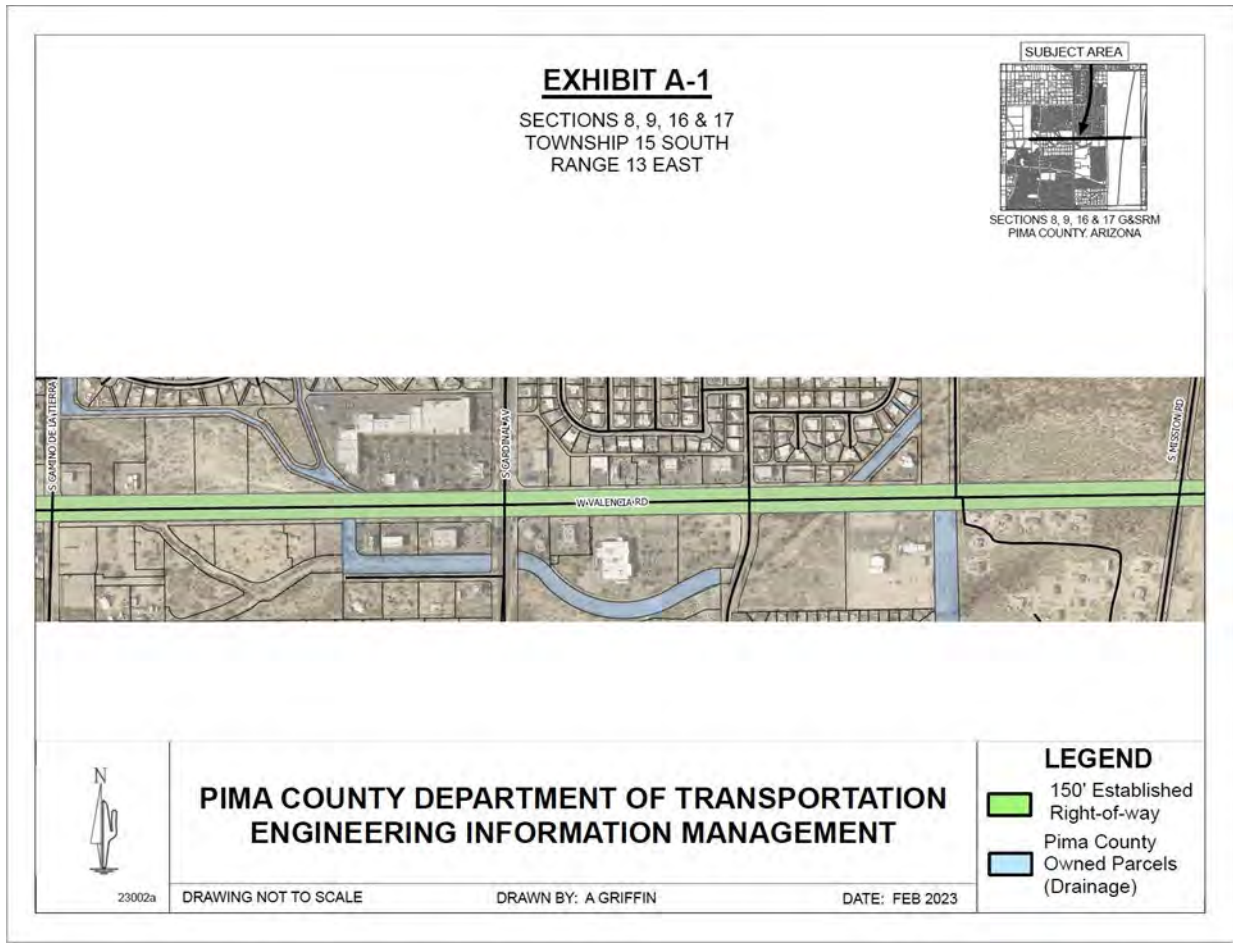
3.19.2. Right-of-Way Plans. The Consultant will prepare 1"=40' right-of-way plans for the project, as per Pima County RDM 3.19 and Appendix 3-O-1. In addition to existing information, all proposed right-of-way and/or easements required shall be shown with complete dimensions. Ownership data and areas required shall be shown. The Consultant will coordinate with and incorporate feedback from Pima County in preparing documents and in identifying properties for potential acquisition and easements.

3.19.3. Quality Control Review of Right-of-Way Documents. The Consultant will provide a quality control review of the Right-of-way documents.

Deliverables:

- Drawing showing right-of-way data with the preliminary Right-of-Way Plan submittal. Potential acquisition and easements will be identified on the drawing.
- Responses to all review comments.

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Task 3.20 Preparation of Construction Documents

- 3.20.1. Initial Design Phase Plans.** The Consultant will prepare initial roadway and striping plans. The Design Concept Plans will be at 1"=40' and will address horizontal and vertical alignment, cross sections, channelization, drainage, right-of-way, major and minor structures.
- 3.20.2. Final Design Phase Plans.** The Consultant will develop Final Design Plans per the checklist found in Chapter 3 of the RDM, including retaining walls, preliminary median openings, striping plans, irrigation plans, and cross sections. Establish initial Inroads templates, earthwork modeling, and project cost estimate for the Final Design Phase.
- 3.20.3. Initial PS&E.** The Consultant will develop Initial PS&E Plans for the project per the checklist found in Chapter 3 of the RDM, including revisions from Final Design Phase Plan submittals, adding storm drain plans, landscape plans, traffic signal plans, lighting plans, staking plans, and updating project cost estimate for the Initial PS&E.
- 3.20.4. Final PS&E.** The Consultant will develop Final PS&E Plans per the checklist found in Chapter 3 of the RDM, including revisions from Initial PS&E, including SWPPP, construction sequencing (if applicable), traffic control, special provisions, traffic signal plans, lighting plans, signing plans, and updating project cost estimate for Final PS&E.

3.20.6. Quality Control Review of Plans. The Consultant will provide a quality control review of the Stage I Design Concept Plans and Stage II Initial Construction Plans.

Deliverables:

- Initial Design Plans per the RDM Checklist, including cost estimate and quantity take-off calculations.
- Final Design Plans per the RDM Checklist, including cost estimate and quantity take-off calculations.
- Initial PS&E Plans per the RDM Checklist, including cost estimate and quantity take-off calculations.
- Final PS&E Plans per the RDM Checklist, including cost estimates, special provisions, and quantity take-off calculations.
- Responses to all review comments.

Task 3.21

The West Valencia Road project will incorporate several innovations, including Miovision signal technology, Complete Street design elements including buffered bike lanes, broadband infrastructure, and innovative project delivery methods and financing.

3.21.1 Innovative Technologies

Pima County has recently deployed Miovision technology at signalized intersections along the corridor to assist with corridor management. Miovision technology provides traffic signal network connectivity, management/ real- time monitoring, communications, maintenance alerts, traffic data, automated traffic signal performance measures, video vehicle surveillance and detection. This technology allows for improved multimodal travel efficiency, maintenance, and safety. The cameras capture each mode of transportation (including pedestrians, cyclists, and buses), turning movements, and progression data from each intersection. Data can be used to improve overall corridor travel by updating signal timings and coordination. Miovision cameras can also track near-miss collisions and other traffic patterns to help the County identify issues that may otherwise be missed.

3.21.2 The project will include multiple lines of conduit to accommodate future fiber optic lines to support broadband development and future technologies. In addition to supporting business and community needs, fiber will allow for faster response for incident management, traffic operations, and emergency services. The planned joint trench will help serve and support historically disadvantaged communities and areas of persistent poverty that do not have high-speed internet service.

3.21.3 Autonomous and connected vehicle technology will also be incorporated into the project. The Consultant will coordinate with Dr. Larry Head with the University of Arizona Transportation Research Institute in Tucson, an industry leader in this field, and will ensure design input for the project to help ensure that the West Valencia Road project delivers the most advanced infrastructure and operations to facilitate the integration of connected and autonomous vehicles.

3.21.4 The Consultant will coordinate with Pima County and their partnership with the Center for Applied Transportation Sciences (CATS) at the University of Arizona in Tucson. The CATS program is developing a travel demand model for the region which can be used to model various demand management strategies and network improvements to evaluate anticipated delays and travel speeds. This model can be used to determine complementary improvements which may further the goals for active transportation, such as increasing transit frequency.

3.21.5 The design process will also include review of the pavement section selection process when the road was constructed 40 years ago to understand how the poor soils in the area were treated. National Resources Conservation Service data indicates that there may be collapsible soils in the area which could pose compaction issues. New processes for dealing with poor soils have been developed since the road was originally constructed, the Consultant is expected to include in the design new processes for addressing poor soils and soil remediation. Portions of the project could lend themselves to innovative geotechnical solutions such as geogrid or a layer of treated base or subbase.

3.21.6 Project design will also incorporate a design stage Road Safety Assessment to ensure that safety is delivered at the highest possible level for the project. The RSA will further ensure that detection, mitigation, and documentation of safety risks are fully investigated.

Task 3.22 Multimodal accessibility. The residents in the project area as well as those in the surrounding areas who rely on West Valencia Road as a means of access for various needs will be afforded more transportation choices through this project design, expanding active transportation opportunities, reducing vehicle dependence, and reducing transportation cost burdens.

3.22.1 Integrate Land Uses to Create More Livable, Walkable Communities

There are almost no sidewalks in the project area, which impedes disadvantaged users from accessing local grocery stores, restaurants, pharmacies, schools, and churches. The lack of infrastructure also makes it difficult for the community to access bus stops to utilize transit to access workplaces and educational opportunities in the greater Pima County area. Further, the bus stops which can be accessed often do not have shelters (which makes waiting for a bus difficult in the hot desert summers) and sometimes do not even have seating available.

The West Valencia Road project design will promote safe, non-motorized travel for the community by adding sidewalks, buffered bike lanes, lighting, and ADA accessible and sheltered bus stops to help accommodate a mode shift from personal vehicles to active transportation and transit.

The Consultant and Pima County will be coordinating with several projects including low-income housing, tribal commercial areas, private commercial areas, and new residential areas to bring a mix of new development along the project corridor. The project will serve as a direct link to the planned local-serving businesses being developed by the Tohono O'odham Nation at the Mission Road/Valencia Road intersection at the east end of the project. At the Camino de la Tierra intersection on the west end of the project, a large specific planning effort is underway to create an employment hub with supporting commercial services and housing which will further the mixed-use nature of development along the corridor.

Task 3.23 to 3.29 – Not Used

Task 3.30 Additional Services

Assumptions:

1. Additional services are speculative in nature as the need for them, and the ultimate level of effort to be required is unknown. Therefore, relative budgets for each of these potential tasks have been identified, but may be further defined, and or modified, should the need for them or other efforts arise as part of the overall scope of work.

3.30.1. Utility Coordination and Survey (Additional Services) In the event a utility is unable to provide the ground marking and certified survey data requested in Task 3.3.1, the Consultant shall provide Utility Quality Level B information for the utility in accordance with ASCE Standard Guidelines for the collection and Depiction of Existing Subsurface Data (CI/ASCE 38-02), page 3.

- Updated mapping of utility information, including potholing information
- This task also accounts for additional drafting and records research to achieve Quality Level C utility line work (valves, manholes, utility lines) and then provide approximate location points to potholing service to then achieve Quality B.
- Quality Level B information for the project waterlines

3.30.2 Other Services The Consultant may be called upon to perform services unknown of or identified subsequent to the original scoping of the project. These efforts may be caused by unforeseen issues that arise after the development of this scope of work. Potential services could include the need to attend additional meetings, provide displays or summaries, perform additional analysis, provide additional design (e.g. Section 404 individual permit, noise wall design, joint trench design), or other efforts associated with the project beyond those identified within this scope of work.

Task 3.31 Post Design Services

3.31.1 Post Design Services. The Consultant may be called upon to provide services beyond the submittal of the final PS&E. PCDOT will coordinate all the Post-Design Services and will act as the principal initial contact for post-design questions. However, the following additional efforts may be required.

Phase I: Pre-Bid Services which may include but are not limited to:

- Attending pre-bid meetings
- Assisting in the preparation of addendums
- Addressing questions on the plans and specifications
- Bid evaluations

Phase II: Post-Design Services which may include but are not limited to:

- Attending the pre-construction meeting and partnering meetings if any
- Attending weekly construction meetings at the project site
- Making site observations of the work under construction
- Evaluating and/or recommending changes in the construction documents
- Providing design details and revised drawings as needed to support construction
- Reviewing shop drawings, erection procedure plans, form work details, and proposals for substitutions or "approved alternates"
- Evaluating value engineering proposals
- Preparing the "as-built" documents

END EXHIBIT A - SCOPE OF SERVICES

EXHIBIT B - COMPENSATION SCHEDULE (81 pages)

1. COST PLUS FIXED FEE SCHEDULE OF PAYMENTS

(Detailed by Major Milestone, Not to Exceed Cost by Task (Direct Labor, Indirect, and Other Direct Costs), and Fixed Fee)

2. COMPENSATION DETAILS

A. Cost Allocation and Ceilings

The compensation schedule will contain the negotiated cost allocations for each individual task. The compensation schedule will be used to monitor cost expenditures and sets the fixed price that can be charged for work pursuant to the specified task.

B. Cost Adjustments

If, for valid reason(s), Consultant notifies the Project Manager that the requisite work cannot be performed within the task's compensation allocation, and the Project Manager (PM) concurs, County will consider modifying cost allocations. The total compensation may be increased only by formal amendment to this agreement.

C. Progress Payments

It is anticipated certain elements of the Project may take longer than one (1) month to complete. These elements may be at considerable cost to Consultant prior to their full completion and acceptance by County. In such cases, at the sole discretion of County, County may authorize interim progress payments to Consultant. The invoice from Consultant will be proportionate to the actual percentage of work completed through the period covered by the invoice, as accepted by the PM.

D. The Fixed Fee for each assignment will be negotiated on a case-by-case basis. The fee will be a percent of the Consultant or Co- Consultant level of effort cost estimate agreed to by the County excluding Sub-Consultants and other direct cost estimates. The fee will be fixed for the scope of work detailed in the contract. The fixed fee percentage will be based upon historical departmental percentages for similar assignments, published industry guidelines and magnitude and duration of the assignment. Fixed Fee for engineering SubConsultants will generally follow the same guidelines established for the prime consultants but can also be negotiated on a case-by-case basis as appropriate.

E. COST ITEMS

1. Hourly Billing

a. Hourly Billing Rates

- Actual Payroll Rates within published industry standards
- Actual payroll rates for each person anticipated to be performing services on the assignment will be provided in advance of execution of the contract. Said listing will be updated on an annual basis during the term of the contract
- Hourly fee schedules for various position titles are not allowed

b. Annual Salaried Professionals

- Annual Salary individuals working a normal forty (40) hour week will be divided by two thousand eighty (2,080) hours to arrive at hourly billing rates
- Annual Salary individuals working a normal thirty-seven and one-half (37.5) hour week will be divided by one thousand nine hundred fifty (1,950) to arrive at hourly billing rates

- c. Allowable Annual Increases
 - Reasonable annual salary increases within published industry standards will be allowed and approved in advance
 - Unusually high proposed increases and increases above published industry standards will be agreed to on a case by case basis.
 - d. SubConsultants

Specific billing arrangements will be negotiated with specialty SubConsultants such as the following:

 - Attorneys
 - Financial Advisors
 - Surveyors
 - Subsurface Consultants
 - Specialty Consultants
 - e. Vacation/Holidays
 - Included in firm's audited multiplier
 - f. Sick Time
 - Included in firm's audited multiplier
 - g. Billing for non-productive idle time
 - No billing for vehicle driving time (commuting time)
 - Allow billing during air travel to Pima County for actual time worked on Pima County projects
 - Short-term assignments are negotiable
2. Multipliers
- a. Only audited multipliers following Generally Accepted Accounting Principles (GAAP) or Federal Single Audit principles are allowed
 - b. Corporate, Regional or Local Audited Multipliers of firms will be negotiated for each contract
 - c. Job Site multipliers will be negotiated in the event the County provides office space or job site trailers for the Consultant
 - d. County will consider annual audited multipliers or fixed multipliers for the contract period
3. Travel Time
- a. Air Travel
 - Allow only for time spent on aircraft working on Pima County projects
 - b. Land Travel
 - Not allowed from Phoenix Metro Area to Pima County (both ways)
 - Not allowed to and from airports
 - c. Local Travel between meetings and job sites
 - Allowed
4. Expenses
- a. Mileage (Between Phoenix Metro Area and Pima County)
 - Approve at the established County mileage rate

- Included in firm's audited multiplier or as other direct cost
 - Mileage for commuting not allowed
- b. Mileage – local
- Approve at the established County mileage rate only allowable for projects outside a radius of 50 miles from 130 W. Congress, Tucson, AZ 85701.
 - Included in firm's audited multiplier or as other direct cost
 - Mileage for commuting to and from work place not allowed
- c. Car Rental/Lease/Corporate Vehicles
- Included in firm's audited multiplier or as other direct cost
- d. Hotel/Meals
- Allow only for infrequent call-in of an out of state consultant for a limited period of time
 - Establish daily limits in accordance with Federal Guidelines and negotiable for unusual circumstances
 - Allowed charges to be identified as other direct costs
- e. IT/Phone/Internal Delivery Charges/Normal Postage/Miscellaneous/Other Administrative Charges
- Include in firm's audited multiplier
- f. Relocation, second domicile or subsistence expenses
- Negotiable on a case by case basis
- g. Reproduction Costs
- Bill as other direct costs if not in audited multiplier
- h. All other direct costs will be detailed in the contract billing
5. Unallowable Costs
- a. Bonus
- Not allowed as a direct charge or in the multiplier
- b. Entertainment Costs
- c. Marketing Costs
- Only as allowed in audited multipliers
- d. Non-identifiable Costs
- e. Donations
- Only as allowed in audited multipliers
- f. Mark-up on subconsultants
- g. Travel time from Phoenix Metro Area to Pima County (both ways)
- h. Air travel for commuting purposes

C. INVOICING

Consultant will submit invoices monthly, to the Project Manager, with appropriate supporting data and documentation and in a format as prescribed by the Project Manager. The Project Manager may delay

approval for up to five (5) work days to review the Progress Report and invoice. The invoice will tabulate the costs associated with each individual task. All Task (deliverables) and Subcontracted Service costs will be appropriately documented. The Project Manager will review and check the invoice to determine if it is complete and acceptable. If the Project Manager determines the invoice to be complete and acceptable, the Project Manager will approve the invoice and forward it for processing the payment.

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PSOMAS

7/9/2023

The attached compensation schedule to complete the Scope of Services was developed with the following assumptions.

General Project Assumptions:

1. The reconstruction limits for the West Valencia project are from Camino de la Tierra on the west end and Mission Road on the east end (a distance of approximately 1.25 miles) plus the additional length needed to tie-in to existing conditions at the ends of the project and intersecting side streets or access points. **The six-lane section will continue west of Camino de la Tierra approximately 500 feet before transitioning to match the existing roadway. The existing bus pullout west of Camino de la Tierra will also be reconstructed.**
2. It is assumed that roadway reconstruction at side streets will be limited to the vicinity of West Valencia as needed to tie-in the intersections to the new roadway improvements (500' or less for Camino de la Tierra and Mission Road; as short as practical for other access points/turnouts).
3. **Sidewalk connections will be made to the nearest side street up to ¼ mile north and south of Valencia Road along Camino de la Tierra, Cardinal Avenue and Hildreth Avenue/Westover Avenue. If Tohono O'odham is supportive and right-of-way is able to be acquired, a sidewalk connection on the north side of Valencia Road from Mission Road to Sandpiper Avenue will also be made.**
4. **Variances from County Standards will be needed to address the Complete Streets aspects of this project. The preliminary variances will be documented early in design based on initial concepts.**
5. **Variances from County Standards will be needed to address the Complete Streets aspects of this project. The preliminary variances will be documented early in design based on initial concepts. A formal variance request will be submitted following the development of the Design Concept Report.**
6. Where estimated hours are based on an assumed number (meetings, duration, etc.), that information is noted in the hourly breakdown spreadsheet.
7. The project will be delivered via the DBB delivery method. Should a CMAR be brought on board, additional meetings and coordination will be necessary and covered under the Additional Services budget.
8. No Environmental Analysis and Mitigation Report (EAMR) will be prepared for this project. An Environmental Assessment following the NEPA process will be prepared instead of an EAMR.
9. **The construction of the project will be delivered via Construction Manager at Risk (CMAR).**

Direct Cost Assumptions:

Displays – Assume 20 3'x10' displays for public meetings, pop-up events, etc.

Reproductions – Assume:

- 8000 8.5x11 B/W sheets (Reports, Misc.)
- 3000 8.5x11 color sheets (Reports, Misc.)
- 5000 11x17 B/W sheets (Plans, Misc.)
- 1000 11x17 color sheets (Design Concept Report, Misc.)
- 1000 24x36 bond (Plans)
- 300 24x36 mylar (Plans)

Subconsultant direct costs are broken down on individual proposals.

Aerial/Geomatics and Subsurface Utility Engineering costs are broken down on individual proposals.

Potholing – Assume 10 potholes for Tucson Water

Task Assumptions:

Task 1.0 – General

1. MicroStation is no longer supported by Bentley. Plans will be submitted in ACAD Civil3D format per discussions with the County.

Task 2.0 – Environmental Analysis and Mitigation Report

1. This task is removed from the Scope of Work per the assumption listed above.

Task 3.1.1 – Project Management

1. Attendance at regular project meetings is assumed to include the Project Manager, Project Engineer, average of one task leader, and representatives from subconsultants as needed based on project needs.
2. The Psomas Project Manager will assist with the selection of a CMAR contractor. This includes two meetings to prepare the release of the RFQ and participation in the selection panel (review proposals, participate in interview phase, one meeting to select CMAR).
3. Psomas will coordinate with the CMAR contractor throughout the project including review of the Guaranteed Maximum Price (GMP) and addressing CMAR comments on the plan submittals.

Task 3.2.1 – Quality Control Plan

1. Pavement Section Selection – This task will be addressed under Task 3.21.5
2. Road Safety Assessment – Psomas will provide previously prepared documents and exhibits (Traffic Engineering Report, Project Plans, etc.) as needed. Psomas will attend the RSA Kick-off meeting and wrap-up. Psomas will coordinate with the County on responses to the RSA recommendations. It is assumed that the recommendations that will be implemented into the project will be incorporated into the next submittal stage following the RSA.

Task 3.3 – Utility Coordination

1. A full subsurface utility engineering (SUE) investigation will be completed. Up to 10 additional potholes are included.

Task 3.4 – Public Participation

1. County to develop initial mailing list. Kaneen to expand mailing list to include additional members of the public including the Tohono O'odham and Pascua Yaqui.
2. One on one direct engagement with businesses within project limits will be held with up to 72 businesses.
3. Up to three two-hour Citizen's Advisory Committee meetings will be held.
4. Up to four two-hour Tohono O'odham and Pascua Yaqui tribal coordination meetings will be held.
5. Up to six one-hour elected official meetings will be held.
6. Up to five two-hour community events will be held.
7. Up to three public meetings will be held with postcards and newspaper ads and follow-up opinion questionnaire postcards. Bilingual outreach included.
8. One two-hour public hearing is assumed.
9. A bilingual project information phone line and email address will be developed and monitored.
10. The existing Social Pinpoint SWAM website will be updated for the West Valencia project.

Task 3.5 – Federal, State and Local Coordination

1. Up to two virtual pre-application meetings with the Corps will be held.
2. A Nationwide Permit (NWP) 12 with preconstruction notification is anticipated. Should an individual permit be necessary, it will be covered under additional services.
3. Up to twelve additional coordination meetings with various agencies are included.
4. Psomas will assist the County Project Manager with the completion of the FHWA/Pima County agreement and the metrics for measurement of success.

5. Psomas will assist the County Project Manager with the completion of forms for the environmental clearance, right-of-way clearance, utility clearance and materials clearance as a part of the federal construction funding authorization request.

Task 3.6 – Public Art

1. The proposed artwork type and location is unknown; therefore, the coordination effort assumes that the design plans will provide the appropriate layout/grading for the art location. Additional design work or details, including a foundation plan are not included in this level of effort.
2. Psomas will assist with the artist selection including evaluating artist proposals and attending up to 6 public art meetings.

Task 3.8 – Environmental Impact Analysis

1. A traffic noise study per FHWA, ADOT and County requirements will be prepared.
2. Cultural resource surveys will be conducted by the County.
3. A visual assessment will be completed per the Pima County Environmentally Sensitive Roadway Design Guidelines.

Task 3.9 – Location Report

1. Since there will not be alternative alignments, it is assumed that a Location Report will not be needed for this project.

Task 3.10 – Survey and Mapping

1. 3.10.1 – One 2-hour coordination meeting with the County will be held prior to the start of survey efforts.
2. 3.10.2 – Assume 4 sectional corners to reference and up to 20 centerline/intersection monuments.
3. 3.10.3 – Assume 3 miles of level runs/spurs with BMs every ~500 feet.
4. 3.10.5 – Geodetic Control Statement and General Notes on the title sheet will be provided.
5. 3.10.7 – Format will be ACAD Civil3D.
6. 3.10.10 – Assume up to 15 legal descriptions and reference maps and 15 temporary construction easements.
7. It is assumed that missing monument (unless a sectional corner) will not be re-set and a Record of Survey will not be required.

Task 3.11 – Drainage Report

1. Peak flows will also be established for the 10-year storm event as necessary for pavement drainage calculations. Peak flow rates will not be provided for storm event outside of the 10-year and 100-year frequencies.
2. Hydraulic modeling will be provided for the 10-yr and 100-yr storm events for which discharge rates were established. Floodplain mapping will be provided where flows exceed 100cfs. It is assumed that other methods of analyses such as normal depth flows, HY-8 or Culvertmaster are acceptable when flows do not exceed the 100cfs regulatory value.
3. Overland drainage and soil system is assumed to mean identification of key discharge points along the project and the use of the NRCS soil surveys to classify soil conditions with respect to the peak discharge assessment, and that a rainfall runoff on grid two-dimensional model and sediment transport analyses are not required.
4. It is assumed that all-weather access may also include flows less than one foot in depth across or along the roadway, and that should impacts greater than 0.10 feet be necessary, drainage easements may be acquired to accommodate those increases.
5. It is assumed that water retention refers to the depth of ponding in water harvesting areas and that the project is not required to provide retention/detention basins due to minimal increases in runoff associated with small areas of additional imperviousness.
6. Coordination with and participation in up to four internal meetings with the City Department of Transportation and Pima County Flood Control as related to the drainage analysis, design and review comments is included in the scope of work. It is anticipated that a single comment resolution meeting for each submittal will be required.

West Valencia
Scope of Work Assumptions

7. CLOMR/LOMR and FEMA coordination excluded.
8. 2D hydrologic modeling and sediment supply and transport calculations and modeling are excluded.

Task 3.12 – Geotechnical Investigation

1. ROW use permit fees will be waived by Pima County for this project.

Task 3.15 – Traffic Engineering

1. Traffic volume data collected for the SWAM study and RAISE Grant application will be used where available; otherwise, new traffic volume data will be collected. Miovision data will not be used.
2. Peak period volumes will be collected at the Valencia Road/Camino de la Tierra, Valencia Road/Westover Avenue, and Valencia Road/Mission Road intersections and a 24-hour classification count will be collected on Valencia Road between Cardinal Avenue and Camino de la Tierra. No other traffic volume data will be collected.
3. Pima County will provide existing signal timing and/or coordination data.
4. The SWAM study will include short-term volume forecasts which can be applied to this report. Volume forecasting beyond the timeline in the SWAM study will be estimated based on the assumed growth in the RAISE Grant application.
5. This scope does not include the safety during construction report or traffic safety report for transition to normal traffic flow at the completion of construction. If a CMAR is selected, a separate scope and fee will be provided for those documents as additional services.

Task 3.16 – Arterial Lighting Design

1. For added safety, arterial lighting and pedestrian scale lighting will be added throughout the length of the project where there is not existing lighting. The 2012 City of Tucson/Pima County Outdoor Lighting Code will be referenced to comply with international dark sky association guidelines.
2. It is assumed that PCDOT will provide the preferred type of luminaire to be evaluated in the photometric analysis.
3. Pedestrian scale lighting will be added throughout the length of the improvements.

Task 3.19 – Right-of-Way

1. Based on research of existing parcels, it is anticipated that up to 15 title reports will be requested and reviewed.

Task 3.20 – Construction Documents

1. Design and PS&E Construction documents will cover the limits described in the general project assumptions.
2. This fee estimate has not included any level of effort to complete the design of noise walls, should they be required based on the noise analysis.
3. Retaining walls, custom engineered culvert structures, and other major structural design elements may be utilized on the project but the related extent of effort is not able to be determined at this time and has not been included in the estimated fee.
4. Construction sequencing and traffic control plans are excluded from the plans; however, Psomas will assist the CMAR with questions regarding the preparation of the plans.
5. This fee estimate includes modifications to three full signalized intersections and three HAWKs/BikeHAWKs/Pelicans.
6. It is anticipated that the existing culverts along Valencia will pass the 100-year flow below the road. These culverts will be extended and wildlife friendly features will be added. Culverts will not be upsized to accommodate wildlife.
7. Sanitary sewer system modifications will be limited to adjustment of existing manhole rims to final grade.
8. Water modification plans will be limited to the lowering of the existing mains (12" and 24") at the proposed box culvert under Camino de la Tierra just north of Valencia Road. It is assumed that the rest of the water system within the project limits will not be in conflict with the improvements.

Task 3.21 – Innovative Technologies

1. The County will provide Miovision data for the signalized intersections in the study area for the days on which traffic counts are conducted. Volumes will be compared between the two sources to determine the validity of the Miovision data.
2. The County will provide Miovision data for the corridor to aid in signal coordination.
3. Psomas will develop a fiber optic conduit plan to accommodate future fiber optic lines to support broadband development and future technologies as outlined in the Middle Mile High Speed Broadband grant to serve underserved communities. The plan will include two microducts with seven channel conduit and vaults every 2,500 to 3,000 feet. The plan will not include the fiber lines. A configuration of a joint trench will be developed in conjunction with the plan layout and coordinated with Pima County. The layout of the fiber optic conduit plan will be included with the roadway lighting plans. Up to four coordination meetings with the Middle Mile High Speed Broadband grant administrator is included in this task.
4. Five lane miles of existing PCCP will be investigated for reuse or recycling on the project using Ground Penetrating Radar (GPR). An allowance of \$5000 has been included in the fee for coordination with specialty contractors as needed.

Task 3.22 – Integrate Land Uses to Create More Livable, Walkable Communities

1. The Planning Center will advise on land use matter and prepare one land use exhibit depicting parcels planned for development or redevelopment in the study area.

Tasks B and C – Additional Services and Post Design Services

1. Budget included for these tasks are estimates to establish an approximate placeholder for the types of efforts described in the Scope of Services. These funds will not be used unless authorized in writing by the County.

PSOMAS DIRECT EXPENSES

West Valencia Road

PSOMAS

ESTIMATED DIRECT LABOR (Psomas)

<u>Classification</u>	<u>Estimated Man-hours</u>	<u>Direct+OH Labor Rate</u>	<u>Direct Hourly Rate</u>	<u>Loaded Labor Costs</u>
Project Principal	70	\$ 278.76	\$ 100.00	\$ 19,513.20
Sr. Project Manager	1,682	\$ 207.68	\$ 74.50	\$ 349,317.76
Sr. Project Engineer	3,256	\$ 167.26	\$ 60.00	\$ 544,598.56
Project Engineer	3,392	\$ 135.90	\$ 48.75	\$ 460,972.80
Designer	4,984	\$ 110.81	\$ 39.75	\$ 552,277.04
Survey Manager	134	\$ 154.01	\$ 55.25	\$ 20,637.34
Project Surveyor	480	\$ 143.56	\$ 51.50	\$ 68,908.80
Party Chief	88	\$ 94.78	\$ 34.00	\$ 8,340.64
2-Person Crew	280	\$ 163.07	\$ 58.50	\$ 45,659.60
Survey Tech	756	\$ 91.99	\$ 33.00	\$ 69,544.44
Administration	48	\$ 91.29	\$ 32.75	\$ 4,381.92
Total	15,170			\$ 2,144,152.10

ESTIMATED DIRECT EXPENSES

(Listed by Item at Estimated Actual Cost)

<u>Item</u>	<u>Quantity</u>	<u>Amount</u>	<u>Total</u>
Displays Plot/Mount	1	\$ 2,000.00	\$ 2,000.00
Traffic Counts (Field Data Services of Arizona)	4	\$ 285.00	\$ 1,140.00
Reproductions	1	\$ 4,000.00	\$ 4,000.00
Aerial - Flight/Mapping	1	\$ 10,410.00	\$ 10,410.00
Subsurface Utility Engineering - Traffic Control	1	\$ 50,500.00	\$ 50,500.00
Potholing	10	\$ 2,000.00	\$ 20,000.00
Direct Expenses TOTAL			\$ 88,050.00

<u>Subconsultant</u>	<u>Total</u>
Wheat Design	\$ 77,372.00
Kaneen	\$ 172,434.00
WestLand	\$ 139,041.81
WSP	\$ 107,420.97
Alta	\$ 19,869.72
The Planning Center	\$ 5,600.00
Subconsultant TOTAL	\$ 521,738.50

TOTAL ESTIMATED LABOR (Psomas)	\$ 2,144,152.10
FEE (10%)	\$ 214,415.21
TOTAL ESTIMATED DIRECT COSTS (Psomas)	\$ 88,050.00
TOTAL ESTIMATED OUTSIDE SERVICES	\$ 521,738.50
SUBTOTAL	\$ 2,968,355.81

ADDITIONAL SERVICES/POST DESIGN SERVICES

Additional Services	\$ 315,701.24
Post Design Services	\$ 231,218.24
TOTAL ADDITIONAL SERVICES/POST-DESIGN SERVICES	\$ 546,919.48

TOTAL ESTIMATED COST \$ 3,515,275.29

CONTRACT TOTAL \$ 3,515,275.29

Psomas

Project Fee Estimate / Authorized Task List

Labor Cost = Direct Labor Rate + Overhead

Project Number:

Project Name:

Project Manager:

Date:

7PIM230101

West Valencia

Kevin Thornton

8/7/2023

BLI No.	Design Description	Project Principal \$ 278.76 / Hr. Hrs. Amount	Sr. Project Manager \$ 207.68 / Hr. Hrs. Amount	Sr. Project Engineer \$ 167.26 / Hr. Hrs. Amount	Project Engineer \$ 135.90 / Hr. Hrs. Amount	Designer \$ 110.81 / Hr. Hrs. Amount	Survey Manager \$ 154.01 / Hr. Hrs. Amount	Project Surveyor \$ 143.56 / Hr. Hrs. Amount	Party Chief \$ 94.78 / Hr. Hrs. Amount	2-Person Crew \$ 163.07 / Hr. Hrs. Amount	Survey Tech \$ 91.99 / Hr. Hrs. Amount	Administration \$ 91.29 / Hr. Hrs. Amount	Intern \$ 55.75 / Hr. Hrs. Amount	Psomas Labor Cost	Fee 10%	Subconsultants Amount	Task Total										
Task 3.1	Project Management																										
3.1.1	Project Management	6	\$ 1,673	152	\$ 31,567	120	\$ 20,071	152	\$ 20,657	-	\$ -	-	\$ -	-	\$ -	-	\$ -	40	\$ 3,652	-	\$ -	\$77,619.52	\$7,761.95	\$19,456.44	\$104,837.91		
	Stakeholder Coordination			48		36		36																			
	Project Contact List (Initial and Updates)			6																							
	Misc. Project Administration (Correspondence, etc.)	4		54		36		36										40									
	CMAR Selection			20																							
	CMAR Coordination	2		24		48		80																			
3.1.2	Meetings and Communication	8	\$ 2,230	208	\$ 43,197	202	\$ 33,787	182	\$ 24,734	54	\$ 5,984	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$109,931.58	\$10,993.16	\$33,316.44	\$154,241.18		
	Weekly Progress Meetings (52 meetings)			104		104		104																			
	Internal Team Meetings/Sub Coordination	8		36		36		36																			
	Pre-review Overview Meetings (4 submittal stages)			16		16																					
	Major Review Comments Meetings (4 submittal stages)			16		16		16																			
	Minor Review Comment Meetings			12		12		8																			
	Additional Miscellaneous Meetings			24		18		18																			
3.1.3	Schedule - Initial and Updates	2	\$ 558	12	\$ 2,492	8	\$ 1,338		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$4,387.76	\$438.78		\$4,826.54		
3.1.4	Cost Estimating - Base Estimate		\$ -	16	\$ 3,323	16	\$ 2,676	32	\$ 4,349	40	\$ 4,432		\$ -		\$ -		\$ -		\$ -		\$ -	\$14,780.24	\$1,478.02		\$16,258.26		
	Total Project Management	16	\$ 4,460	388	\$ 80,580	346	\$ 57,872	366	\$ 49,739	94	\$ 10,416	-	\$ -	-	\$ -	-	\$ -	-	\$ -	40	\$ 3,652	-	\$ -	\$206,719.10	\$20,671.91	\$52,772.88	\$280,163.89
Task 3.2	Quality Control Plan																										
3.2.1	Quality Control Plan	2	\$ 558	16	\$ 3,323	32	\$ 5,352	-	\$ -	16	\$ 1,773	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$11,005.68	\$1,100.57		\$12,106.25
	Quality Control Plan	2		16		32				16																	
	Total Quality Control Plan	2	\$ 558	16	\$ 3,323	32	\$ 5,352	-	\$ -	16	\$ 1,773	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$11,005.68	\$1,100.57		\$12,106.25
Task 3.3	Utility Coordination																										
3.3.1	Data Gathering, Utility Designation, Letter of Acceptance	-	\$ -	88	\$ 18,276	60	\$ 10,036	96	\$ 13,046	452	\$ 50,086	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$91,443.96	\$9,144.40		\$100,588.36
	Initial Utility Meetings (Assume 4)			12		12				12																	
	Utility Designation, Data Gathering			60		32		40		400																	
	Existing Utility Mapping Package (40 Scale, Double VP)			8		8		40		40																	
	Coordinate Letters of Acceptance			8		8		16																			
3.3.2	Design Coord, Util Impact Identification	-	\$ -	28	\$ 5,815	60	\$ 10,036	40	\$ 5,436	40	\$ 4,432	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$25,719.04	\$2,571.90		\$28,290.94
	Utility Impact Identification, Coordination			8		40		20		40																	
	Utility Meetings through Design (Assume 10)			20		20		20																			
3.3.3	Utility Impact Mitigation		\$ -	16	\$ 3,323	40	\$ 6,690	40	\$ 5,436	40	\$ 4,432		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$19,881.68	\$1,988.17		\$21,869.85
3.3.4	Quality Control Review		\$ -	12	\$ 2,492	24	\$ 4,014		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$6,506.40	\$650.64		\$7,157.04
	Total Utility Coordination	-	\$ -	144	\$ 29,906	184	\$ 30,776	176	\$ 23,918	532	\$ 58,951	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$143,551.08	\$14,355.11		\$157,906.19
Task 3.4	Public Participation																										
3.4.1	Engage Community to Ensure Equity	2	\$ 558	30	\$ 6,230	26	\$ 4,349		\$ -	80	\$ 8,865		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$20,001.48	\$2,000.15	\$86,144.00	\$108,145.63
3.4.2	Coordination with Other Projects	2	\$ 558	16	\$ 3,323	8	\$ 1,338		\$ -	8	\$ 886		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$6,104.96	\$610.50	\$3,620.00	\$10,335.46
3.4.3	Public Participation Plan		\$ -	4	\$ 831	2	\$ 335		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$1,165.24	\$116.52	\$3,650.00	\$4,931.76
3.4.4	Public Meetings	2	\$ 558	24	\$ 4,984	22	\$ 3,680	16	\$ 2,174	36	\$ 3,989		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$15,385.12	\$1,538.51	\$70,407.79	\$87,331.42
	Public Meetings (3 Meetings)	2		12		12		12																			
	Public Hearing			4		4		4																			
	Preparation of Public Meeting Materials			8		6		36																			
3.4.3	Quality Control Review		\$ -	2	\$ 415	4	\$ 669		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$1,084.40	\$108.44		\$1,192.84
	Total Public Participation	6	\$ 1,673	76	\$ 15,784	62	\$ 10,370	16	\$ 2,174	124	\$ 13,740	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$43,741.20	\$4,374.12	\$163,821.79	\$211,937.11
Task 3.5	Federal, State and Local Coordination																										
3.5.1	Coordination Between Participating Agencies	-	\$ -	52	\$ 10,799	56	\$ 9,367	16	\$ 2,174	72	\$ 7,978	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$30,318.64	\$3,031.86	\$11,993.98	\$45,344.48
	Agency Meetings (12 Meetings)			24		24				40																	
	Preparation of Materials			4		8		8		24																	
	Assist with FHWA/Pima County Agreement			8		8																					
	Assist with Clearances			16		16		8		8																	
	Total Federal, State and Local Coordination	-	\$ -	52	\$ 10,799	56	\$ 9,367	16	\$ 2,174	72	\$ 7,978	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$30,318.64	\$3,031.86	\$11,993.98	\$45,344.48
Task 3.6	Public Art																										
3.6.1	Coordination with Artist	-	\$ -	44	\$ 9,138	18	\$ 3,011	8	\$ 1,087	72	\$ 7,978	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$21,214.12	\$2,121.41	\$3,156.00	\$26,491.53
	Assist with Selection of Artist			24																							
	Coordination with Artist			8		4				32																	
	Incorporation into Design Documents			4		8		8		40																	
3.6.2	Quality Control Review		\$ -	8	\$ 1,661	6	\$ 1,004		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$2,665.00	\$266.50		\$2,931.50
	Total Public Art	-	\$ -	52	\$ 10,799	24	\$ 4,014	8	\$ 1,087	72	\$ 7,978	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$23,879.12	\$2,387.91	\$3,156.00	\$29,423.03
Task 3.7	Data Gathering																										
3.7.1	Gather Existing Information		\$ -	4	\$ 831	4	\$ 669	40	\$ 5,436		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$6,935.76	\$693.58		\$7,629.34
3.7.2	Site Visits During Project Design (Assume 4)		\$ -	16	\$ 3,323	16	\$ 2,676	16	\$ 2,174		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$8,173.44	\$817.34		\$8,990.78
3.7.3	Quality Control Review		\$ -	8	\$ 1,661	6	\$ 1,004		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$2,665.00	\$266.50		\$2,931.50
	Total Data Gathering	-	\$ -	28	\$ 5,815	26	\$ 4,349	56	\$ 7,610	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$17,774.20	\$1,777.42		\$19,551.62
Task 3.8	Environmental Impact Analysis																										
3.8.1	Reduce Air, Water, & Noise Pollution in Underserved Communities		\$ -	2	\$ 415	16	\$ 2,676		\$ -	16	\$ 1,773		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$4,864.48	\$486.45	\$21,555.33	\$26,906.26
3.8.2	Increase Active Transportation		\$ -	4	\$ 831	16	\$ 2,676		\$ -	16	\$ 1,773		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$5,279.84	\$527.98		\$5,807.82
3.8.3	Incorporate Energy Efficient Infrastructure		\$ -	\$ -		\$ -		\$ -		\$ -			\$ -		\$ -		\$ -		\$ -		\$ -		\$ -				
3.8.4	Improve Resilience and Avoids Adverse Environmental Impacts		\$ -	2	\$ 415	8	\$ 1,338		\$ -	8	\$ 886		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$2,639.92	\$263.99		\$2,903.91
3.8.5	Wildlife Friendly Drainage Structures		\$ -	4	\$ 831	16	\$ 2,676		\$ -	16	\$ 1,773		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$5,279.84	\$527.98		\$5,807.82
3.8.6	NEPA Analysis		\$ -	8	\$ 1,661	16	\$ 2,676		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$4,337.60	\$433.76	\$86,143.40	\$90,914.76
	Total Environmental Impact Analysis	-	\$ -	20	\$ 4,154	72	\$ 12,043	-	\$ -	56	\$ 6,205	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$22,401.68	\$2,240.17	\$107,698.73	\$132,340.58
Task 3.10	Survey and Mapping																										
3.10.1	Initial Planning and Reconnaissance		\$ -		\$ -		\$ -		\$ -	2	\$ 308	4	\$ 574		\$ -		\$ -		\$ -	8	\$ 730		\$ -	\$1,612.58	\$161.26		\$1,773.84
3.10.2	Horizontal Control		\$																								

Psomas

Project Fee Estimate / Authorized Task List

Labor Cost = Direct Labor Rate + Overhead

Project Number:	7PIM230101
Project Name:	West Valencia
Project Manager:	Kevin Thornton
Date:	8/7/2023

BLI No.	Design Description	Project Principal \$ 278.76 Hrs.	/ Hr. Amount	Sr. Project Manager \$ 207.68 Hrs.	/ Hr. Amount	Sr. Project \$ 167.26 Hrs.	Engineer / Hr. Amount	Project Engineer \$ 135.90 Hrs.	/ Hr. Amount	Designer \$ 110.81 Hrs.	/ Hr. Amount	Survey Manager \$ 154.01 Hrs.	/ Hr. Amount	Project Surveyor \$ 143.56 Hrs.	/ Hr. Amount	Party Chief \$ 94.78 Hrs.	/ Hr. Amount	2-Person Crew \$ 163.07 Hrs.	/ Hr. Amount	Survey Tech \$ 91.99 Hrs.	/ Hr. Amount	Administration \$ 91.29 Hrs.	/ Hr. Amount	Intern \$ 55.75 Hrs.	/ Hr. Amount	Psomas Labor Cost	Fee 10%	Subconsultants Amount	Task Total
3.10.7	Culture Surveys	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	4	\$ 616	52	\$ 7,465	32	\$ 3,033	80	\$ 13,046	144	\$ 13,247	-	\$ -	-	\$ -	\$37,406.28	\$3,740.63		\$41,146.91
	Field Survey											4		12		32		80		24									
	Aerial Survey													40						120									
3.10.8	Right-of-Way Surveys		\$ -		\$ -		\$ -		\$ -		\$ -	20	\$ 3,080	80	\$ 11,485	24	\$ 2,275	80	\$ 13,046	60	\$ 5,519	\$ -		\$ -	\$ -	\$35,404.72	\$3,540.47		\$38,945.19
3.10.9	Roadway Design Manual Survey Efforts		\$ -		\$ -		\$ -		\$ -		\$ -	2	\$ 308	16	\$ 2,297		\$ -		\$ -	8	\$ 736			\$ -	\$ -	\$3,340.90	\$334.09		\$3,674.99
3.10.10	Legal Descriptions & Reference Maps (15 Legals, 15 TCEs)		\$ -		\$ -		\$ -		\$ -		\$ -	24	\$ 3,696	80	\$ 11,485		\$ -		\$ -	120	\$ 11,039			\$ -	\$ -	\$26,219.84	\$2,621.98		\$28,841.82
3.10.11	Quality Control Review		\$ -		\$ -		\$ -		\$ -		\$ -	4	\$ 616	32	\$ 4,594		\$ -		\$ -	16	\$ 1,472			\$ -	\$ -	\$6,681.80	\$668.18		\$7,349.98
	Total Survey and Mapping	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	106	\$ 16,325	368	\$ 52,830	88	\$ 8,341	280	\$ 45,660	644	\$ 59,242	8	\$ 730	-	\$ -	\$183,127.26	\$18,312.73		\$201,439.99
Task 3.11	Drainage Report																												
3.11.1	Review Existing Plans and Reports		\$ -	2	\$ 415	24	\$ 4,014		\$ -	24	\$ 2,659		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$7,089.04	\$708.90		\$7,797.94
3.11.2	Peak Discharge Determination		\$ -	2	\$ 415	8	\$ 1,338		\$ -	36	\$ 3,989		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$5,742.60	\$574.26		\$6,316.86
3.11.3	Existing Hydraulic Conditions		\$ -	4	\$ 831	48	\$ 8,028		\$ -	24	\$ 2,659		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$11,518.64	\$1,151.86		\$12,670.50
3.11.4	Drainage Reports	-	\$ -	20	\$ 4,154	80	\$ 13,381	-	\$ -	144	\$ 15,957	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$33,491.04	\$3,349.10		\$36,840.14
	Initial Design Phase Submittal				8		40				80																		
	Final Design Phase Submittal				8		24				40																		
	Final PS&E Phase Submittal				4		16				24																		
3.11.5	FEMA Requirements		\$ -	4	\$ 831	4	\$ 669		\$ -	8	\$ 886		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$2,386.24	\$238.62		\$2,624.86
3.11.6	Contributing Watersheds		\$ -	8	\$ 1,661	8	\$ 1,338		\$ -	16	\$ 1,773		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$4,772.48	\$477.25		\$5,249.73
3.11.7	Proposed Improvements		\$ -	4	\$ 831	40	\$ 6,690		\$ -	80	\$ 8,865		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$16,385.92	\$1,638.59		\$18,024.51
3.11.8	Hydraulic Analysis		\$ -	8	\$ 1,661	16	\$ 2,676		\$ -	32	\$ 3,546		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$7,883.52	\$788.35		\$8,671.87
3.11.9	Quality Control Review		\$ -	8	\$ 1,661	24	\$ 4,014		\$ -	12	\$ 1,330		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$7,005.40	\$700.54		\$7,705.94
3.11.10	County, State and Federal Standards		\$ -	2	\$ 415	4	\$ 669		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$1,084.40	\$108.44		\$1,192.84
	Total Drainage Report	-	\$ -	62	\$ 12,876	256	\$ 42,819	-	\$ -	376	\$ 41,665	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$97,359.28	\$9,735.93		\$107,095.21
Task 3.12	Geotechnical Investigation																												
3.12.1	Geotech Testing and Analysis and Report		\$ -	24	\$ 4,984	8	\$ 1,338		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$6,322.40	\$632.24	\$48,593.08	\$55,547.72
3.12.2	Quality Control Review		\$ -	4	\$ 831	2	\$ 335		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$1,165.24	\$116.52		\$1,281.76
	Total Geotechnical Investigation	-	\$ -	28	\$ 5,815	10	\$ 1,673	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$7,487.64	\$748.76	\$48,593.08	\$56,829.48
Task 3.13	Pavement Design Report																												
3.13.1	Pavement Design Report	-	\$ -	10	\$ 2,077	16	\$ 2,676	24	\$ 3,262	16	\$ 1,773	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$9,787.52	\$978.75	\$13,268.00	\$24,034.27
	EASL Calculations				2			24																					
	Coordinate Pavement Design				8		16			16																			
3.13.2	Quality Control Review		\$ -	4	\$ 831	2	\$ 335		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$1,165.24	\$116.52		\$1,281.76
	Total Pavement Design Report	-	\$ -	14	\$ 2,908	18	\$ 3,011	24	\$ 3,262	16	\$ 1,773	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$10,952.76	\$1,095.28	\$13,268.00	\$25,316.04
Task 3.15	Traffic Engineering Report																												
3.15.1	Initial Traffic Engineering Report	6	\$ 1,673	4	\$ 831	32	\$ 5,352	36	\$ 4,892	80	\$ 8,865	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$21,612.80	\$2,161.28		\$23,774.08
	Traffic Counts Coordination					4		2		4																			
	Extended Traffic Forecast (beyond SWAM forecast)	2				4				4																			
	Future LOS Evaluations	2				6		6		20																			
	Identify Improvements	2				8		12		12																			
	Study Preparation			4		10		16		40																			
3.15.2	Final Traffic Engineering Report	2	\$ 558	2	\$ 415	8	\$ 1,338	8	\$ 1,087	22	\$ 2,438	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$5,835.98	\$583.60		\$6,419.58
	Comment Responses					4		4		6																			
	Final Traffic Engineering Report	2		2		4		4		16																			
3.15.3	Meetings	4	\$ 1,115	8	\$ 1,661	16	\$ 2,676		\$ -	16	\$ 1,773		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$7,225.60	\$722.56		\$7,948.16
3.15.4	Quality Control Review	4	\$ 1,115		\$ -	4	\$ 669		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$1,784.08	\$178.41		\$1,962.49
	Total Traffic Engineering Report	16	\$ 4,460	14	\$ 2,908	60	\$ 10,036	44	\$ 5,980	118	\$ 13,076	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$36,458.46	\$3,645.85		\$40,104.31
Task 3.16	Arterial Street Lighting Design Report																												
3.16.1	Draft/Final Lighting Report	2	\$ 558	12	\$ 2,492	136	\$ 22,747	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$25,797.04	\$2,579.70		\$28,376.74
	Photometric Requirements and Analysis	2		12		80																							
	Draft Lighting Report					40																							
	Final Lighting Report					16																							
3.16.2	Quality Control Review		\$ -	2	\$ 415	6	\$ 1,004		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$1,418.92	\$141.89		\$1,560.81
	Total Arterial Street Lighting Design Report	2	\$ 558	14	\$ 2,908	142	\$ 23,751	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$27,215.96	\$2,721.60		\$29,937.56
Task 3.17	Design Concept Report (DCR)																												
3.17.1	Executive Summary/Project Overview and Description	-	\$ -	40	\$ 8,307	120	\$ 20,071	60	\$ 8,154	60	\$ 6,649	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$43,181.00	\$4,318.10	\$8,279.41	\$55,778.51
	Draft Report Writing/Preparation			24		80		40		40																			
	Final Report Writing/Revisions			16		40		20		20																			
3.17.2	Project Area Characteristics (Existing Conditions)		\$ -	12	\$ 2,492	16	\$ 2,676	24	\$ 3,262	40	\$ 4,432		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$12,862.32	\$1,286.23		\$14,148.55
3.17.3	Design Standards, Criteria and Features/Alternatives	4	\$ 1,115	40	\$ 8,307	40	\$ 6,690	40	\$ 5,436	60	\$ 6,649		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$28,197.24	\$2,819.72		\$31,016.96
3.17.4	Social, Economic, and Environmental Considerations/Public Involvement	2	\$ 558	20	\$ 4,154	40	\$ 6,690	20	\$ 2,718	40	\$ 4,432		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$18,551.92	\$1,855.19		\$20,407.11
3.17.5	DCR with Conclusions and Recommendations		\$ -	40	\$ 8,307	40	\$ 6,690	16	\$ 2,174	16	\$ 1,773		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$18,944.96	\$1,894.50		\$20,839.46
3.17.6	Cost Estimate		\$ -	16	\$ 3,323	32	\$ 5,352	32	\$ 4,349	40	\$ 4,432		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$17,456.40	\$1,745.64		\$19,202.04
3.17.7	Quality Control Review of DCR	2	\$ 558	12	\$ 2,492	24	\$ 4,014		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	\$7,063.92	\$706.39		\$7,770.31
	Total Design Concept Report (DCR)	8	\$ 2,230	180	\$ 37,382	312	\$ 5																						

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Project Fee Estimate / Authorized Task List

Labor Cost = Direct Labor Rate + Overhead

Project Number:	7PIM230101
Project Name:	West Valencia
Project Manager:	Kevin Thornton
Date:	8/7/2023

BLI No.	Design Description	Project Principal		Sr. Project Manager		Sr. Project Engineer		Project Engineer		Designer		Survey Manager		Project Surveyor		Party Chief		2-Person Crew		Survey Tech		Administration		Intern		Psomas Labor Cost	Fee 10%	Subconsultants Amount	Task Total
		\$ 278.76 Hrs.	/ Hr. Amount	\$ 207.68 Hrs.	/ Hr. Amount	\$ 167.26 Hrs.	/ Hr. Amount	\$ 135.90 Hrs.	/ Hr. Amount	\$ 110.81 Hrs.	/ Hr. Amount	\$ 154.01 Hrs.	/ Hr. Amount	\$ 143.56 Hrs.	/ Hr. Amount	\$ 94.78 Hrs.	/ Hr. Amount	\$ 163.07 Hrs.	/ Hr. Amount	\$ 91.99 Hrs.	/ Hr. Amount	\$ 91.29 Hrs.	/ Hr. Amount	\$ 55.75 Hrs.	/ Hr. Amount				
3.20.3	Major Cross Drainage/Minor Culvert Plans (20 Scale)			8		40		60		60																			
	Drainage Area Grading/Details Plans (40 Scale)			4		16		40		40																			
	Landscape Plan (Sample Plan/Details per RDM)			2				4		4																			
	Pavement Marking Plans (40 Scale, Double VP)			4		8		32		40																			
	Water Modification Design Conflict Memo			4		16				8																			
	Cross-sections (@ 100 ft, 6/sheet)			4		16		40		40																			
	Quantities / Cost Estimate			4		16		40		40																			
	Initial PS&E	8	\$ 2,230	174	\$ 36,136	574	\$ 96,007	980	\$ 133,182	1,368	\$ 151,588	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$419,143.72	\$41,914.37	\$25,813.92	\$486,872.01
	Cover Sheet & General Notes			2		4				8																			
	Typical Sections			2		4		24		24																			
	Pavement Structural Sections					2		8		8																			
	Civil Details					4		24		60																			
	Drainage Details					4		24		40																			
	Summary Sheets (RCB, Drainage, Barrier)					4		8		40																			
	Demolition Plans (40 Scale, Double VP)					4		8		40																			
	Geometric Control (40 Scale, Double VP)					4		8		32																			
	Roadway Plans (40 Scale)	8			8		60		120		160																		
	Sidestreet Plans (40 Scale)				8		12		20		40																		
	Driveway Plans (40 Scale)				8		24		60		60																		
	Drainage Area Grading/Detail Plans (40 Scale)						4		16		80																		
	Cross Drainage Plans (20 Scale)						4		32		60																		
	Storm Drain Plans (40 Scale)						8		24		80																		
	Traffic Signal Plans (3 Signals, 3 HAWKs)						12		52		100																		
	Lighting Plans (Arterial and Pedestrial Scale)						12		60		32																		
	Landscape Plans (With NPI)						2				4																		
Pavement Marking Plans (40 Scale, Double VP)						4		8		32																			
Signing Plans (with Summaries) (40 Scale, Double VP)						8		32		60																			
Staking Plans (3 Intersections, 2 other locations)						8		24		40																			
Water Modification Plans						8		60		40																			
Sewer Modification Plans						8		16		48																			
Special Provisions						40		40		20																			
Cross-sections (@ 100 ft, 6/sheet)						4		16		60																			
Quantities / Cost Estimate						4		16		40																			
3.20.4	Final PS&E	2	\$ 558	154	\$ 31,983	444	\$ 74,263	678	\$ 92,140	938	\$ 103,940	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$302,883.66	\$30,288.37	\$11,536.00	\$344,708.03
	Cover Sheet & General Notes					4		8		8																			
	Typical Sections					2		4		16																			
	Pavement Structural Sections							2		6																			
	Civil Details					4		16		40																			
	Drainage Details					4		16		32																			
	Summary Sheets (RCB, Drainage, Barrier)					2		8		24																			
	Demolition Plans (40 Scale, Double VP)					2		8		24																			
	Geometric Control (40 Scale, Double VP)					2		6		24																			
	Roadway Plans (40 Scale)	2			8		32		40		40																		
	Sidestreet Plans (40 Scale)				2		8		16		24																		
	Driveway Plans (40 Scale)				2		8		24		40																		
	Drainage Area Grading/Detail Plans (40 Scale)						4		16		40																		
	Cross Drainage Plans (20 Scale)						2		24		40																		
	Storm Drain Plans (40 Scale) (No Trunk Line Anticipated)						4		16		32																		
	Traffic Signal Plans (3 Signals, 3 HAWKs)						12		32		52																		
	Lighting Plans (Arterial and Pedestrial Scale)						6		24		48																		
	Landscape Plans (with NPI)						2				4																		
	Pavement Marking Plans (40 Scale, Double VP)						4		8		20																		
	Signing Plans (with Summaries) (40 Scale, Double VP)						4		20		40																		
	Staking Plans (3 Intersections, 2 other locations)						4		16		40																		
	Water Modification Plans						8		40		20																		
	Sewer Modification Plans						8		8		32																		
	SWPPP (Sheets and Book)						4		16		48																		
	Special Provisions						40		40		16																		
Cross-sections (@ 100 ft, 6/sheet)						4		16		40																			
Quantities / Cost Estimate						4		16		40																			
Final Revisions to Plans, Specs and Estimate (Sealed Plans)						16		40		80																			
3.20.6	Quality Control Review of Plans	4	\$ 1,115	92	\$ 19,107	164	\$ 27,431	100	\$ 13,590	120	\$ 13,297	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$74,539.44	\$7,453.94	\$81,993.38	
	Initial Design QA/QC					8		24		20																			
	Final Design QA/QC					12		40		24																			
	Initial PS&E QA/QC					20		40		40																			
	Final PS&E QA/QC					12		40		20																			
	Responses to all review comments	4				40		20																					
	Total Preparation of Construction Documents	20	\$ 5,575	546	\$ 113,393	1,562	\$ 261,260	2,486	\$ 337,847	3,190	\$ 353,484	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$1,071,559.90	\$107,155.99	\$62,008.12	\$1,240,724.01
Task 3.21	Innovative Technologies																												
3.21.1	Miovision		\$ -	2	\$ 415	6	\$ 1,004		\$ -	8	\$ 886		\$ -		\$ -		\$ -		\$ -		\$ -								

Psomas
Project Fee Estimate / Authorized Task List

Labor Cost = Direct Labor Rate + Overhead

Project Number: 7PIM230101
Project Name: West Valencia
Project Manager: Kevin Thornton
Date: 8/7/2023

BLI No.	Design Description	Project Principal \$ 278.76 Hrs.	/ Hr. Amount	Sr. Project Manager \$ 207.68 Hrs.	/ Hr. Amount	Sr. Project Engineer \$ 167.26 Hrs.	/ Hr. Amount	Project Engineer \$ 135.90 Hrs.	/ Hr. Amount	Designer \$ 110.81 Hrs.	/ Hr. Amount	Survey Manager \$ 154.01 Hrs.	/ Hr. Amount	Project Surveyor \$ 143.56 Hrs.	/ Hr. Amount	Party Chief \$ 94.78 Hrs.	/ Hr. Amount	2-Person Crew \$ 163.07 Hrs.	/ Hr. Amount	Survey Tech \$ 91.99 Hrs.	/ Hr. Amount	Administration \$ 91.29 Hrs.	/ Hr. Amount	Intern \$ 55.75 Hrs.	/ Hr. Amount	Psomas Labor Cost	Fee 10%	Subconsultants Amount	Task Total	
	Subconsultant Services Totals (Tasks 3.1-3.22)																													
	Wheat Design - Landscape Architecture		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -				\$71,920.00	
	Kaneen Communications - Public Participation		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -				\$172,434.00	
	Westland Resources - Environmental Planning		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -				\$139,041.81	
	WSP - Geotech		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -				\$107,420.97	
	Alta Planning and Design - Complete Streets		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -				\$19,869.72	
	The Planning Center - Land Use Planning		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -				\$5,600.00	
	Total Subconsultant Services Totals (Tasks 3.1-3.22)	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-			\$516,286.50	
Proposal Total		70	\$ 19,513	1,682	\$ 349,318	3,256	\$ 544,599	3,392	\$ 460,973	4,984	\$ 552,277	134	\$ 20,637	480	\$ 68,909	88	\$ 8,341	280	\$ 45,660	756	\$ 69,544	48	\$ 4,382	-	\$ -	\$2,144,152.10	\$214,415.21	\$516,286.50	\$2,874,853.81	
Task B	Additional Services																													
B.1	Additional Utility Investigation	-	\$ -	24	\$ 4,984	48	\$ 8,028	96	\$ 13,046	120	\$ 13,297	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$39,356.40	\$3,935.64	\$40,000.00	\$83,292.04	
	Additional Potholing Contingency (20 @ 2000/ea) - With Coord Time		\$ -	8	\$ 1,661	16		16		40																			\$40,000.00	
	Additional Utility Mapping		\$ -	16	\$ 3,323	32	\$ 5,352	80	\$ 10,872	80	\$ 8,865																			
B.3	Other Services	-	\$ -	40	\$ 8,307	80	\$ 13,381	400	\$ 54,360	400	\$ 44,324	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$120,372.00	\$12,037.20	\$100,000.00	\$232,409.20	
	Additional Misc Project Needs As Required		\$ -	40	\$ 8,307	80	\$ 13,381	400	\$ 54,360	400	\$ 44,324																		\$100,000.00	
	Total Additional Services	-	\$ -	64	\$ 13,292	128	\$ 21,409	496	\$ 67,406	520	\$ 57,621	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$159,728.40	\$15,972.84	\$140,000.00	\$315,701.24	
Task C	Post Design Services																													
C.1.1	Pre-Bid Services	-	\$ -	24	\$ 4,984	84	\$ 14,050	60	\$ 8,154	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$27,188.16	\$2,718.82		\$29,906.98	
	Attend Pre-bid Meetings (2)			4		4																								
	Assist in Preparation of Addendums			8		32																								
	Address Questions on Plans and Specifications			8		32		60																						
	Evaluate Bids			4		16																								
C.2.1	Construction Services	-	\$ -	246	\$ 51,089	528	\$ 88,313	116	\$ 15,764	96	\$ 10,638	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$165,804.72	\$16,580.47	\$5,452.00	\$187,837.19	
	Attend Pre-construction and Partnering Meetings (2)			8		8																								
	Attend Weekly Construction Meetings (90)			180		360																								
	Site observations (4)			16		16		16		16																				
	Evaluate Changes to Construction Documents			4		40		40																						
	Provide Design Details and Revised Drawings			4		24		40		40																				
	Review Shop Drawings, etc.			16		40																								
	Evaluate Value Engineering Proposals			8		40																								
	Video Document Drone Flight (10 Flights)			10				20		40																				
	Wheat Post Design																											\$5,452.00		
C.3.2	Construction Services	-	\$ -	16	\$ 3,323	24	\$ 4,014	40	\$ 5,436	40	\$ 4,432	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$17,205.52	\$1,720.55		\$18,926.07	
	Prepare As-Built Documents		\$ -	16	\$ 3,323	24	\$ 4,014	40	\$ 5,436	40	\$ 4,432		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -					
	Total Post Design Services	-	\$ -	286	\$ 59,396	636	\$ 106,377	216	\$ 29,354	136	\$ 15,070	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	\$210,198.40	\$21,019.84	\$5,452.00	\$236,670.24	

West Valencia Road

PSOMAS SERVICES			
Task	Description	Task Total	Fee (10%)
Task 3.1	Project Management	\$ 206,719.10	\$ 20,671.91
Task 3.2	Quality Control Plan	\$ 11,005.68	\$ 1,100.57
Task 3.3	Utility Coordination	\$ 143,551.08	\$ 14,355.11
Task 3.4	Public Participation	\$ 43,741.20	\$ 4,374.12
Task 3.5	Federal, State and Local Coordination	\$ 30,318.64	\$ 3,031.86
Task 3.6	Public Art	\$ 23,879.12	\$ 2,387.91
Task 3.7	Data Gathering	\$ 17,774.20	\$ 1,777.42
Task 3.8	Environmental Impact Analysis	\$ 22,401.68	\$ 2,240.17
Task 3.10	Survey and Mapping	\$ 183,127.26	\$ 18,312.73
Task 3.11	Drainage Report	\$ 97,359.28	\$ 9,735.93
Task 3.12	Geotechnical Investigation	\$ 7,487.64	\$ 748.76
Task 3.13	Pavement Design Report	\$ 10,952.76	\$ 1,095.28
Task 3.15	Traffic Engineering Report	\$ 36,458.46	\$ 3,645.85
Task 3.16	Arterial Street Lighting Design Report	\$ 27,215.96	\$ 2,721.60
Task 3.17	Design Concept Report (DCR)	\$ 146,257.76	\$ 14,625.78
Task 3.19	Right-of-way Acquisition Support	\$ 31,524.60	\$ 3,152.46
Task 3.20	Preparation of Construction Documents		
3.20.1	Initial Design Phase Plans	\$ 120,678.48	\$ 12,067.85
3.20.2	Final Design Phase Plans	\$ 154,314.60	\$ 15,431.46
3.20.3	Initial PS&E	\$ 419,143.72	\$ 41,914.37
3.20.4	Final PS&E	\$ 302,883.66	\$ 30,288.37
3.20.6	Quality Control Review of Plans	\$ 74,539.44	\$ 7,453.94
Task 3.21	Innovative Technologies	\$ 32,067.90	\$ 3,206.79
Task 3.22	Multimodal Accessibility	\$ 749.88	\$ 74.99
		\$ 2,144,152.10	\$ 214,415.21

SUBCONSULTANT SERVICES	
Subconsultant	Task Total
Wheat Design - Landscape Architecture	\$ 77,372.00
Kaneen Communications - Public Participation	\$ 172,434.00
Westland Resources - Environmental Planning	\$ 139,041.81
WSP - Geotech	\$ 107,420.97
Alta Planning and Design - Complete Streets	\$ 19,869.72
The Planning Center - Land Use Planning	\$ 5,600.00
	\$ 521,738.50

ADDITIONAL SERVICES (T&M)		
Task	Description	Task Total
Task B	Additional Services	\$ 315,701.24
Task C	Post Design Services	\$ 231,218.24
		\$ 546,919.48

DIRECT EXPENSES		
Item		Task Total
Displays		\$ 2,000.00
Inter. Turning Mmt Counts (4-Hour)		\$ 855.00
24-hr ADT Count w/Class., Speeds		\$ 285.00
Reproductions		\$ 4,000.00
Aerial - Flight/Mapping		\$ 10,410.00
Subsurface Utility Engineering - Traffic Control		\$ 50,500.00
Potholing		\$ 20,000.00
		\$ 88,050.00

Fee (10%) **\$ 214,415.21**

CONTRACT TOTAL **\$ 3,515,275.29**

Quote #	Date	Expiration
Q-SCA-23-253	6/13/2023	90 days



Vertical Mapping Resources
 2220 S. Country Club Drive
 Suite 105
 Mesa, AZ 85210
 480.948.2555
www.verticalmapping.com

QUOTATION

CONTACT: Justin Magill
CLIENT: Psomas
ADDRESS: 5 Hutton Centre Drive, Suite 300
 Santa Ana, CA 92707
PHONE: (916) 788-8122

West Valencia

Assumptions: Psomas will provide ground control and aerial imagery for this project.

DESCRIPTION OF SERVICES

- Topographic Mapping
- Optional Orthophotography

SCOPE OF SERVICES AND BRIEF METHODOLOGY

Imagery for this project will be provided by Psomas.

VMR will perform analytical aerotriangulation using Hexagon Geospatial's ImageStation Analytical Triangulation (ISAT) software.

Topographic mapping will be collected at a scale of 1" = 40' with 1' contours. VMR will collect all discernible planimetric and topographic features utilizing digital photogrammetric workstations. All mapping will meet FGDC accuracy requirements for geospatial data.

If the option is selected, VMR will also perform digital orthorectification services for this project. Control from the aerotriangulation and ground survey will be used to tie the digital images to actual ground coordinates. The DTM collected from the stereo imagery will be used during the digital orthorectification process to adjust each image pixel into its correct position.



Phone: (480) 948-2555

www.verticalmapping.com

Q-SCA-23-253 - West Valencia

Psomas

LAYOUT

Project limits are predetermined and are shown below. The client's requested limits are depicted with the cyan boundary. VMR will provide mapping to the magenta boundary, which is generally an additional inch at map scale. Please reference the KMZ that accompanies this quote.



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Q-SCA-23-253 - West Valencia

Psomas

SCHEDULE

The project timeline is estimated to require 18 working production days. Note this timeline is based on production days required to complete the project after receipt of ground control and imagery.

COST

This proposal to perform the described services becomes a contract subject to attached Terms and Conditions when signed by Vertical Mapping Resources and Psomas. Email or verbal athorization to proceed, in lieu a of signed quotation, will assume the attached Terms and Conditions are accepted. This quote is valid for 90 days.

West Valencia / Cost Breakdown		
TASK	DESCRIPTION	COST
Aerial Imagery Collection	Imagery provided by client	\$ -
Aerotriangulation	Softcopy aerotriangulation	\$ 2,715.00 \$1,870.00
Map Compilation	1" = 40' topographic mapping with QC (DTM & 1' contours)	\$ 7,517.00
Map Edit	Final Edit	\$ 1,023.00
TOTAL		\$ 11,255.00 \$10,410.00
OPTIONAL SERVICES		
Orthophotography	Orthophotography (color) with a ??? pixel resolution	\$ 1,683.00
DELIVERABLES		
PRODUCT	FORMAT	
DTM	AutoCAD	
Topographic Mapping	AutoCAD	
Orthophotography	TIF	

AGREED BY:

Vertical Mapping Resources:

Psomas:



Bret Okraski, Vice President

Justin Magill

6/13/2023

Date

Date



Phone: (480) 948-2555

www.verticalmapping.com

TERMS and CONDITIONS

1) Independent Contractor: Vertical Mapping Resources operates as an independent contractor and not as an employee, agent, joint venture, or partner of the Client. Vertical Mapping Resources retains the right to perform services for others during the term of this Agreement. The Agreement includes the Quotation to the Client from Vertical Mapping Resources upon its acceptance, which is deemed to occur if Vertical Mapping Resources begins the work described in the quotation with the Client's approval in writing or by electronic mail.

2) Payment of Invoices: The Client will pay Vertical Mapping Resources' invoices within 30 days of their receipt and acceptance by the Client. Invoices will be deemed accepted by the Client when receipt by the Client is deemed to have occurred unless the Client advises Vertical Mapping Resources within 10 days of when receipt is deemed to occur of any objection to the invoice. Client will not use any objection to delay payment of any undisputed portions of the invoice. Vertical Mapping Resources reserves the right to cease work or to refuse to provide the Client with any work product until such disputes are resolved. Client agrees to pay a service charge of 1.5% per month on invoice balances over 30 days past due.

3) Cooperation: The Client and Vertical Mapping Resources agree to cooperate with each other in every reasonable way in order to complete the terms of this Agreement. Upon request, the Client shall execute and deliver, or cause to be executed and delivered, such documents or instruments that are necessary to perform the terms of this Agreement.

4) Rights in Data: Notes, letters, software, photographs and other work materials developed or acquired in the process of producing the products named in the "scope of services" section of this Agreement remain the property of Vertical Mapping Resources. Vertical Mapping Resources agrees to maintain work materials in an ordered and accessible manner and take reasonable action to safeguard work materials for future use. The Client acknowledges that its right to utilize the services and work products provided pursuant to this Agreement will continue only so long as Client is not in default under the Agreement (including these terms and conditions) and the Client has performed all obligations under this Agreement.

5) Assignment: Neither party to this Agreement will assign or otherwise transfer its rights or delegate its obligations under this Agreement without the prior written consent of the other party, which may be withheld for any reason whatsoever.

6) Indemnity: Vertical Mapping Resources indemnifies the Client, its officers, directors, employees and agents from any claims, suits, loss, damage, expense, and liability, including, but not limited to, attorneys' fees and litigation expenses resulting from Vertical Mapping Resources' negligent performance of this Agreement. The Client indemnifies Vertical Mapping Resources, its officers, directors, employees, and agents from any claims, suits, loss, damage, expense and liability, including, but not limited to, attorneys' fees and litigation expenses, resulting from the Client's misuse of the materials Vertical Mapping Resources supplies under this Agreement. Neither party shall be responsible or held liable to the other party for any indirect or consequential damages arising out of services performed under this Agreement. Vertical Mapping Resources' liability under this Agreement shall be limited to the amount of the fees paid by the Client to Vertical Mapping Resources for services performed under this Agreement or to \$15,000.00, whichever is greater.

7) Insurance: Vertical Mapping Resources shall maintain general liability, automobile liability, professional liability, and worker's compensation insurance coverage in such amounts as it deems appropriate. Certificates of insurance will be sent to the Client if requested.

8) Termination of Agreement: The Client may terminate this Agreement in the event Vertical Mapping Resources is unable to satisfactorily perform its work; however, Vertical Mapping Resources shall be entitled to compensation for all work performed up to the point that the Agreement is terminated. Vertical Mapping Resources is entitled to immediately, and without notice, suspend its performance of any and all of its obligations pursuant to this Agreement if the Client files a voluntary petition seeking relief under the United States Bankruptcy Code or if there is an involuntary bankruptcy petition filed against the Client in the United States Bankruptcy Court.

9) Disputes and Applicable Law: Nevada law, exclusive of any conflict-of-laws principles governs the construction of this Agreement and the resolution of any controversy, claim or dispute arising from its formation, performance, discharge, lack of performance or default. Should any legal or arbitration proceedings be brought by either party to enforce or interpret any of the terms or conditions of this Agreement, the prevailing party is entitled to recover all reasonable attorneys' fees and costs incurred in defense of the claim from the other party. The venue for any such action shall be in the County of Washoe, Nevada.

10) Force Majeure: Neither party to this Agreement will be liable to the other party for delays in performing the services or delivery of the products, nor for the direct or indirect cost, resulting from such delays resulting labor strikes, riots, war, acts of governmental authorities, inclement weather conditions, natural catastrophes, terrorism, or any other cause beyond the reasonable control or contemplation of either party or that constitutes a force majeure.

11) Severability and Waiver of Breach: If any provision of the Agreement between Vertical Mapping Resources and Client or any remedy described in the Agreement is invalid under any applicable law, the remaining provisions of the Agreement remain effective. Vertical Mapping Resources waiver of any other term or condition, or breach of any term or condition must be in writing to be effective and is a waiver of any other term or condition, or the breach of any other term or condition.

12) Entire Agreement: These terms and conditions together with the accepted quotation are the Agreement between Vertical Mapping Resources and the Client as regards to the work specified in the "scope of services" section of this Agreement, and supersedes all prior agreements, whether written or oral. In the event of conflict between the contents of these terms and conditions and any purchase order or other form of written authorization subsequently issued for Vertical Mapping Resources services or products, these terms and conditions control unless a subsequent writing provides to the contrary.





SERVICE PROVIDER - SUBCONTRACTOR

**Darlene Dahney Yellowhair, PE, TE, PTOE, RSP ENVSP
PSOMAS**

Prepared by: Sharon Morris

[illegible]

ALTA PLANNING + DESIGN

Scope of Work

Valencia Road Complete Streets Design

Alta Planning + Design, Inc.

Task 1: Project Management

Joe Gilpin will submit Monthly invoices to Psomas and partake in some level of internal communications that are not deliverable related.

Deliverables:

Monthly Invoices

Task 2: Team Meetings

Joe Gilpin will virtually attend the project kick off and up to two (2) additional meetings through the life of the project. Each meeting is estimated to take two (2) hours of time.

Deliverables:

Attendance at up to three (3) meetings.

Task 3: Design Concept Report

Joe Gilpin will be involved in the design concept report phase of the project to set the direction of the complete streets features early in the project. Activities may include review of materials, markups of designs, research, citations of studies to support design solutions.

Deliverables:

Periodic email based review and transmittal of materials. Reviews will be provided to Psomas and Pima County.

Task 4: Design Milestone Review (30, 60, 90% review)

Joe Gilpin will perform design review services to the Psomas team on each of the design milestones ahead of 100% design. Joe will look for opportunities to improve complete streets accommodations without impacting travel lanes. Joe will look at sidewalks, bicycle lanes, intersection amenities, crossings and overall roadway geometry.

Deliverables:

Pdf review of each of the design milestones. Reviews will be provided to Psomas and Pima County.

Task 5: Design Road Safety Audit

Joe Gilpin will participate with the Psomas Team in a limited fashion of the Design Road Safety Audit (RSA)

Deliverables:

Virtual attendance at the RSA and review of and production of supplementary/follow up materials.

Project Budget

Valencia Road Complete Streets Design

Alta Planning + Design, Inc.

TASK	Principal-in-Charge	Total Task Hours	Total Task Fee
	Joe Gilpin		
	<i>Negotiated Rate</i>	\$254.74	
1. Project Management	6	6	\$1,528.44
1.1 General Project Management	6	6	\$1,528.44
2. Team Meetings	6	6	\$1,528.44
2.1 Kickoff Meeting	2	2	\$509.48
2.2 Team Meetings (2)	4	4	\$1,018.96
3. Design Concept Report	20	20	\$5,094.80
3.1 Task work	20	20	\$5,094.80
4. Design Milestone Review	38	38	\$9,680.12
4.1 30%	18	18	\$4,585.32
4.2 60%	12	12	\$3,056.88
4.3 90%	8	8	\$2,037.92
5. Design Road Safety Audit	8	8	\$2,037.92
5.1 RSA kick-off	4	4	\$1,018.96
5.2 RSA wrap up	4	4	\$1,018.96
Staff Hours	78	78	
Labor Total	\$19,870		\$19,869.72
Reimbursable Expenses & Travel			\$0
Project Total			\$19,869.72

GENERAL NOTES:

* Hours and staff assignments can be adjusted by the consultant as needed to implement the tasks described during the course of the project.

* Hourly rates will be adjusted if work is continued into subsequent year(s). Staff rate may not change without County approval via amendment of contract or staff with a different rate.

KANEEN COMMUNICATIONS

Kaneen Communications

Professional Design Services for West Valencia Road Improvements

07/06/23

Task 3.4 – Public Participation

- 1. Attendance at Kick-Off Meeting** - Assumes in-person attendance at one two-hour kick off meeting
- 2. Weekly Project Meetings with Pima County** - Assumes in-person/virtual meeting attendance at 1 hour each (attendance at 32 mtgs).
- 3. Monthly Project Team Meetings** - Assumes 24 two-hour team meetings
- 4. Special Public Outreach Meetings** - Assumes attendance at 6 one-hour public outreach meetings with team
- 5. Design Review and Comment Resolution Meetings** - Assumes attendance at 2 two-hour meetings
- 6. Develop Public Involvement Plan (PIP)** - In coordination with Pima County assumes strategic planning and consulting with team, draft PIP, coordinate team revisions, and finalize.
- 7. Project Mailing List** - Pima County to research and develop initial mailing list for all owners and properties within one-half mile wide corridor along the alignment of the project. Kaneen assumes the expansion of the mailing list for any member of the public who wishes to be added to it, including Tohono O'odham and Pascua Yaqui. *See further details below.
- 8. Citizen Advisory Committee*** - Pima County assumes outreach, formatting and execution of CAC. Kaneen to assist with preparation and attendance as needed at 3 two hour meetings.
- 9. Business Outreach and Coordination Meetings** - In coordination with Pima County, conduct one on one direct engagement with key business's within the project limits-assumes approximately 72 business's. Develop an expanded owner and on site contact list. Some outreach will be conducted by Bilingual Staff.
- 10. Tribal Coordination Meetings** - Assumes coordinating with Tohono O'odham and Pascua Yaqui and attending 4 two-hour one-on-one meetings with tribal nations within the design area to gather feedback.
- 11. Elected Official Coordination** - Assumes up to 6 one-hour meetings with Elected Official offices
- 12. Internal Stakeholder Coordination** - Assumes timely and consistent coordination with Pima County Communications, the Board of Supervisors, County management and departments.
- 13. External Stakeholder Coordination** - Assumes timely and consistent coordination with Tohono O'odham, Pascua Yaqui, Non-profits, youth organizations, schools, churches, area businesses, developers, and pedestrian/bike advocacy groups

14. Emergency Response Services - Assumes coordination and engagement with emergency responders (Fire, Sheriff, etc).

15. Community Events - Assumes strategic participation and efficient planning in line with 5 two-hour community events. Includes Bilingual outreach.

16. Public Meeting Postcard - Assumes copy development and graphic layout for 3 public meeting postcards. Pima County will utilize project mailing list, postage, and printing service to distribute postcards. Includes Bilingual outreach. *See further details below.

17. Public Meeting Ads - Kaneen to provide content. Pima County will take the lead for 3 Public Meeting ads to be designed, and placed within 15 days in advance of the meeting, but not more than 30. Includes Bilingual outreach. *See further details below.

18. Public Meetings - Assumes coordination and execution of 3 two-hour public meetings at these project milestones: preparing a location plan, during the process of preparing a design concept report, and during the process of preparing the environmental assesment and mitigation report. Assumes materials preparations, signage, set-up, staffing, comment form administration, outreach and breakdown. Includes Bilingual outreach. *See further details below.

19. Public Meeting Opinion Questionnaire - Assumes the development and the circulation of 3 follow-up public opinion questionnaire postcards, to be sent via mail to project mailing list following each public meeting. Includes Bilingual outreach. *See further details below.

20. Public Hearing - Assumes attendance at 1 two-hour planning meeting to discuss logistics of public hearing. Includes securing meeting location and necessary equipment, and assumes attendance in-person at 1 two-hour Public Hearing. *See further details below.

21a. Public Hearing Ads - Develop copy for 2 ads to run in Arizona Daily Star to advertise public hearing. Assumes coordination with newspaper to purchase and place ads. Includes Bilingual outreach. *See further details below.

21b. FONSI Notice - Assumes design and copy of newspaper/and or radio ad to inform public of public hearing outcome and decisions. Assumes coordination with newspaper/radio to purchase and place ads. *See further details below.

22. Contact Database - Assumes database creation, maintenance, and eBlast communications through constant contact and the project email.

23. Bilingual Project Information Line - Assumes the development and monitoring of 1 project phone line and 1 project email address. Monitor, research, and respond to calls, voicemails and email inquiries. Coordinate with team to provide responses.

24. Website - Assumes website development on Social Pinpoint (similar to SWAM website); design website, maintenance, and updates to project website throughout the design phases

25. Colateral Materials - Assumes in coordination with Pima County the creation and printing of a project fact sheet, project area map, FAQ sheet, QR code cards and public hearing materials.

26. Other Services - For performing services unknown of or identified subsequent to the original scoping of the project. Including: the need to attend additional meetings, provide displays or summaries, or other efforts associated with the project beyond those identified within this scope of work.

* Pima County to assume cost of production of all outreach materials (fact sheet, ads, mailers, postcard, etc) and distribution, printing, mailing, and postage. Pima County to assume coordination with AZ Bilingual.

* CAC-Mailing, formation, and meeting logistics handled by Pima County.



Psomas - Professional Design Services for West Valencia Road Improvements

Public Outreach - Assumes 24 months

ESTIMATE OF MANHOURS

Draft 4 07/20/2023

With direct expense information.

Task 3.4 - Public Participation	Project Principal/Manager	Designer/Artist	Public Relations Coordinator	Translation	Clerical	Total Hours	Total Labor Costs	Direct Expenses	Direct Expenses	Total Costs
	\$150	\$100	\$100	\$100	\$50					\$ 172,434.00
1. Attendance at Kick-Off Meeting - Assumes in-person attendance at one two-hour kick off meeting	2	0	2	0	0	4	\$500	\$ -		\$ 500.00
2. Weekly Project Meetings with Pima County - Assumes in-person/virtual meeting attendance at 1 hour each (attendance at 32 mtgs).	32	0	32	0	0	64	\$8,000	\$ 20.00	Color copies if needed	\$ 8,020.00
3. Monthly Project Team Meetings - Assumes 24 two-hour team meetings	48	0	48	0	24	120	\$13,200	\$ 20.00	Color copies if needed	\$ 13,220.00
4. Special Public Outreach Meetings - Assumes attendance at 6 one-hour public outreach meetings with team	6	0	6	0	6	18	\$1,800	\$ 20.00	Color copies if needed	\$ 1,820.00
5. Design Review and Comment Resolution Meetings - Assumes attendance at 2 two-hour meetings	4	0	4	0	0	8	\$1,000	\$ 20.00	Color copies if needed	\$ 1,020.00
6. Develop Public Involvement Plan (PIP) - In coordination with Pima County assumes strategic planning and consulting with team, draft PIP, coordinate team revisions, and finalize.	10	0	15	0	12	37	\$3,600	\$ 50.00	Color copies if needed	\$ 3,650.00
7. Project Mailing List - Pima County to research and develop initial mailing list for all owners and properties within one-half mile wide corridor along the alignment of the project. Kaneen assumes the expansion of the mailing list for any member of the public who wishes to be added to it, including Tohono O'odham and Pascua Yaqui. *See further details below.	4	0	8	0	3	15	\$1,550	\$ -		\$ 1,550.00
8. Citizen Advisory Committee*- Pima County assumes outreach, formatting and execution of CAC. Kaneen to assist with preparation and attendance as needed at 3 two hour meetings.	12	0	12	6	9	39	\$4,050	\$ -		\$ 4,050.00
9. Business Outreach and Coordination Meetings - In coordination with Pima County, conduct one on one direct engagement with key business's within the project limits- assumes approximately 72 business's. Develop an expanded owner and on site contact list. Some outreach will be conducted by Bilingual Staff.	20	0	45	4	0	69	\$7,900	\$ 20.00	Color copies if needed	\$ 7,920.00
10. Tribal Coordination Meetings - Assumes coordinating with Tohono O'odham and Pascua Yaqui and attending 4 two-hour one-on-one meetings with tribal nations within the design area to gather feedback.	12	0	12	0	12	36	\$3,600	\$ 20.00	Color copies if needed	\$ 3,620.00



Psomas - Professional Design Services for West Valencia Road Improvements

Public Outreach - Assumes 24 months

ESTIMATE OF MANHOURS

Draft 4 07/20/2023

With direct expense information.

Task 3.4 - Public Participation	Project Principal/Manager	Designer/Artist	Public Relations Coordinator	Translation	Clerical	Total Hours	Total Labor Costs	Direct Expenses	Direct Expenses	Total Costs
	\$150	\$100	\$100	\$100	\$50					\$ 172,434.00
11. Elected Official Coordination - Assumes up to 6 one-hour meetings with Elected Official offices	12	0	12	0	12	36	\$3,600	\$ 20.00	Color copies if needed	\$ 3,620.00
12. Internal Stakeholder Coordination - Assumes timely and consistent coordination with Pima County Communications, the Board of Supervisors, County management and departments.	12	0	12	0	12	36	\$3,600	\$ 50.00	Color copies if needed	\$ 3,650.00
13. External Stakeholder Coordination - Assumes timely and consistent coordination with Tohono O'odham, Pascua Yaqui, Non-profits, youth organizations, schools, churches, area businesses, developers, and pedestrian/bike advocacy groups	24	0	24	12	12	72	\$7,800	\$ 50.00	Color copies if needed	\$ 7,850.00
14. Emergency Response Services - Assumes coordination and engagement with emergency responders (Fire, Sheriff, etc).	12	0	12	0	12	36	\$3,600	\$ -		\$ 3,600.00
15. Community Events - Assumes strategic participation and efficient planning in line with 5 two-hour community events. Includes Bilingual outreach.	15	0	15	10	10	50	\$5,250	\$ -		\$ 5,250.00
16. Public Meeting Postcard - Assumes copy development and graphic layout for 3 public meeting postcards. Pima County will utilize project mailing list, postage, and printing service to distribute postcards. Includes Bilingual outreach. *See further details below.	12	12	24	12	6	66	\$6,900	\$ -		\$ 6,900.00
17. Public Meeting Ads - Kaneen to provide content. Pima County will take the lead for 3 Public Meeting ads to be designed, and placed within 15 days in advance of the meeting, but not more than 30. Includes Bilingual outreach. *See further details below.	12	12	24	6	12	66	\$6,600	\$ -		\$ 6,600.00
18. Public Meetings - Assumes coordination and execution of 3 two-hour public meetings at these project milestones: preparing a location plan, during the process of preparing a design concept report, and during the process of preparing the environmental assessment and mitigation report. Assumes materials preparations, signage, set-up, staffing, comment form administration, outreach and breakdown. Includes Bilingual outreach. *See further details below.	35	30	45	10	35	155	\$15,500	\$ 100.00	Color copies if needed for each public meeting	\$ 15,600.00



Psomas - Professional Design Services for West Valencia Road Improvements

Public Outreach - Assumes 24 months

ESTIMATE OF MANHOURS

Draft 4 07/20/2023

With direct expense information.

Task 3.4 - Public Participation	Project Principal/Manager	Designer/Artist	Public Relations Coordinator	Translation	Clerical	Total Hours	Total Labor Costs	Direct Expenses	Direct Expenses	Total Costs
	\$150	\$100	\$100	\$100	\$50					\$ 172,434.00
19. Public Meeting Opinion Questionnaire - Assumes the development and the circulation of 3 follow-up public opinion questionnaire postcards, to be sent via mail to project mailing list following each public meeting. Includes Bilingual outreach. *See further details below.	10	10	15	15	15	65	\$6,250	\$ 20.00	Color copies if needed	\$ 6,270.00
20. Public Hearing - Assumes attendance at 1 two-hour planning meeting to discuss logistics of public hearing. Includes securing meeting location and necessary equipment, and assumes attendance in-person at 1 two-hour Public Hearing. *See further details below.	8	0	12	3	12	35	\$3,300	\$ 20.00	Color copies if needed	\$ 3,320.00
21a. Public Hearing Ads - Develop copy for 2 ads to run in Arizona Daily Star to advertise public hearing. Assumes coordination with newspaper to purchase and place ads. Includes Bilingual outreach. *See further details below.	4	6	6	4	2	22	\$2,300	\$ -		\$ 2,300.00
21b. FONSI Notice - Assumes design and copy of newspaper/and or radio ad to inform public of public hearing outcome and decisions. Assumes coordination with newspaper/radio to purchase and place ads. *See further details below.	2	4	8	4	2	20	\$2,000	\$ -		\$ 2,000.00
22. Contact Database - Assumes database creation, maintenance, and eBlast communications through constant contact and the project email.	12	6	36	6	24	84	\$7,800	\$ 600.00	Monthly cost of \$25.00 to set up Constant Contact for eblasts, etc.	\$ 8,400.00
23. Bilingual Project Information Line - Assumes the development and monitoring of 1 project phone line and 1 project email address. Monitor, research, and respond to calls, voicemails and email inquiries. Coordinate with team to provide responses.	0	0	36	18	36	90	\$7,200	\$ 1,704.00	Updated monthly cost for 24 mos \$56 for information line and setting up office 365 for emails \$360.00 for 2 yrs	\$ 8,904.00
24. Website - Assumes website development on Social Pinpoint (similar to SWAM website); design website, maintenance, and updates to project website throughout the design phases	24	48	18	8	12	110	\$11,600	\$ 4,000.00	Cost of setting up website with Social Pinpoint.	\$ 15,600.00
25. Colateral Materials - Assumes in coordination with Pima County the creation and printing of a project fact sheet, project area map, FAQ sheet, QR code cards and public hearing materials.	36	18	60	48	60	222	\$21,000	\$ -		\$ 21,000.00



Psomas - Professional Design Services for West Valencia Road Improvements

Public Outreach - **Assumes 24 months**

ESTIMATE OF MANHOURS

Draft 4 07/20/2023

With direct expense information.

Task 3.4 - Public Participation	<u>Project Principal/Manager</u>	<u>Designer/Artist</u>	<u>Public Relations Coordinator</u>	<u>Translation</u>	<u>Clerical</u>	<u>Total Hours</u>	<u>Total Labor Costs</u>	<u>Direct Expenses</u>	<u>Direct Expenses</u>	<u>Total Costs</u>
	\$150	\$100	\$100	\$100	\$50					\$ 172,434.00
26. Project Management	24	0	24	0	4	52	\$6,200	\$ -		\$ 6,200.00
27. Other Services - For performing services unknown of or identified subsequent to the original scoping of the project. Including: the need to attend additional meetings, provide displays or summaries, or other efforts associated with the project beyond those identified within this scope of work.	0	0	0	0	0	0	\$0	\$ -		\$ -
TOTAL	404	146	567	166	344	1627	\$165,700.00	\$ 6,734.00		\$172,434.00

*Pima County to assume cost of production of all outreach materials (fact sheet, ads, mailers, postcard, etc) and distribution, printing, mailing, and postage. Pima County to assume coordination with AZ Bilingual.

*CAC-Mailing, formation, and meeting logistics handled by Pima County.

THE PLANNING CENTER

MEMORANDUM

Date: August 14, 2023 **Project:** Design Engineering for West Valencia Road

To: Kevin Thornton, PE, ENV SP - Psomas

From: Lexy Wellott, AICP

Subject: Scope and Fee for West Valencia Road Complete Streets White Paper

The following represents the scope and fee necessary to produce an analysis that evaluates existing land uses for the segment of Valencia Road between Mission Road to Camino de la Tierra and current development regulations that create barriers to walkable communities and transit-oriented development. The analysis will also identify recommendations for code refinements to reduce (or eliminate) the barriers identified and enhance the pedestrian experience and safety while activating the street presence for businesses along the study area.

Scope of Work:

- Research, analyze, and map existing and planned land uses within the study area
- Coordinate with Pima County Development Services Department to determine if any new development projects are on the horizon within the study area
- Identify development regulations and standards utilized by Pima County that currently present barriers to developing complete streets
- Coordinate with Pima County Development Services Department to determine their current pursuit for code refinements as they relate to implementing complete streets principles
- Research and analyze best practices for implementing complete streets policies to inform code refinement recommendations
- Prepare a white paper documenting the findings of the analysis
- Review with the Client and revise as necessary (one (1) round of revisions)
- Advise on land use matters throughout the project scope, as needed.

Estimated Fee

- Hourly Rates = \$140 (Project Manager)
- Projected Hours = 40 hours maximum
- Total Fee = \$5,600



The Planning Center - Billing Rates

TPC Title	ADOT Equivalent Title	Rate	Sample Invoices
Principal	Transportation Planner, Sr.	180	2120, 2118, 2125
Project Manager	Transportation Planner	140	2293, 2120, 2128
Project Manager	Registered Landscape Architect	140	2118, 2128, 2125
Planner	Designer	85	2125, 2293, 2247

WESTLAND RESOURCES

Scope of Work (Revision 3)
Environmental Services for the Pima County Department
of Transportation Valencia Road Improvement Project
WestLand Proposal No. 10944

SCOPE OF WORK AND COST ASSUMPTIONS

TASK 2. ENVIRONMENTAL ASSESSMENT AND MITIGATION REPORT (EAMR)

Per Kevin Thornton's conversation with Pima County (the County), an EAMR will not be required because the necessary resource information and impact assessment will be incorporated into the Environmental Assessment (EA) that WestLand will prepare per Arizona Department of Transportation (ADOT) / Federal Highway Administration (FHWA) standards. Preparation of the EA and all resource studies and meetings associated with the project for WestLand's teams are reflected under the scope and fee for **Task 3.8**.

TASK 3. PROJECT MANAGEMENT

WestLand management/scheduling meetings are incorporated into **Task 3.8** except for public meetings (**Task 3.4.4**).

Task 3.4.4 Public Meetings

- WestLand will support the project team as needed in developing public participation and materials for the public meetings associated with the EA.
- The WestLand Project Manager (PM) will attend three public meetings/open houses and up to three Community Advisory Committee (CAC) meetings and will be accompanied by one resource specialist, as needed, to address specific resources concerns that may be raised by the public or other stakeholders (for example, noise).
- WestLand's scope of work does not include planning, advertising, or providing summary reports regarding the public meetings.

TASK 3.5 FEDERAL, STATE AND LOCAL COORDINATION

Task 3.5.1 Army Corps of Engineers/Other Agency Coordination

- WestLand will conduct a site visit to prepare a preliminary jurisdictional determination (PJD) per current U.S. Army Corps of Engineers (Corps) guidance (Note: this is currently in flux based on recent Court decisions).
- If needed, WestLand would attend up to two virtual pre-application meetings with the Corps regarding Clean Water Act Section 404 permitting.
- It is anticipated that the project would meet the terms and conditions for a Nationwide Permit (NWP) 14 with a preconstruction notification (PCN) to the Corps due to potential permanent impacts within the ordinary high-water mark.

- WestLand PM, and resource specialist as needed, will attend up to 12 additional agency coordination meetings. It is anticipated that half of these will be in person meetings in Tucson.

Deliverables

- WestLand would prepare a PJD and PCN for an NWP 14.
- WestLand would follow up on action items identified during agency meetings.

TASK 3.8 ENVIRONMENTAL IMPACT ANALYSIS

Task 3.8.1 Reduce Air, Water, and Noise Pollution in Underserved Communities

- WestLand will perform a traffic noise study per FHWA, ADOT, and County requirements.
 - The noise study will include measurement of traffic noise in the project area, noise modeling of existing and design-year traffic, and preparation of a noise study report.
 - The FHWA's Traffic Noise Model (TNM) Version 3.1 will be used to predict sound levels at sensitive receivers in the project area.
 - WestLand will prepare draft and final reports that will include a project description, methods, and results, including a comparison with ADOT and County traffic noise regulations.
- WestLand will provide socioeconomic data gathered from existing sources such as "EJView" online. Additional socioeconomic data or analysis will not be conducted.

Task 3.8.6 NEPA Analysis - Environmental Assessment

WestLand will conduct the necessary coordination, complete resources studies, and prepare the EA draft and final versions for team review. Specific tasks include the following.

Meetings

- Participate in a kick-off meeting and site visit with the project team.
- Participate in internal meetings and coordination meetings with the team.
 - Two team meetings to review the draft EA.
 - Eleven weekly meetings with the County team.
 - Ten internal team meetings.
 - Meetings will be attended by WestLand's PM and other resource specialists as needed.

Resource Studies

- Collect data on biological, socioeconomic, and physical resources within the project area from readily available sources.
- Cultural Resource surveys will be conducted by the County.
- A Preliminary Initial Site Assessment (PISA) will be conducted by ConformaTech, Inc. (CTEC).

- CTEC will perform an ADOT PISA in general accordance with the 2022 ADOT document titled “*Hazardous Material Team Preliminary Initial Site Assessment Procedures*.” The goal of this process is to efficiently assess the presence or absence of environmental contamination, and if present, to provide sufficient information regarding the nature and extent of the material and to aid the design team in minimizing the construction and liability impacts of that contamination.
 - CTEC's scope of services will consist of the following activities:
 - Project design and right-of-way requirements review.
 - Existing and previous land uses review including:
 - Aerial photo review.
 - USGS topographic maps.
 - ADOT sources (as available).
 - Applicable regulatory agency databases (¼-mile search radius) and files review if applicable.
 - CTEC assumes no more than two agency files will require review,
 - Environmental lien research is for right-of-way only,
 - Field survey,
 - Completion of the PISA Form which will present comments and recommendations including the potential need for further investigation.
 - Assumptions:
 - No Phase I Environmental Site Assessments will be conducted.
 - No right-of-way acquisition is included.
 - WestLand will provide base maps and project specific details.
- A Visual Assessment/Modeling will be prepared as follows:
 - As a component of the overall Environmental Resource Assessment and Mitigation, WestLand will inventory and assess existing visual and aesthetic resources along the Valencia Road project per the Pima County Environmentally Sensitive Roadway Design Guidelines. WestLand will:
 - Field identify and document existing visual and aesthetic resources.
 - Conduct a visual analysis.
 - Recommend treatment and mitigation options for negative impacts.

Environmental Assessment

- An EA will be completed per ADOT/FHWA/Council on Environmental Quality (CEQ) standards/guidelines.
- The EA will include resource and impact assessments and will summarize public outreach efforts conducted under **Task 3.4.4** and cultural resource surveys/tribal outreach efforts provided by the County.

- Mitigation measures will be developed in coordination with the project team to address impacts identified during the analysis.
- WestLand will coordinate with Psomas on design features to consider in the impacts analysis associated with construction, operation, and maintenance activities.
- The draft EA will be provided to the County for review.
- The revised draft EA will be provided to ADOT's Environmental Planning Group for review.
- One meeting will be held to review comments.
- A final EA will be provided for final review and approval.

Deliverables

- EA per **Task 3.8.6**
 - Eight hard copies and one original of the draft and final EA will be submitted with the electronic file.
 - Assume one internal team review and one County review of the draft.
 - Assume one internal team review and one County review of the final.
 - Assume two ADOT reviews.
 - Design Concept Report (**Task 3.17**)

TASK 3.12 GEOTECHNICAL INVESTIGATION

WestLand will assist in clearance for cultural and biological resources for the geotechnical investigations. This will not include a cultural resources survey as the County will be providing that information.

TASK 3.17 DESIGN CONCEPT REPORT

Task 3.17.4 Social, Economic, and Environmental Considerations/Public Involvement Efforts and Agency Coordination

- WestLand will provide a summary of social, economic, and environmental considerations for incorporation into the Design Concept Report (DCR).
- This will be provided in electronic format only.
- WestLand will review the draft DCR with a focus on environmental considerations.

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August 15, 2023

Mr. Kevin Thornton
Psomas
333 E. Wetmore, Suite 450
Tucson, Arizona 85705

**Re: ENVIRONMENTAL SERVICES FOR THE PCDOT VALENCIA ROAD IMPROVEMENT PROJECT
WESTLAND PROPOSAL NO. P10944 | REVISION 5**

Dear Mr. Thornton:

WestLand Engineering & Environmental Services (WestLand) is excited to submit this scope of work and fee proposal to support the Valencia Road project from Mission Road to Camino de la Tierra. The scope of work and cost table are attached. A summary of costs is provided in **Table 1**. This revision reflects the updated calculated rates supporting the estimated costs and revised County-approved overhead rate.

Table 1. Cost Summary Table

Task	Estimated Cost
Task 3.4.4 Public Participation Plan/Meetings	\$ 12,939.79
Task 3.5.1 Agency Outreach (Corps of Engineers)	\$ 11,993.98
Task 3.8 Environmental Impact Analysis ¹	
Environmental Assessment/Mitigation	\$ 52,440.20
Noise Modeling	\$ 21,555.33
Visual Assessment	\$ 27,703.20
PISA (ConformaTech)	\$ 4,000.00
Task 3.12 Clearance for Geotech	\$ 3,224.70
Task 3.17.4 DCR (Summary)	\$ 3,184.61
Subtotal Labor	\$ 137,041.81
Print Production	\$ 2,000.00
Total Estimated Cost	\$ 139,041.81

¹ Includes all planning meetings; includes 3.8.1. and 3.8.6.

We look forward to the opportunity to work with you on this Project. If you have any questions or require additional information, please do not hesitate to call Kim Otero at 520-206-9585.

Respectfully,
WestLand Engineering & Environmental Services



Ron van Ommeren
Director, Environmental

KAO:kd
Attachments: Scope of Work
Breakdown of Costs Table
ConformaTech PISA proposal

WESTLAND LABOR COST BREAKDOWN

TASK 2 EAMR - Task 2 will be consolidated with Task 3 per Kevin's conversation with the County

TASK 3

Labor Classification	HOURS	2023 Direct Labor Rate (\$)	Overhead (192.5%)	Fee (10%)	Calculated Billing Rate (\$)	Calculated Billing Rate (\$)
			192.5%	10%		
Task 3.4.4. Public Participation Plan/Meetings						
Principal Consultant	7	\$72.50	\$139.56	\$21.21	\$233.27	
Sr. Project Manager	40	\$61.15	\$117.71	\$17.89	\$196.75	
Env. Specialist III	28	\$31.20	\$60.06	\$9.13	\$100.39	
Sr Document Production Spec II	3	\$30.00	\$57.75	\$8.78	\$96.53	
Veh/Equipment Coordinator	3	\$34.85	\$67.09	\$10.19	\$112.13	\$12,939.79
Task 3.5.1 Agency Outreach (Corps of Engineers/Other Agency/CAC Meetings)						
Sr Principal Consultant	8	\$87.67	\$168.76	\$25.64	\$282.08	
Sr Project Manager	32	\$61.15	\$117.71	\$17.89	\$196.75	
Env Specialist I	28	\$22.00	\$42.35	\$6.44	\$70.79	
Sr Geospatial Analyst II	2	\$39.31	\$75.67	\$11.50	\$126.48	
Geospatial Analyst III	10	\$30.52	\$58.75	\$8.93	\$98.20	
Veh/Equipment Coordinator	2	\$34.85	\$67.09	\$10.19	\$112.13	\$11,993.98
Task 3.8 Environmental Impact Analysis (includes 3.8.1 and 3.8.6)						
Environmental Assessment						
Principal Consultant	12	\$72.50	\$139.56	\$21.21	\$233.27	
Sr. Project Manager	115	\$61.15	\$117.71	\$17.89	\$196.75	
Env. Specialist III	80	\$31.20	\$60.06	\$9.13	\$100.39	
Env Specialist I	140	\$22.00	\$42.35	\$6.44	\$70.79	
Sr Geospatial Analyst II	3	\$39.31	\$75.67	\$11.50	\$126.48	
Geospatial Analyst III	23	\$30.52	\$58.75	\$8.93	\$98.20	
Sr Document Production Spec III	26	\$30.00	\$57.75	\$8.78	\$96.53	
Proj Administrator I	0.5	\$23.10	\$44.47	\$6.76	\$74.32	
Veh/Equipment Coordinator	0.5	\$34.85	\$67.09	\$10.19	\$112.13	
Project Controller II	24	\$34.28	\$65.99	\$10.03	\$110.30	
Sr Tech Specialist I	2	\$60.10	\$115.69	\$17.58	\$193.37	
Biologist I	8	\$31.00	\$59.68	\$9.07	\$99.74	\$52,440.20

Labor Classification	HOURS	2023 Direct Labor Rate (\$)	Overhead (192.5%)	Fee (10%)	Calculated Billing Rate (\$)	Calculated Billing Rate (\$)
Noise						
Sr Project Manager (Noise P.E.)	77	\$61.15	\$117.71	\$17.89	\$196.75	
Sr Biologist I	16	\$33.04	\$63.60	\$9.66	\$106.31	
Biologist I	16	\$31.00	\$59.68	\$9.07	\$99.74	
Sr Document Production Specialist II	6	\$30.00	\$57.75	\$8.78	\$96.53	
Sr Geospatial Analyst II	20	\$39.31	\$75.67	\$11.50	\$126.48	\$21,555.33
Visual Assessment						
Principal	40	\$72.50	\$139.56	\$21.21	\$233.27	
Sr Landscape Arch	14	\$56.82	\$109.38	\$16.62	\$182.82	
Landscape Arch II	62	\$43.27	\$83.29	\$12.66	\$139.22	
Biologist I	72	\$31.00	\$59.68	\$9.07	\$99.74	\$27,703.20
PISA (Vendor)						
ConformaTech	See ConformaTech proposal dated July 20, 2023 for breakdown					\$4,000.00
Task 3.12 Clearance for Geotech						
Sr Project Manager	8	\$61.15	\$117.71	\$17.89	\$196.75	
Env Specialist III	12	\$31.20	\$60.06	\$9.13	\$100.39	
Sr Document Production Specialist II	2	\$30.00	\$57.75	\$8.78	\$96.53	
Sr Geospatial Analyst II	2	\$39.31	\$75.67	\$11.50	\$126.48	\$3,224.70
Task 3.17.4 - DCR (Summary)						
Sr Project Manager	5	\$61.15	\$117.71	\$17.89	\$196.75	
Env Specialist III	20	\$31.20	\$60.06	\$9.13	\$100.39	
Sr Document Production Specialist II	2	\$30.00	\$57.75	\$8.78	\$96.53	\$3,184.61
Labor Total						\$137,041.81
Direct Expenses						
Print Production						\$2,000.00
Total Labor and Expenses						\$139,041.81

July 20, 2023
CTEC Proposal No. TE23-04-01

Kim Otero
WestLand Resources, Inc.
4001 East Paradise Falls Drive
Tucson, Arizona 85712

**RE: Proposal for Preliminary Initial Site Assessment (PISA)
PCDOT Valencia Road Improvement Project
Tucson, Arizona**

Ms. Otero:

ConformaTech, Inc. (CTEC) will perform an ADOT PISA in general accordance with the 2022 ADOT document titled "Hazardous Material Team Preliminary Initial Site Assessment procedures." The goal of this process is to efficiently assess the presence or absence of environmental contamination, and if present, to provide sufficient information regarding the nature and extent of the material and to aid the design team in minimizing the construction and liability impacts of that contamination.

CTEC's scope of services will consist of the following activities:

- Review project design and right-of-way requirements,
- Review existing and previous land uses including:
 - Aerial photo review,
 - USGS topographic maps,
 - ADOT sources (as available),
- Review applicable regulatory agency databases (¼-mile search radius) and files if applicable,
 - CTEC assumes no more than two agency files will require review,
 - Environmental lien research is for right-of-way only,
- Field survey,
- Completion of the PISA Form which will present comments and recommendations including the potential need for further investigation.

Assumptions:

No Phase I ESAs will be conducted,

No right-of-way acquisition is included,

WestLand will provide base maps and project specific details.

The estimated fee for this PISA is **\$4,000.00**. This cost shall not be exceeded without prior consent of Client. These charges do not include additional consultation, client meetings or other services not specifically stated in the scope of work. If such additional services are requested, additional charges will be based on CTEC's current prevailing rates. In the event the project is canceled, CTEC will be compensated for all fees and costs incurred through the date of the cancellation.

The detailed breakdown of the lump sum cost follows:

Environmental Professional 40 hours @ \$82.00 =	\$ 3,280.00
Environmental Database Search	\$ 400.00
<u>Aerial Photography</u>	<u>\$ 320.00</u>
Total	\$ 4,000.00

We look forward to working with you on this project. Should you have any questions concerning this proposal, we would appreciate the opportunity to review and clarify.

Respectfully submitted,

ConformaTech, Inc.



Gerry P. Yarab, R.G.
Environmental Manager
Direct Tel: (520) 573-2045
Direct Fax: (520) 573-0528

WHEAT DESIGN GROUP

June 27, 2023

Kevin Thornton, PE
PSOMAS
333 East Wetmore, Suite 450
Tucson, Arizona 85705

Re: 4VALMR West Valencia Road Improvements: Mission Road to Camino de la Tierra - cost proposal

Kevin,

We are pleased to submit this proposal for providing landscape architectural services for the above-stated project. We have based this scope and fee on the emails and exhibits PSOMAS has provided. Basic services will include submittal of Native Plant Inventory & Mitigation Report, Riparian Habitat coordination & documentation, public art coordination, Landscape & Irrigation Plans and Details, Special Provisions, and Cost Estimate. CAD drafting of the construction documents will be provided in AutoCAD to Pima County standards. Please refer to the attached Workhour Estimates for a detailed breakdown of services offered.

Assumptions:

1. *Landscape architectural services are provided for 16-months.*
2. *Pima Association of Governments Standard Specifications and Details (2016) will be used.*
3. *PSOMAS will provide current aerials and base files in AutoCAD format.*
4. *Native plant inventory will follow the Environmentally Sensitive Roadway guidelines located in Chapter 4 of Pima County's Roadway Design Manual.*
5. *The technical review, checking procedures, and monitoring process shall follow Wheat Design Group's QA/QC plan for each submittal.*
6. *Landscape Architect's hours for performing quality control shall be billed toward the specific tasks.*
7. *All submittals will be in pdf format to PSOMAS; including no mylars for Signed & Sealed Final submittal.*

SCOPE OF WORK

TASK 3.0

TASK 3.1.2 MEETINGS AND COMMUNICATION

This task includes preparation and attendance to the following meetings:

- Attend (1) Kick-off Meeting.
- Attend (11) Monthly Meetings.
- Attend (3) Additional Coordination Meetings.
- Attend (3) Comment Review Meetings.

TASK 3.4 PUBLIC PARTICIPATION

Task 3.4.4 Public Meetings.

This task includes preparation and participation for (3) public meetings.

TASK 3.6 PUBLIC ART

Task 3.6.1 Coordination with Artist.

This task includes coordination with the Public Artist and integrating their work into the plan documents. Also includes participation on the Public Artist Selection Committee.

TASK 3.20 PREPARATION OF CONSTRUCTION DOCUMENTS

Task 3.20.1	Initial Design Phase Plans
Task 3.20.2	Final Design Phase Plans. Native Plant Inventory, Mitigation charts, plant relevés
Task 3.20.3	Initial PS&E. Riparian Mitigation Plans.
Task 3.20.4	Final PS&E.

Deliverables:

1. *Initial Design Phase Submittal (Task 3.20.1) - No landscape sheets for this submittal.*
2. *Final Design Phase Submittal: Irrigation plans, Typical Landscape plan, Standard details, and cost estimate. Also includes the Native Plant inventory, plans, mitigation charts, and native plant relevés.*
3. *Initial PS&E Submittal: Native Plant inventory and documentation, Irrigation plans and details, Landscape plans and details, cost estimate and Special Provisions. Also includes Riparian Mitigation Plans.*
4. *Final PS&E Submittal: Signed & Sealed Native Plant inventory and documentation, Irrigation plans and details, Landscape plans and details, Landscape Surface plans and details, cost estimate and Special Provisions.*

Assumptions:

1. *Landscape plans will include green infrastructure elements such as basins, swales, and curb cuts to help mitigate drainage issues, enhance soil, increase habitat, and reduce the use of potable water. Construction details will be included.*
2. *Task 3.20 includes coordination with design team to include urban design elements into the landscape plans such as street furniture, street trees, and enhanced sidewalk/pathways to make the corridor more livable, enhance quality of life, and make multi-modal transportation more accessible.*
3. *Task 3.20 includes input and coordination relating to pedestrian scale lighting.*
8. *Landscape plans will adhere to the Environmentally Sensitive Roadway guidelines located in Chapter 4 of Pima County's Roadway Design Manual.*
4. *Landscape plans will utilize drought tolerant plants from Pima County's Native Plant Nursery.*

TASK 3.31 POST DESIGN SERVICES

Phase 1 Pre-Bid Services.

This task may include the following tasks:

- Attend pre-bid meeting.
- Assist with amendments.
- Addressing questions in the PSE submittal.

Phase 2 Post Design Services

This task may include the following tasks:

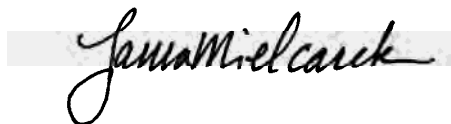
- Attend pre-construction and partnering meeting.
- Revise drawings to support construction efforts.
- Review shop drawings and/or product submittals.
- Respond to RFI's.
- Prepare "as-built" documents.

PROFESSIONAL FEES

Professional fee for Design is \$71,920.00 (which includes Direct Expenses of \$576.00) and Professional fee for Post Design is \$5,452.00 for a **Total of \$77,372.00**. The work will be based on the fully burdened/unit price of work hourly rates provided and based on the hours and tasks listed in the attached Workhour Estimate worksheet. Work beyond this scope will be considered additional services and will not proceed without approval from the Client. Billings for services will be submitted through the end of each month based on the hours worked.

We very much look forward to working with you on this project.

Sincerely,

A handwritten signature in black ink, reading "Laura Mielcarek", is written over a light gray rectangular background.

Laura Mielcarek, Principal
Wheat Design Group, Inc.

Wheat Design Group DERIVATION OF COST PROPOSAL SUMMARY

PROJECT: **4VALMR West Valencia Road Improvements:
Mission Road to Camino de la Tierra**

DBE: Yes #1025

PREPARED BY: Laura Mielcarek, Principal

CONTRACT TIME: 16 months

DATE: **07/25/23**

CONTRACT NO.:

CONSULTANT: **Wheat Design Group, Inc.**

DESIGN FULLY BURDENED LABOR COST

Item No.	TASK DESCRIPTION		No. HOURS	UNIT PRICE OF WORK	TOTAL COST
	<u>CLASSIFICATION</u>		<u>Hours</u>	<u>Rates</u>	<u>Cost</u>
	Landscape Architectural	Project Manager-Sr.	78	\$160.00	\$12,480.00
	Services	Registered Landscape Architect-Sr.	170	\$138.00	\$23,460.00
		Registered Landscape Architect	172	\$102.00	\$17,544.00
		Designer	188	\$95.00	\$17,860.00
TOTAL DESIGN FULLY BURDENED LABOR:			608	Hrs.	\$71,344.00

OTHER DIRECT EXPENSES

TRAVEL	\$0.00
EXHIBITS FOR OPEN HOUSES	\$576.00
TOTAL OTHER DIRECT EXPENSES:	\$576.00

ESTIMATED FEES

TOTAL DESIGN CONSULTANT FEE	=	\$71,920.00
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POST DESIGN FULLY BURDENED LABOR COST

Item No.	TASK DESCRIPTION		No. HOURS	UNIT PRICE OF WORK	TOTAL COST
	<u>CLASSIFICATION</u>		<u>Hours</u>	<u>Rates</u>	<u>Cost</u>
	Landscape Architectural	Project Manager-Sr.	10	\$160.00	\$1,600.00
	Services: POST DESIGN	Registered Landscape Architect-Sr.	22	\$138.00	\$3,036.00
		Registered Landscape Architect	8	\$102.00	\$816.00
		Designer	0	\$95.00	\$0.00
TOTAL POST DESIGN CONSULTANT FEE			40	Hrs.	\$5,452.00

TOTAL CONTRACT AMOUNT

\$77,372.00

Wheat Design Group Workhour Estimate by Task

4VALMR West Valencia Road Improvements

7/25/2023

UNIT PRICE OF WORK (FULLY BURDENED) RATES		\$160.00	\$138.00	\$102.00	\$95.00	
Description		Project Manager-Sr.	Registered Landscape Architect-Sr.	Registered Landscape Architect	Designer	TOTAL
3.1.2	MEETINGS AND COMMUNICATION					
	Kick-off Meeting	2	2	0	0	4
	Monthly Meetings (11 max.)	0	22	0	0	22
	Additional Coordination Meetings (3 max.)	6	6	0	0	12
	Comment Review Meetings (3 max.)	6	6	0	0	12
	Subtotal	14	36	0	0	50
TASK 3.1.2		\$2,240.00	\$4,968.00	\$0.00	\$0.00	\$7,208.00
Description		Project Manager-Sr.	Registered Landscape Architect-Sr.	Registered Landscape Architect	Designer	TOTAL
3.4	PUBLIC PARTICIPATION					
3.4.4	Attendance and Preparation for 1 Public Meeting	4	8	0	12	24
	Attendance and Preparation for 1 Public Meeting	4	8	0	12	24
	Attendance and Preparation for 1 Public Meeting	4	8	0	12	24
	Subtotal	12	24	0	36	72
TASK 3.4		\$1,920.00	\$3,312.00	\$0.00	\$3,420.00	\$8,652.00
Description		Project Manager-Sr.	Registered Landscape Architect-Sr.	Registered Landscape Architect	Designer	TOTAL
3.6	PUBLIC ART					
3.6.1	Coordination with Artist	6	10	8	0	24
	Subtotal	6	10	8	0	24
TASK 3.6		\$960.00	\$1,380.00	\$816.00	\$0.00	\$3,156.00
Description		Project Manager-Sr.	Registered Landscape Architect-Sr.	Registered Landscape Architect	Designer	TOTAL
3.20	PREPARATION OF CONSTRUCTION DOCUMENTS					
3.20.1	Initial Design Phase Plans	0	0	0	0	0
3.20.2	Final Design Phase Plans	8	16	32	24	80
	Native Plant Inventory and Documentation (2 days, 2 people)	4	12	24	24	64
	Native Plant Reveles	0	4	4	0	8
3.20.3	Initial PS&E	18	40	60	60	178
	Riparian Mitigation Plans	4	4	12	12	32
3.20.4	Final PS&E	12	24	32	32	100
	Subtotal	46	100	164	152	462
TASK 3.20		\$7,360.00	\$13,800.00	\$16,728.00	\$14,440.00	\$52,328.00

	DESIGN TOTAL WORKHOURS	78	170	172	188	608
	DESIGN TOTAL BURDENED LABOR	\$12,480.00	\$23,460.00	\$17,544.00	\$17,860.00	\$71,344.00

UNIT PRICE OF WORK (FULLY BURDENED) RATES		\$160.00	\$138.00	\$102.00	\$95.00	
Description		Project Manager-Sr.	Registered Landscape Architect-Sr.	Registered Landscape Architect	Designer	TOTAL
3.31	POST DESIGN SERVICES					
Phase 1	Pre-bid services	4	6	0	0	10
Phase 2	Post Design Services	6	16	8	0	30
	Subtotal	10	22	8	0	40
TASK 3.31		\$1,600.00	\$3,036.00	\$816.00	\$0.00	\$5,452.00
	POST DESIGN TOTAL WORKHOURS	10	22	8	0	40
	POST DESIGN DESIGN TOTAL BURDENED DIRECT LABOR	\$1,600.00	\$3,036.00	\$816.00	\$0.00	\$5,452.00

FEE ESTIMATE SUMMARY

PROJECT: Design Engineering Services for
West Valencia Road: Mission Road to Camino de la Tierra DATE 6/5/2023

PREPARED BY: Laura Mielcarek CONTRACT NUMBER SFQ-PO-2300012

EFFECTIVE DATE PRIME CONTRACTOR PSOMAS

CONTRACT TIME CONTRACT TYPE

ITEM NO.	FIRM	Discipline	Direct Labor Rate	Overhead	Profit	UNIT (HOURLY) RATE
			N/A	N/A	N/A	
1	Wheat Design Group, Inc.	Principal	N/A	N/A	N/A	\$160.00
2	Wheat Design Group, Inc.	Project Manager	N/A	N/A	N/A	\$138.00
3	Wheat Design Group, Inc.	A/E	N/A	N/A	N/A	\$102.00
4	Wheat Design Group, Inc.	Designer	N/A	N/A	N/A	\$95.00

Formulas

- (A) Direct Labor Rate
- (B) Overhead @%X(A)
- (C) Profit @X(A+B)
- (D) Billing Rate (A+B+C)

WSP



June 26, 2023

Proposal No. 202308023-PRO-1

Kevin Thornton, PE, ENV SP
PSOMAS INC
333 E Wetmore Rd, Suite 450
Tucson, AZ 85705

SCOPE AND FEE PROPOSAL FOR WEST VALENCIA ROAD IMPROVEMENTS: MISSION ROAD TO CAMINO DE LA TIERRA (4VALMR)

Dear Kevin:

WSP USA Inc. (WSP) is pleased to present this letter proposal to PSOMAS to provide final geotechnical engineering services in support of the West Valencia Road Project from Mission Road to Camino de la Tierra. The project is planned to widen Valencia from a total of four through lanes to six through lanes. We understand that the scope of services for this task order involves completing a final geotechnical subsurface investigation for the project, final geotechnical testing and analysis, and preparation of final geotechnical and pavement design reports.

1.0 PROPOSED SCOPE OF SERVICES

1.1 Task 3.1 Project Management

This task includes time for the WSP project manager to attend an estimated 11 monthly meetings (2 hours each) and 3 coordination meetings (2 hours each). It also includes time for miscellaneous coordination with the project team and other project management activities.

1.2 Task 3.12 Geotechnical Investigation and Report

1.2.1 Subtask A – Field Program

This task will include preliminary geotechnical evaluation that will include a desktop study to review available materials and data and to perform a site survey to assess existing pavement, soil conditions and any evidence of geological hazards.

WSP will conduct a geotechnical investigation to collect soil subgrade samples as well as pavement cores. This task will include effort for preparation of field investigation plans as well as for field visits to the site to check for access, logistical, and other considerations. It also includes time to secure the necessary ROW permits, coordinate with subconsultants, arrange for equipment, perform an 811 Utility Locate request for the project, etc.

WSP will utilize hollow stem auger soil borings as the primary means of collecting geotechnical field information and samples for testing. Drilling services will be provided by Southlands Engineering, LLC (Southlands), a Disadvantaged Business Enterprise (DBE) and City of Tucson Small Business Enterprise (SBE) drilling

subcontractor. We will also be supported by Border Traffic Safety (Border) who will provide traffic control services. Border is a SBE and a DBE. We also propose to collect a total of 8 asphalt cores using Southlands. A cost estimate from Southlands is provided as Attachment 1. Derivation of traffic control costs and rate sheets from Border are included as Attachment 2.

We have made the following assumptions regarding this subtask:

- Borehole spacing will be approximately 500 feet resulting in a total of 14 boreholes.
- Boreholes are targeted to be located on alternating outside shoulders of the roadway where feasible, but in some cases utility conflicts will require drilling in the median or in the travel lanes.
- 12 Boreholes will be 5 feet deep with standard penetration testing (SPT) performed at 2.5 and 5 foot depths in accordance with Pima County (County) requirements.
- 2 Boreholes will be 15 feet deep with SPT testing performed at 2.5 to 5 foot intervals for characterization of subsurface conditions at major drainage structures.
- A total of 8 pavement cores will be performed through the existing Portland Cement Concrete Pavement (PCCP).
- We assume boreholes and pavement cores will take approximately 5 field days to complete because of limitations due to traffic control.
- Borehole and pavement core locations will be field located using plans and field measurements with elevations interpolated from contour information. Alternatively, they may be surveyed by others.

During the field operations, a WSP field engineer or geologist will log the material retrieved from the boreholes in accordance with visual observation procedures (ASTM D 2488), record the results of standard penetration tests in boreholes, and collect representative samples for further laboratory evaluation. WSP will perform the subsurface investigation in general accordance with the following reference documents:

- ADOT Geotechnical Project Development Manual
- ADOT Materials Testing Manual and updates
- Pima County Roadway Design Manual
- American Association of State Highway and Transportation Officials (ASHTO) Manual on Subsurface Investigations
- Standard Recommended Practice for Conducting Geotechnical Subsurface Investigations, AASHTO Designation: R 13-03, American Society for Testing and Materials Designation: D 420-98

1.2.2 Subtask B – Lab Testing

Representative soil samples that are collected during the field investigation will be properly labeled and delivered to WSP's Phoenix lab, an ADOT approved materials laboratory, for further testing in accordance with approved test methods. The lab cost summary table and lab unit rates are included as Attachment 3.

1.2.3 Subtasks C and D – Draft and Final Geotechnical Reports

Once the results of the geotechnical field investigation are complete, additional analysis will be completed to address the following design elements:

- development of interpreted subsurface conditions, including soil stratigraphy and the general soil properties recommended for design
- evaluations of soil shrinkage/swell characteristics (earthwork factors) and ground compaction factors
- evaluation of potential geological/geotechnical hazards, including hydro-collapsible soil or swelling soil
- evaluation of soil corrosion potential (pH, resistivity, sulfate content, and chloride content) for the proposed drainage structures
- evaluation of pavement subgrade conditions and potential mitigation measures, if required
- foundation recommendations at major drainage structure locations

The geotechnical analysis and recommendations from the assessment will be provided in a Draft Geotechnical Report after the completion of the field and lab investigations. The final report will incorporate all review comments generated by the draft report. The final version of the report will be signed and sealed by an Arizona Registered engineer.

Project oversight and Quality Assurance/Quality Control (QA/QC) control will be organized in accordance with our internal project management protocols and PSOMAS' project plan. Michael Pegnam will serve as our senior technical reviewer assigned to the team, and he will be charged with technical and quality review of project processes and deliverables. WSP will provide documentation, if requested, that the appropriate QC process was followed.

1.3 Task 3.13 Pavement Design Report

WSP will present our comments, findings, and conclusions in a Pavement Design Summary Report. The report will contain the following information:

- interpreted subsurface conditions, including soil stratigraphy and soil properties recommended for pavement design
- evaluation of pavement design parameters using County procedures
- report pavement subgrade strength parameters based on the latest updates to the pavement design section (Section 3.13)
- summary and discussion of traffic data (including 18-kip equivalent single axle loadings, ESALS) provided by others
- recommended flexible pavement section and alternative pavement sections compared by initial construction cost as well as constructability and other factors
- summary of the potential PCCP re-use options evaluated under Task 3.21.5

The report will be provided in draft PDF format, and after receiving comments from the project team, WSP will finalize the report and issue a final PDF report sealed by an Arizona registered civil engineer. This report will follow the same QA/QC procedures discussed in Section 1.2.3

Depending on the number of geotechnical recommendations needed, WSP may opt to combine the geotechnical and pavement design reports into a single deliverable, pending approval from PSOMAS and the County. This would reduce redundant information and simplify project documents.

1.4 Task 3.21.5 PCCP Reuse

There are approximately 5 lane-miles of existing PCCP that appear to be in relatively good condition despite its age. We understand the County would like to explore innovative options for re-use of this PCCP, including stabilizing and repairing in place and adding an overlay (black-topping), rubblization and use in place as an aggregate base layer, or crushing and recycling as aggregate base or other material. Several additional investigation techniques will be needed for this analysis.

1.4.1 GPR Investigation

WSP proposes to conduct a Ground Penetrating Radar (GPR) survey to determine the thickness or the depth to the bottom of the concrete and to attempt to image any subsurface voids between the concrete and the subbase road layer. GPR units consist of a transmitter and co-located receiver and come in different frequencies and number of channels. The unit transmits a radio signal into the ground and that signal then reflects off materials with a different dielectric constant than the surrounding material. Dielectric constant is a dimensionless property of materials that measures the ease of which a material becomes polarized in the presence of an external electric field. For a target of interest to be detectable a measurable change in dielectric values is required. Different materials exhibit different dielectric values (i.e., air is 1 and water is 81).

WSP plans to use an IDS GeoRadar Stream C multi-antenna array GPR unit to collect data over the survey areas of the site. The Stream C is a multi-channel GPR unit with 32 600 MHz antennas of which 8 are cross polarized allowing for a true 3D swatch of data collection. An RTK-GNSS unit will connect to the GPR to collect data geo-referenced to NAD 1983 Arizona State Plane Arizona (Central) US Survey Foot. The onboard computer navigation indicates the footprint of the unit where data has been collected allowing the operator to rapidly cover the entire accessible portion of the survey area.

1.4.2 Subtask A – GPR Mobilization

The GPR operator will mobilize from our Buffalo, New York office. The specialized GPR equipment will be rented for the project and shipped to/from the WSP Tucson office. This task will include preparing and shipping the equipment, travel by plane to and from Tucson, and other direct expenses. All travel expenditures will be in accordance with Pima County procurement requirements.

1.4.3 Subtask B – GPR Field Survey

Our geophysicist will mount the Stream C GPR unit to the back of a side-by-side vehicle and collect GPR data at 2-3 mile per hour (mph). WSP will work with County approved traffic control and establish either lane closures or utilize a mobile attenuator truck shadowing the operation in order to ensure a safe working environment. Work maybe done at night to minimize impact to traffic flow. Once traffic control has been set up, the geophysicist will collect data across the 1.3 mile length of the project by surveying three passes per lane of the road for complete

coverage of each lane. Based on survey production speeds, traffic control setups, and on-site coordination, WSP estimates that the work will take two field days to complete.

1.4.4 Subtask C – Data Processing and Report

The WSP geophysicist will process each section of data and assemble data sets into manageable lengths and size. Each profile will be reviewed for evidence of voiding and selecting the bottom of the concrete road. The data can also be merged into and presented as 3D sections which may aid in the interpretation of features of interest. Line work of the bottom of concrete and any identified voids will be presented in a stand-alone GPR report that will be incorporated as an Appendix to the Geotechnical Report.

1.4.5 Subtask D – Additional Analysis

Additional analysis will be required besides the GPR data to evaluate the condition of the PCCP for potential reuse. This task includes coordination with specialty contractors on PCCP rubblization feasibility and cost, identification of slabs needing repair, preparation of recommendations for slab repair and stabilization, and supporting the design team with preparation of cost estimates for PCCP stabilization or reuse. WSP has also included an allowance of \$5,000 under this task for performance of petrographic analysis of selected concrete cores for additional insights into their condition and potential for reuse, although a specific lab and cost estimate has not been identified yet.

2.0 ASSUMPTIONS

WSP has made the following assumptions when preparing this scope and fee proposal:

- Right-of-way (ROW) use permit fees will be waived for this Pima County project.
- PSOMAS and the project team members will provide the necessary environmental clearance and right-of-entry documents.
- Archaeological monitoring, if required, will be provided by others.
- PSOMAS or the County will provide traffic data including 18-kip equivalent single axle loadings (ESALS) over the design life, or average daily traffic (ADT) values with vehicle type distribution data and desired pavement design life.

3.0 SCHEDULE

We understand that the overall project schedule is very aggressive. The critical path items for WSP's scope of services are obtaining the necessary ROE permits for the field investigation, the design team providing us with any environmental or cultural clearance documents required in order for us to perform our field investigation, and the team's surveyors marking the location of our boreholes, if survey locations are needed. We will work with PSOMAS to ensure that our work meets the requirements of the project schedule. We have provided the following preliminary task lead times and durations to factor into your schedule.

- WSP can provide a geotechnical investigation plan within two weeks of notice to proceed (NTP)
- The geotechnical investigation (boreholes and coring) can be started approximately 3 weeks after receiving all necessary environmental and right of entry (ROE) permits (if applicable). Additional float for scheduling is helpful if this is not on the critical path.

- The boreholes and coring will take approximately one week to complete.
- Laboratory testing will take approximately 4 weeks after completion of the boreholes and coring.
- The draft geotechnical report and draft pavement reports will be developed in parallel and can be issued 4 weeks after completion of the lab testing.
- The GPR survey can be performed approximately 2 months after NTP to allow sufficient lead time for equipment rental and staff availability.
- GPR data processing and reporting will take approximately 1 month but should be completed by the time of the draft reports if not sooner.
- Final geotechnical and pavement reports can be issued approximately 3 weeks after receipt of all comments.
- Pavement section alternatives will be compared by initial construction cost, no life-cycle pavement cost analysis will be performed.

4.0 STAFFING

The WSP team involved in this project will be:

- Michael Pegnam, PE – Project Director and Senior Reviewer
- Randy Post, PE – Project Manager
- Mark Saunders – Geophysics Program Task Manager

Various staff and project engineers from our Tucson office will comprise our support staff. Our field geophysicist will mobilize from Redmond, Washington or Buffalo, New York with support from local staff as needed.

5.0 ESTIMATED COSTS

WSP understands that this project will be invoiced on a cost plus fixed fee basis. Our total costs are anticipated to be approximately \$107,656.99. A derivation of costs is provided as Table 1. Specific hours per labor classification for each of the tasks discussed above are listed in the attached Table 1. These rates are based on our most recent audited overhead rate and adjusted for a fixed fee of 10 percent. If additional budget is required to continue the design effort due to significant changes in scope as the project develops, WSP will submit a change order request and obtain approval in advance of exceeding this total.

6.0 CLOSING

We look forward to working with PSOMAS and the members of the team on this project. Please contact Randy at (520) 332-1414 if you have any questions or comments regarding this proposal.

Respectfully submitted,

WSP USA Inc.



Randy Post, PE
Assistant Vice President, Geotechnical Engineer



Roger Pihl, PG
Vice President, Senior Geologist

RMP/RAP/rm

Attachments: Table 1 – Overall Derivation of Cost
Table 2 – Distribution of Labor Hours
Attachment 1 – Southlands Engineering, LLC Cost Estimate
Attachment 2 – Traffic Control Cost Derivation and Backup (Border Traffic Safety)
Attachment 3 – Laboratory Testing

[https://golderassociates.sharepoint.com/sites/130697/project files/2023 proposals/202308023 psomas valencia mission to cdlt/proposal/rev 1/202308023-pro-1-w_valencia_road_26jun23.docx](https://golderassociates.sharepoint.com/sites/130697/project%20files/2023%20proposals/202308023%20psomas%20valencia%20mission%20to%20cdlt/proposal/rev%201/202308023-pro-1-w_valencia_road_26jun23.docx)

Tables

Table 1: Overall Derivation of Cost

Task No.	Task Name	Hours	Direct Labor	OH and FCCM (139.52%)	Fixed Fee (10%)	Total Professional Services	Reimbursable Expenses	Subcontractors	TOTAL
Task 3.1	Project Management	76.0	\$4,451.33	\$6,210.50	\$1,066.17	\$11,728.00			\$11,728.00
Task 3.12	Geotechnical Investigation and Report								
Task 3.12A	Field Program	92.0	\$3,935.14	\$5,490.31	\$942.55	\$10,368.00		\$13,239.38	\$23,607.38
Task 3.12B	Lab Testing	10.0	\$524.53	\$731.82	\$125.65	\$1,382.00			\$1,382.00
Task 3.12C	Draft Geotech Report	90.0	\$5,253.69	\$7,329.95	\$1,258.36	\$13,842.00			\$13,842.00
Task 3.12D	Final Geotech Report	44.0	\$2,481.10	\$3,461.63	\$594.27	\$6,537.00			\$6,537.00
Task 3.13	Pavement Design Report								
Task 3.13A	Draft Pavement Report	68.0	\$3,723.36	\$5,194.83	\$891.81	\$9,810.00			\$9,810.00
Task 3.13B	Final Pavement Report	24.0	\$1,312.47	\$1,831.16	\$314.37	\$3,458.00			\$3,458.00
Task 3.21.5	PCCP Reuse								
Task 3.21.5A	GPR Mobe	42.0	\$1,668.11	\$2,327.35	\$399.54	\$4,395.00	\$3,422.20		\$7,817.20
Task 3.21.5B	GPR Field Work	49.0	\$1,927.72	\$2,689.55	\$461.73	\$5,079.00	\$5,872.20	\$822.19	\$11,773.39
Task 3.21.5C	GPR Processing / Reporting	62.0	\$2,705.41	\$3,774.59	\$648.00	\$7,128.00	\$500.00		\$7,628.00
Task 3.21.5D	Additional Analysis	28.0	\$1,836.25	\$2,561.94	\$439.81	\$4,838.00		\$5,000.00	\$9,838.00
TOTAL PRICE		585.0	\$29,819.11	\$41,603.62	\$7,142.27	\$78,565.00	\$9,794.40	\$19,061.57	\$ 107,420.97

Notes:

Table 2: Distribution of Labor Hours

Task Number	Task Name	Hours by Labor Classification								TASK TOTAL HOURS
		Project Manager	Project Director	Assistant Vice President (P-12)	Senior Consultant (P-10)	Consultant (P-09)	Associate Consultant (P-08)	Drafting (T-07 to T-10)	Administrative Support (A-07 to A-09)	
	Fully Loaded Billing Rate	\$180.24	\$233.14	\$160.79	\$127.64	\$111.00	\$97.72	\$107.77	\$81.75	
3.1	Project Management	56							20	76
3.12	Geotechnical Investigation and Report									
3.12A	Field Program	8			24		60			92
3.12B	Lab Testing	2			8					10
3.12C	Draft Geotech Report	40	4		40			4	2	90
3.12D	Final Geotech Report	20			20			2	2	44
3.13	Pavement Design Report									
3.13A	Draft Pavement Report	24			40			2	2	68
3.13B	Final Pavement Report	10			10			2	2	24
3.21.5	PCCP Reuse									
3.21.5A	GPR Mobe	2		2			38			42
3.21.5B	GPR Field Work	2		2			45			49
3.21.5C	GPR Processing / Reporting			16			40	6		62
3.21.5D	Additional Analysis	16	4		8					28
	Total Hours									585

ATTACHMENT 1

**Southlands Engineering, LLC Cost
Estimate**

Southlands Engineering

P.O. Box 65017 Tucson, Arizona 85728
1875 W. Gardner Lane, Tucson, Arizona 85705
Phone: (520) 940-0472 . Fax: (520) 329-8998

ROC No.: A-4 294073 | ADWR No.: 845 | AzBTR: 18921 | N.Mexico: WD-1746



Mr. Randy Post, PE

Assistant Vice President, Geotechnical Engineer

WSP

Tucson, Arizona

Date: 7/25/2023

Proposal No.: P2302-044

Cost Estimate for Geotechnical Engineering Services, Revision 1

Proposed Geotechnical & Pavement Investigation

West Valenica Road, Camino De La Tierra to Mission

Pima County, Arizona

WSP Project #: TBD

SCOPE OF WORK

Scope: Geotechnical Drilling Investigation, Hollow Stem Auger

1. Drill a total of fourteen (14) boreholes to depths ranging from 5 to 15-feet below bgs.
2. Drill 12 boreholes to depths of 5-feet bgs for pavement mitigation & design.
3. Drill 2 boreholes to 15-feet bgs for drainage structures.
4. Eight (8) of the pavement boreholes will require pavement coring and patching.
5. The other boreholes will be drilled in the shoulders of the existing alignment.

Drilling Methods: Borehole will be drilled as follows:

Hollow Stem Auger (3.25 I.D.)

Asphalt Coring: Wet Diamond Asphalt/Concrete coring.

This will be performed at the eight PC locations.

Coring Crew Estimated to be on site for 2 shifts.

Sampling: Standard SPT Sampling at 2.5 and 5 feet intervals.

Borehole Abandonment: All boreholes will be backfilled with auger cuttings.

Equipment: Utilizing a CME-45 Truck mounted Drill Rig

Project Duration: 3 days (2 days for the pavement boreholes and 1 day for the other 6 boreholes)

Project Profit: This cost estimate is based on costs that are derived at 10 percent profit.

SCOPE : Geotechnical Subsurface Investigation

Item	Quantity	Unit	Cost	Price
HOLLOW-STEM-AUGER DRILLING COSTS				
CME 55/75 HT Truck-Mounted Drill Rig: Hollow-Stem Auger				
Work Plan/Health & Safety/Project Mgmt.	4.00	HOUR	\$ 120.00	\$ 480.00
Job Preparation (Materials & Equipment)	4.00	HOUR	\$ 180.00	\$ 720.00
Mobilization/Demobilization ²	1.00	LUMP	\$ 1,565.00	\$ 1,565.00
ATV Rig Transportation (Low-Boy)	0.00	LUMP		\$ -
DRILLING RELATED COSTS				
Safety Meeting/Borehole Access/Site Set-Up	2.00	HOUR	\$ 180.00	\$ 360.00
Drilling; Hollow Stem Auger ³	10.00	HOUR	\$ 180.00	\$ 1,800.00
Rig Move (Between Boreholes)	4.00	HOUR	\$ 180.00	\$ 720.00
Abandonment/Patching/Site Clean-Up	4.00	HOUR	\$ 180.00	\$ 720.00
Neat Cement for Backfill Blend	0.00	EACH	\$ -	\$ -
Asphalt Cold Patch	8.00	EACH	\$ 25.00	\$ 200.00
Drilling Stand-By: (TC Set-Ups & Asphalt Coring)	4.00	DAILY	\$ 180.00	\$ 720.00
CONCRETE AND ASPHALT CORING				
Project Preparation	2.00	HOUR	\$ 165.00	\$ 330.00
Mobilization/Demobilization	2.00	EACH	\$ 425.00	\$ 850.00
On-Site Coring/Clean-Up (8-Locations)	8.00	HOUR	\$ 175.00	\$ 1,400.00
Stand-by (TC Set-Up and Moving)	8.00	HOUR	\$ 175.00	\$ 1,400.00
Estimated Drilling Total			\$ 11,265.00	

NOTES:

- Job Preparation:** includes time to inspect and prepare the equipment and materials that will be required to complete the investigation. For this particular project, it would consist of preparing multiple cutter heads and auger to complete the drilling investigation. The time also includes time spent to perform daily ADOT vehicle inspection prior to driving the drill rig to the project site.
Time to prepare a health and safety plan has also been included as part of this preparation task.
- Mobilization/Demobilization:** includes time spent by the crew to mobilize equipment to the project site, including the mobilization of all materials and associated tooling.
- Drilling Time:** includes time spent to drill the assigned locations and SPT sampling including backfilling and restoring locations (including patching if necessary) to acceptable standards.

4. **Safety Meetings / Borehole Access / Move Drill Rig:** Includes time to move the drill rig between the borehole locations. It also accounts for the time that will be spent on a daily basis to conduct daily tail gate meetings and any safety audits that maybe conducted. This estimated time also includes time for site-specific safety training that may be conducted prior to commencing.
5. **Standby** time due to unreadiness of the borehole locations or 'Client' delays will be billed at the provided hourly rate, and has not been included in this cost estimate.

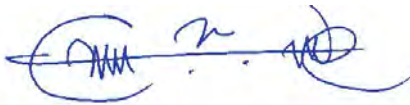
ASSUMPTIONS:

1. **WSP** will coordinate all Blue Stake permits and verify that all utilities are marked and all conflicts resolved prior to completing the subsurface investigations. Southlands will be included on the Blue Stake request as a sub-contractor as required by State regulations. Southlands will not be liable for any damaged underground or overhead utilities.
2. **WSP** will coordinate and acquire all necessary permits that may be required to complete the proposed subsurface investigations.
3. Based on the information provided, **WSP** will coordinate and provide all traffic control or safety related accessories that will be required to complete the investigations.
4. This cost estimate assumes that access to the drill locations will require minimal efforts and will not require the use of additional materials or equipment. Any damage that may result to the Southlands' drilling equipment will be billed at cost plus 15 percent to replace or repair all damages.
5. Southlands will not dictate the location of drilled borehole, this is the responsibility of the 'Client', hence Southlands will not be held responsible for any damaged overhead and underground utilities that may occur as a result of drilling at a location as directed by the 'Client'. Once the work is scheduled, this proposal will be considered a legal binding document for conditions of the project.
6. If the project encounters difficulties beyond our control or if the scope of work is altered, Southlands reserves the right to renegotiate the price.

Southlands thanks you for the opportunity to provide you this cost estimate proposal. If you have any questions or need any clarifications regarding this cost estimate, or if we may be of any further assistance please do not hesitate to contact us at (520) 940-0472. We look forward to hearing from you soon.

Sincerely,

SOUTHLANDS ENGINEERING, LLC



David C. Mwewa, P.E.
President/Principal Engineer
chushidm@southlandsengr.com



ATTACHMENT 2

**Traffic Control Cost Derivation and
Backup (Border Traffic Safety)**

Summary of Traffic Control Costs - Phase 3.12

Description	Unit	Rate	Quantity	Subtotal
Lane Closure for approximately 4 Boreholes (See Border Daily Quote)	Day	\$383.59	1	\$383.59
Lane Closures for Median Work, and for Boreholes in Travel Lanes	Day	\$383.59	1	\$383.59
Shoulder Closure for approximately 6 Boreholes (See Border Daily Quote)	Day	\$275.00	1	\$275.00
Lane Closure for pavement coring operation (8 cores, see Border Daily Quote)	Day	\$383.59	2	\$767.19
TC Plan	Each	\$55.00	3	\$165.00
TOTAL:				\$1,974.38

Notes:

Summary of Traffic Control Costs - Phase 3.21.5

Description	Unit	Rate	Quantity	Subtotal
Attenuator truck following behind GPR equipment. See Daily Rate derivation.	Day	\$383.59	2	\$767.19
TC Plan	Each	\$55.00	1	\$55.00
				\$0.00
				\$0.00
TOTAL:				\$822.19

Notes:

Daily Traffic Control Derivation - Attenuator Truck, Prewarning Signs

	Item	Unit	Rate	Quantity	Subtotal	
Barricade/Equipment Rental	Flashing Arrowboard Panel	each/day	\$20.00		\$0.00	T
	Variable Message Board	each/day	\$65.00		\$0.00	T
	Vertical Panels	each/day	\$0.25		\$0.00	T
	Type II Barricade	each/day	\$0.25		\$0.00	T
	Type III Barricade	each/day	\$0.50		\$0.00	T
	Type A Warning Flashing Light	each/day	\$0.15		\$0.00	T
	Type C Warning Steady Burn Light	each/day	\$0.20	4	\$0.80	T
	Small Sign Std. Intensity Sheeting (<10Sq.ft.)	each/day	\$0.25		\$0.00	T
	Large Sign Std. Intensity Sheeting (>10Sq.ft.)	each/day	\$0.35		\$0.00	T
	Large Sign HI- Intensity Sheeting (>10Sq.ft.) (ADOT)	each/day	\$0.75		\$0.00	T
	Portable Sign Stand (Spring Type)	each/day	\$0.75	4	\$3.00	T
	Portable Sign Stand (Rigid Type < 10Sq.ft.)	each/day	\$0.25		\$0.00	T
	Traffic Cones 28"	each/day	\$0.25		\$0.00	T
	Traffic Cones 28" w/ reflective sleeve	each/day	\$0.45		\$0.00	T
	Waterbarrier (water filled, by contractor)	each/day	\$4.50		\$0.00	T
	Truck Mounted Attenuator	each/day	\$225.00	1	\$225.00	T
Sale Items	City of Tucson 30 Day Barricade Permit w/ TCP review Fee	each	\$175.00		\$0.00	
	Traffic Control Plan	each	\$55.00		\$0.00	
	Safety flag on staff	each	\$3.25	8	\$26.00	T
	Sandbags - Vps/ signs	each	\$1.50	16	\$24.00	T
Labor	1 man, 1 truck	Per Hour	\$55.00	4	\$220.00	
	Attenuator Driver	Per Hour	\$50.00	8	\$400.00	
	Certified flagger	Per Hour	\$50.00		\$0.00	
Non-Taxable Subtotal:					\$620.00	
Taxable Subtotal:					\$278.80	
Tax (8.7%):					\$24.26	
TOTAL:					\$923.06	

Notes:



527 W. 29Th Street # 3
Tucson, Arizona, 85713
Phone: (520) 664-2244 Fax: (520)623-9187
E-mail: borrdertrafficsafety@cox.net

Az Business Lic # 20162914
Fed. Tax #20-8233053
Adot Civil Rights #20060182

Date: 6/12/2023

Company: WSP ATTN: RANDY POST
Project: All Southern Az Projects Fax:
Jobsite: All Southern Az Projects Phone: 520-405-8581

BARRICADE RENTAL PRICES PER UNIT (Construction Area Elements)

Flashing Arrowboard Panel	20.00	each/day
Variable Message Board	65.00	each/day
Vertical Panels	0.25	each/day
Type II Barricade	0.25	each/day
Type III Barricade	0.50	each/day
Type A Warning Flashing Light	0.15	each/day
Type C Warning Steady Burn Light	0.20	each/day
Small Sign Std. Intensity Sheeting (<10Sq.ft)	0.25	each/day
Large Sign Std. Intensity Sheeting (>10Sq.ft.)	0.35	each/day
Large Sign HI- Intensity Sheeting (>10Sq.ft.) (ADOT)	0.75	each/day
Portable Sign Stand (Spring Type)	0.75	each/day
Portable Sign Stand (Rigid Type < 10Sq.ft))	0.25	each/day
Traffic Cones 28"	0.25	each/day
Traffic Cones 28" w/ reflective sleeve	0.45	each/day
Waterbarrier (water filled, by contractor)	4.50	each/day
ADA Fencing	4.50	each/day
AFAD (Automated Flagger Assist device)	55.00	each/hour
Truck Mounted Attenuator	225.00	each/day

SALE ITEMS:

City of Tucson 30 Day Barricade Permit w/ TCP review Fee	175.00	each
Traffic Control Plan	55.00	each
Safety flag on staff	3.25	each
Sandbags - Vps/ signs	1.50	each
Specialty Sign Eng. Grade	18.00	p/sq.ft
Specialty Sign HIP Grade (county / city spec)	22.50	p/sq.ft
Telespar post w/Foundation 2" x12'	125.00	each
Caution Tape - 1000' roll	22.00	each
Insurance Endorsements, Waivers	TBD	each

LABOR:

1 man, 1 truck	(port to port)	\$ 55.00	Per Hour
Attenuator Driver	(port to port)	\$ 50.00	Per Hour
Certified flagger	(port to port)	\$ 50.00	Per Hour

Setups & Takedowns will be done by Border Traffic Safety Technicians (not Negotiable)

due to Insurance Liabilities & City of Tucson, Pima County Regulations

Applicable sales tax will be added to all billings

Net 30 days on rental and sales items

Items not listed on this schedule will be quoted upon request

Equipment covered under this quote will meet City of Tucson / PAG / MUTCD specifications

Labor is not included in the above unit rental rates, overtime rates apply aftr 8 hours or weekends

Labor charges will include port to port as well as time spent on the job site

Job Check & Service will be provided on a regular basis at the above labor rates

1 hour minimum labor will be charged on all trips to jobsite

All rental items are billed per day not per shift

Prices are effective until 12-31-24, Retention 0%

Questions Contact
Ben Lozano @520-382-7666
blozano@cox.net

Certified SBE/ MBE /DBE Company

[illegible]

START DATE:		ORDERED BY:		CUSTOMER #:							
DATE	TRANS ACTION	AMOUNT OF UNITS	ON HAND	DESCRIPTION	# UNITS	#DAYS	UNIT PRICE	AMOUNT			
				SMALL SIGNS REG. INT	4	1	\$ 0.25	\$ 1.00			
				SIGN STANDS W/ FLASHERS	4	1	\$ 0.40	\$ 1.60			
				VERTICAL PANELS W/ STEADY BURN	10	1	\$ 0.45	\$ 4.50			
				TYPE II BARRICADES W/ FLASHERS	4	1	\$ 0.40	\$ 1.60			
				EQUIPMENT RENTAL SUBTOTAL:							\$ 8.70
				<u>SALE ITEMS (CONSUMABLES)</u>							
				FILLED SAND BAGS	12	1	\$ 1.50	\$ 18.00			
				SAFETY FLAGS W/ STAFF	6	1	\$ 3.25	\$ 19.50			
				TRAFFIC CONTROL PLANS	1	1	\$ 55.00	\$ 55.00			
				SALE ITEM SUBTOTAL:							\$ 92.50
				<u>LABOR CHARGES (INCLUDE PORT to PORT)</u>				<u>HOURS</u>	<u>TRIPS</u>		
				DELIVER / SETUP ONE MAN ONE TRUCK	1.50	1	\$ 55.00	\$ 82.50			
				FINAL TAKEDOWN & PICKUP 1 MAN 1 TRUCK	1.50	1	\$ 55.00	\$ 82.50			
				LABOR SUBTOTAL:							\$ 165.00
				NOTE:							
				ADDITIONAL DELIVERIES / SETUPS /PICKUPS							
				WILL BE BILLED AT \$55.00 PER/ HOUR				RENTAL & SALES COST:	\$ 101.20		
				1 MAN 1 TRUCK (PORT TO PORT)				LABOR:	\$ 165.00		
								8.7% TAX	\$ 8.80		
								TOTAL:	\$ 275.00		

ATTACHMENT 3

Laboratory Testing

Summary of Laboratory Testing

Test Name	Standard	Rate	Unit	Qty.	Subtotal
Collapse Potential of Soils	ASTM D5333	\$200.00	each	4	\$800.00
Consolidation	ASTM D2435, AASHTO T216	\$285.00	each		\$0.00
Consolidation, Time Rate Loading	ASTM D2435, AASHTO T216	\$325.00	each		\$0.00
Crumb Test of Soil	USBR 5400	\$100.00	each		\$0.00
Density of Soil in-situ – Ring	ASTM D2937	\$35.00	each		\$0.00
Density of Soil in-situ – Shelby Tube	ASTM D1587/D2937	\$50.00	each		\$0.00
Direct Shear	ASTM D3080	\$400.00	each		\$0.00
Direct Shear - Remolded	ASTM D3080	\$425.00	each		\$0.00
Hydrometer Analysis	ASTM D422, AASHTO T88	\$280.00	each		\$0.00
Moisture Content of Soil	ASTM D2216, AASHTO T265	\$25.00	each	20	\$500.00
One-Dimensional Expansion	ASTM D4546	\$160.00	each	4	\$640.00
Organic Content	ASTM D2974, AASHTO T267	\$125.00	each		\$0.00
pH and Minimum Resistivity of Soils and Aggregates	ARIZ 236	\$160.00	each	4	\$640.00
pH of Soils and Aggregates	AZ 236	\$50.00	each		\$0.00
Permeability, Flex Wall – Cohesive In-situ	ASTM D5084	\$360.00	each		\$0.00
Permeability, Flex Wall – Cohesive Remolded	ASTM D5084	\$400.00	each		\$0.00
Permeability, Granular Soil	AASHTO T215	\$360.00	each		\$0.00
Pinhole Dispersion of Soil	ASTM D4647	\$260.00	each		\$0.00
Plasticity Index (Dry Prep)	ASTM D4318, AASHTO T89/T90	\$95.00	each	20	\$1,900.00
Plasticity Index (Wet Prep)	ASTM D4318, AASHTO T89/T90/R74	\$120.00	each		\$0.00
Proctor-Modified	ASTM D1557, AASHTO T180	\$155.00	each		\$0.00
Proctor-Standard	ASTM D698, AASHTO T99, ARIZ 225/245	\$135.00	each		\$0.00
Proctor-Standard One Point	AASHTO T272, ARIZ 246	\$90.00	each		\$0.00
Resilient Modulus of Subgrade	AASHTO T307	\$1,750.00	each		\$0.00
Resilient Modulus of Subbase	AASHTO T307	\$1,800.00	each		\$0.00
Resistivity of Soils	ASTM G187, AASHTO T288, ARIZ 236	\$130.00	each		\$0.00
R-Value	ASTM D2844, AASHTO T190, CTM 301	\$300.00	each	3	\$900.00
Sieve Analysis, Dry Sieve	ASTM C136, AASHTO T27, ARIZ 201	\$70.00	each	20	\$1,400.00
Sieve Analysis, Washed	ASTM C136, AASHTO T27, ARIZ 201	\$95.00	each		\$0.00
Soil Specific Gravity	ASTM D854, AASHTO T100	\$170.00	each		\$0.00
Sulfate and Chloride Content	ARIZ 733, ARIZ 736	\$70.00	each	4	\$280.00
Triaxial – Unconsolidated Undrained	ASTM D2850, AASHTO T296	\$450.00	each		\$0.00
Triaxial - Consolidated Undrained	ASTM D4767	\$1,850.00	each		\$0.00
Unconfined Compressive Strength,	ASTM D2166, AASHTO T208	\$150.00	set		\$0.00
Point Load Index	ASTM D5731	\$60.00	each		\$0.00
Slake Durability	ASTM D4644	\$200.00	each		\$0.00
Unconfined Compressive Strength, Rock Core	ASTM D7012 Method C	\$55.00	each		\$0.00
Compressive Strength - Concrete Cores	ARIZ 317, ASTM C42, AASHTO T24	\$35.00	each	8	\$280.00
TOTAL:					\$7,340.00

Construction Materials Testing and Inspection

WSP USA – Phoenix 2023 Fee Schedule

AGGREGATE

A.	Aggregate Durability Index (ASTM D3744, AASHTO T210).....	\$ 220.00/each
B.	Artificial Crushing	250.00/each
C.	Bulking Effect – Slurry Seal and Microsurfacing Sand (Mod. ASTM C29, Mod. AASHTO T19) ..	175.00/each
D.	California Bearing Ratio (CBR) with Modified Proctor (ASTM D1883, AASHTO T193)	550.00/each
E.	California Bearing Ratio (CBR) with Standard Proctor (ASTM D1883, AASHTO T193)	500.00/each
F.	California Bearing Ratio (CBR) One Point with Proctor (ASTM D1883, AASHTO T193)	400.00/each
G.	Clay Lumps and Friable Particles (ASTM C142, AASHTO T112).....	125.00/each
H.	Cleanliness Value (CTM 227).....	200.00/each
I.	Flakiness Index of Aggregate (ARIZ 233).....	110.00/each
J.	Flat and Elongated Particles (ASTM D4791)	175.00/each
K.	Fractured Faces (AASHTO T335, ASTM D5821, ARIZ 212)	110.00/each
L.	Lightweight Pieces, Coal and Lignite (AASHTO T113, ASTM C123)	250.00/each
M.	L.A. Abrasion of Large Size Coarse Aggregate (ASTM C535).....	350.00/each
N.	L.A. Abrasion of Coarse Aggregate (ASTM C131, AASHTO T96).....	250.00/each
O.	Max. Dry Unit Weight and Water Content Range Using Vibrating Hammer (ASTM D7382)	350.00 each
P.	Max. Index Density and Unit Weight of Soils Using a Vibratory Table (ASTM D4253)	350.00 each
Q.	Methylene Blue Value of Mineral Aggregate (AASHTO T330)	350.00/each
R.	Min. Index Density and Unit Weight of Soils and Calculation of Relative Density (ASTM D4254)	300.00 each
S.	Moisture Content of Aggregate (ASTM C566, AASHTO T255).....	25.00/each
T.	Organic Impurities in Fine Aggregate (ASTM C40, AASHTO T21).....	145.00/each
U.	Percent Carbonates in Aggregate (ARIZ 238)	125.00/each
V.	Potential Alkali Reactivity of Coarse Aggregate (ASTM C1260, ASTM C1567).....	600.00/each
W.	Potential Alkali Reactivity of Fine Aggregate (ASTM C1260, ASTM C1567).....	500.00/each
X.	Sand Equivalent (ASTM D2419, AASHTO T176, ARIZ 242)	95.00/each
Y.	Sieve Analysis, (Dry Sieve) (ASTM C136, AASHTO T27, ARIZ 201)	75.00/each
Z.	Sieve Analysis, (Washed) (ASTM C136, AASHTO T27, ARIZ 201)	95.00/each
AA.	Soundness of Aggregate by Use of Sodium (Magnesium) Sulfate (ASTM C88, AASHTO T104) ..	250.00/each
BB.	Specific Gravity and Absorption of Coarse Aggregate (ASTM C127, AASHTO T85, ARIZ 210) ..	95.00/each
CC.	Specific Gravity and Absorption of Fine Aggregate (ASTM C128, AASHTO T84, ARIZ 211)	125.00/each
DD.	Uncompacted Void Content (ARIZ 247, ASTM C1252, AASHTO T304).....	125.00/each
EE.	Unit Weight and Voids in Aggregate (ASTM C29, AASHTO T19)	95.00/each
FF.	Vaughan and Soares Testing.....	350.00/each

SOILS

A.	Collapse Potential of Soils (ASTM D5333).....	\$ 200.00/each
B.	Consolidation (ASTM D2435, AASHTO T216).....	285.00/each
C.	Consolidation, Time Rate Loading (ASTM D2435, AASHTO T216)	325.00/each
D.	Crumb Test of Soil (USBR 5400)	100.00/each
E.	Density of Soil in-situ – Ring (ASTM D2937)	35.00/each
F.	Density of Soil in-situ – Shelby Tube (ASTM D1587/D2937)	50.00/each
G.	Direct Shear (ASTM D3080)	400.00/each
H.	Direct Shear - Remolded (ASTM D3080)	425.00/each
I.	Hydrometer Analysis (ASTM D422, AASHTO T88).....	280.00/each
J.	Lime Stabilization Mix Design.....	Quote
K.	Moisture Content of Soil (ASTM D2216, AASHTO T265)	25.00/each
L.	One-Dimensional Expansion (Swell) (ASTM D4546) Undisturbed.....	160.00/each
M.	Organic Content (ASTM D2974, AASHTO T267).....	125.00/each
N.	pH and Minimum Resistivity of Soils and Aggregates (ARIZ 236)	160.00/each
O.	pH of Soils and Aggregates (AZ 236)	50.00/each
P.	Permeability, Flex Wall – Cohesive In-situ (ASTM D5084)	360.00/each
Q.	Permeability, Flex Wall – Cohesive Remolded (ASTM D5084)	400.00/each
R.	Permeability, Granular Soil (AASHTO T215)	360.00/each
S.	Pinhole Dispersion of Soil (ASTM D4647)	260.00/each
T.	Plasticity Index (Dry Prep) (ASTM D4318, AASHTO T89/T90)	95.00/each
U.	Plasticity Index (Wet Prep) (ASTM D4318, AASHTO T89/T90/R74).....	120.00/each
V.	Proctor-Modified (ASTM D1557, AASHTO T180)	155.00/each
W.	Proctor-Standard (ASTM D698, AASHTO T99, ARIZ 225/245)	135.00/each
X.	Proctor-Standard One Point (AASHTO T272, ARIZ 246)	90.00/each

*Modifications to above testing / specifications, call for quote.

Construction Materials Testing and Inspection WSP USA – Phoenix 2023 Fee Schedule

Y.	Resilient Modulus of Subgrade (AASHTO T307)	1750.00/each
Z.	Resilient Modulus of Subbase (AASHTO T307)	1800.00/each
AA.	Resistivity of Soils (ASTM G187, AASHTO T288, ARIZ 236)	130.00/each
BB.	R-Value (ASTM D2844, AASHTO T190, CTM 301)	300.00/each
CC.	Sieve Analysis, (Dry Sieve) (ASTM C136, AASHTO T27, ARIZ 201)	70.00/each
DD.	Sieve Analysis, (Washed) (ASTM C136, AASHTO T27, ARIZ 201)	95.00/each
EE.	Soil Specific Gravity (ASTM D854, AASHTO T100)	170.00/each
FF.	Sulfate and Chloride Content (ARIZ 733, ARIZ 736)	70.00/each
GG.	Triaxial – Unconsolidated Undrained (ASTM D2850, AASHTO T296)	450.00/each
HH.	Triaxial - Consolidated Undrained (ASTM D4767)	1850.00/each
II.	Unconfined Compressive Strength, (ASTM D2166, AASHTO T208)	150.00/set

ROCK CORE

A.	Point Load Index (ASTM D5731)	60.00/each
B.	Slake Durability (ASTM D4644)	200.00/each
C.	Unconfined Compressive Strength, Rock Core (ASTM D7012 Method C)	55.00/each

CONCRETE / GROUT / MORTAR / MASONRY / SOIL CEMENT

A.	Compressive Strength - Concrete Cores (ARIZ 317, ASTM C42, AASHTO T24)	\$ 35.00/each
B.	Compressive Strength - Concrete Cylinders (ARIZ 314, ASTM C39, AASHTO T22)	20.00/each
C.	Compressive Strength – Concrete Masonry Units (ASTM C140)	70.00/each
D.	Compressive Strength – Grout Prisms (UBC 21-17)	20.00/each
E.	Compressive Strength – Masonry Prisms (ASTM E447, UBC 24-26) (2 High Blocks)	200.00/each
F.	Compressive Strength – Mortar Cylinders (ASTM C109, AASHTO T106)	20.00/each
G.	Compressive Strength – Soil Cement (ARIZ 241)	25.00/each
H.	Flexural Strength of Concrete (ASTM C293)	60.00/each
I.	Flexural Strength of Concrete with Mold Cleanup (ASTM C293)	75.00/each
J.	Grout or Mortar Mix Design	Quote
K.	Length Change (Shrinkage) of Hardened Concrete (ASTM C157)	550.00/set
L.	Portland Cement Concrete Mix Design	Quote
M.	Shotcrete Panel Coring and Compressive Strength, 3 Cores (ASTM C1140)	225.00/each
N.	Soil Cement Design	Quote
O.	Time of Setting of Concrete Mixtures (ASTM C403)	125.00/each

ASPHALTIC CONCRETE / SLURRY SEAL / MICROSURFACING

A.	Abson Recovery, Asphalt Content (ASTM D1856 & D2172, AASHTO R59 & T164)	\$ 450.00/each
B.	Analysis of Cut Cores	Quote
C.	Asphalt Drain Down Test (AASHTO T305, Schellenberg Method)	325.00/each
D.	Bulk Specific Gravity of Bituminous Mixtures, SSD (ARIZ 415, ASTM D2726, AASHTO T166)	45.00/each
E.	Bulk Specific Gravity, Paraffin/Parafilm Coated Specimens (ASTM D1188, AASHTO T275)	75.00/each
F.	Centrifuge Extraction of Bituminous Mixtures (ASTM D2172, AASHTO T164)	260.00/each
G.	Centrifuge Extraction/Gradation of Bituminous Mixture (ASTM D2172, AASHTO T164)	300.00/each
H.	Coating and Stripping of Bituminous Mixtures (ASTM D1664, AASHTO T182, CTM 302)	150.00/each
I.	Determine Set and Cure Development of Slurry Systems by Cohesion Tester (ISSA TB-139)	50.00/each
J.	Dynamic Modulus of Hot Mix Asphalt (HMA) (AASHTO T342)	1800/each
K.	Effect of Water on Cohesion of Bituminous Mixtures, IMC	550.00each
	(ASTM D1074/ D1075, AASHTO T165/ T167, ARIZ 802)	
L.	Extraction/Recovery, Absolute Viscosity, Penetration	595.00/each
M.	Gyratory Compaction (AASHTO T312)	160.00/each
N.	Hveem Stabilometer and Bulk Density (ASTM D1560/D1561, AASHTO T246/T247)	175.00/each
O.	Ignition Oven Calibration (ARIZ 427/428, AASHTO T308 Annex A, ASTM D6307)	750.00/each
P.	Ignition-Gradation (ASTM D63074, AASHTO T308, ARIZ 427/428)	225.00/each
Q.	Loaded Wheel (ISSA TB-109, ISSA TB-147, ASTM D6372)	250.00/each
R.	Marshall Test Stability, Flow, Bulk Density (ARIZ 410, ASTM D6326/D6327, AASHTO R68/T245) ...	155.00/each
S.	Moisture Content of HMA, oven method (AASHTO T329, ARIZ 406)	60.00/each
T.	Nuclear Asphalt Content Gauge Calibration (AASHTO T287, ARIZ 421)	750.00/each
U.	Reflux Extraction and Gradation of Bituminous Materials (ASTM D2172, AASHTO T164)	295.00/each
V.	Rotary Evaporator Recovery of Asphalt, Asphalt Content (ASTM D5404 & D2172)	450.00/each

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Construction Materials Testing and Inspection WSP USA – Phoenix 2023 Fee Schedule

W.	Shultz Breuer Ruck (Additional points \$700 each) (ISSA TB144, ASTM D6372)	1500.00/each
X.	Sweep Test of Bituminous Emulsion Surface Treatment Samples (ASTM D7000)	350.00/each
Y.	Tensile Strength Ratio, (ASTM D4867, AASHTO T283)	550.00/each
Z.	Theoretical Maximum Specific Gravity, Rice Test (ASTM D2041, AASHTO T209, ARIZ 417) ...	155.00/each
AA.	Thickness Determination on AC Cores (ASTM D3549).....	15.00/each
BB.	Volatile Distillates in Bituminous Paving Mixtures (ASTM D1461, AASHTO T110)	475.00/each
CC.	Wet Track Abrasion Test, 1 hour (ISSA TB-100, ASTM D3910, ASTM D6372)	275.00/each
DD.	Wet Track Abrasion Test, 6 day (ISSA TB-100, ASTM D3910, ASTM D6372).....	350.00/each

Asphalt Concrete Mix Designs / Slurry Seal / Microsurfacing Job Mix Formulas

A.	Asphalt Rubber - ARAC Mix Design	Quote
B.	Asphalt Rubber – AR-ACFC Mix Design	Quote
C.	Asphaltic Concrete Mix Design - Cold Mix Recycled, Marshall Method	Quote
D.	Asphaltic Concrete Mix Design - Marshall Method, 4 Inch	Quote
E.	Asphalt Concrete Mix Design - Hveem	Quote
F.	Asphalt Concrete Mix Design - Superpave	Quote
G.	Trial Mix Design	Quote
H.	Micro Surfacing Job Mix Formula (MAG 714, ISSA, Various agencies)	1,800.00/each
	(Cohesion, Consistency, split consistency, mix test, setting, water resistance, wet stripping, WTAT 1 hour, loaded wheel test, lateral displacement, specific gravity, does not include Aggregate testing)	
I.	Micro Surfacing Job Mix Formula (ADOT or other that requires SBR test).....	3250.00/each
	(Cohesion, Consistency, split consistency, mix test, setting, water resistance, wet stripping, WTAT 1 hour/6 days, loaded wheel test, does not include Aggregate testing)	
J.	Slurry Seal Job Mix Formula (MAG 715, ISSA, Various agencies).....	1,650.00/each
	(Cohesion, Consistency, split consistency, mix test, setting, water resistance, wet stripping, loaded wheel test, does not include Aggregate testing)	

BITUMINOUS MATERIALS

Superpave PG Binder

A.	Bending Beam Rheometer (ASTM D6648, AASHTO T313)	\$ 250.00/each
B.	Bending Beam Rheometer with RTFO/PAV Aging	485.00/each
C.	Bending Beam Rheometer with Physical Hardening (ASTM D6648, AASHTO T313)	450.00/each
D.	Bending Beam Rheometer, Delta Tc with RTFO/PAV Aging.....	775.00/each
E.	Brookfield Viscosity (ASTM D4402, AASHTO T316).....	100.00/each
F.	Brookfield Viscosity, Temp Sweep 3 points (ASTM D4402, AASHTO T316)	235.00/each
G.	Brookfield Viscosity, Temp Sweep 4 points (ASTM D4402, AASHTO T316)	285.00/each
H.	Dynamic Shear Rheometer (ASTM D7175, AASHTO T315).....	185.00/each
I.	Dynamic Shear Rheometer, Linearity Test (ASTM D7175, AASHTO T315).....	250.00/each
J.	Dynamic Shear Rheometer, Temp. Sweep (ASTM D7175, AASHTO T315).....	250.00/each
K.	Multiple Stress Creep and Recovery, MCSR (AASHTO T350, ASTM D7405)	375.00/each
L.	PG Classification (AASHTO R29)	1,075.00/each
M.	PG Grade Blend Development	Quote
N.	PG Verification (ASTM D6373, AASHTO M320).....	875.00/each
O.	PG Verification, (Caltrans Section 92).....	1,125.00/each
P.	PG Verification, (Caltrans Section 92 w/o Solubility).....	1,000.00/each
Q.	Pressure Aging Vessel (ASTM D6521, AASHTO R28).....	185.00/each
R.	Pressure Aging Vessel, 40 hour (ASTM D6521, AASHTO R28)	300.00/each
S.	Rolling Thin Film Oven (ASTM D2872, AASHTO T240)	145.00/each
T.	Rolling Thin Film Oven with Mass Loss (ASTM D2872, AASHTO T240).....	155.00/each
U.	Temperature Viscosity Curve, Brookfield, specific gravity, DSR	475.00/each

Asphalt Cement

A.	Absolute Viscosity (140°F; 60°C) (ASTM D2171, AASHTO T202)	\$ 100.00/each
B.	AR Grade Asphalt Verification (ASTM D3381, AASHTO M226)	795.00/each
C.	AR Grade Asphalt Verification, Partial Series.....	Quote
D.	Ash in Bituminous Materials (ASTM D2939.10, AASHTO T111).....	175.00/each
E.	Asphalt Grade Blend Development.....	Quote
F.	Brookfield Viscosity, Asphalt (ASTM D2994, ASTM D4878-A or ASTM D5018).....	135.00/each

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G.	Brookfield Viscosity, Asphalt (ASTM D4402, AASHTO T316).....	100.00/each
H.	Chemical Analysis of Asphalt, Complete Series, Modified Rostler/Sternberg (ASTM D2006).....	975.00/each
I.	Ductility of Bituminous Materials (ASTM D113, AASHTO T51).....	135.00/each
J.	Elastic Recovery (ASTM D6084, AASHTO T301).....	160.00/each
K.	Flash and Fire Point, Cleveland Open Cup (ASTM D92, AASHTO T48).....	100.00/each
L.	Flash and Fire Point, Cleveland Open Cup, co-polymer products (ASTM D92, AASHTO T48)	150.00/each
M.	Flash and Fire Point, Tag Open Cup (ASTM D3143, AASHTO T79).....	100.00/each
N.	Heptane/Xylene Equivalent (AASHTO T102).....	275.00/each
O.	Kinematic Viscosity (275°F; 135°C or 140°F; 60°C) (ASTM D2170, AASHTO T201)	145.00/each
P.	n-Heptane Insolubles (ASTM D3279)	275.00/each
Q.	n-Pentane Insolubles (ASTM D2006).....	250.00/each
R.	Penetration (@ Temperatures other than 77°F; 25°C) (ASTM D5, AASHTO T49).....	100.00/each
S.	Penetration (77°F; 25°C) (ASTM D5, AASHTO T49).....	100.00/each
T.	Penetration Grade Asphalt Verification (AASHTO M20)	595.00/each
U.	Penetration Grade Asphalt Verification, Partial Series	Quote
V.	Percent of Ash Content (ASTM D5040).....	200.00/each
W.	Rolling Thin Film Oven Test (ASTM D2872, AASHTO T240)	145.00/each
X.	Rolling Thin Film Oven with Mass Loss (ASTM D2872, AASHTO T240).....	155.00/each
Y.	Separation of Asphalt Cement (ASTM D7173, TX 540C).....	185.00/each
Z.	Smoke Point (ADEQ Procedure).....	185.00/each
AA.	Softening Point of Asphalt, Ring and Ball (ASTM D36, AASHTO T53).....	100.00/each
BB.	Solubility of Bituminous Materials (ASTM D2042, AASHTO T44).....	140.00/each
CC.	Solubility of Bituminous Materials, Centrifuge (ASTM D5546).....	295.00/each
DD.	Solubility of Bituminous Materials, (Modified ASTM D2931.21).....	165.00/each
EE.	Specific Gravity of Bituminous Materials (ASTM D70, AASHTO T228)	100.00/each
FF.	Specific Gravity of Crude Petroleum and Liquid Petroleum by Hydrometer (ASTM D1298).....	195.00/each
GG.	Spot Test (AASHTO T102).....	185.00/each
HH.	Thin Film Oven Aging, (ASTM D1754)	185.00/each
II.	Torsional Recovery (CTM 332).....	275.00/each
JJ.	Vialit test for chip retention, Single temperature (Modified EN 12272-3)	425.00/each
KK.	Vialit test for chip retention, Three temperatures (Modified EN 12272-3)	525.00/each
LL.	Viscosity Grade Asphalt Verification (AASHTO M226)	805.00/each
MM.	Viscosity Grade Asphalt Verification, Partial Series	Quote
NN.	Water in Petroleum Products (ASTM D95, AASHTO T55).....	275.00/each

Asphalt Rubber Binder / Crack Seal

A.	Asphalt Compatibility Test, Crack Sealant, (ASTM D5329.12).....	\$ 175.00/each
B.	Asphalt Rubber Binder Design Profile (AZ Profile).....	1550.00/each
C.	Asphalt Rubber Binder Design Profile (CA Profile)	1750.00/each
D.	Asphalt Rubber Binder Evaluation.....	Quote
E.	Asphalt Rubber Binder Verification.....	Quote
F.	Asphalt Rubber Binder Verification, Partial Series	Quote
G.	Asphalt Rubber Blend Submittal Sample.....	350.00/each
H.	Bitumen Content, TCE (ASTM D4 modified).....	175.00/each
I.	Brookfield Viscosity, Asphalt (ASTM D2994 or ASTM D5018)	135.00/each
J.	Brookfield Viscosity, Crack Sealant, (ASTM D2196)	160.00/each
K.	Bulk Density of Crumb Rubber.....	150.00/each
L.	Crack Sealant Evaluation.....	Quote
M.	Crack Sealant Verification.....	Quote
N.	Crack Sealant, Bond Test (ASTM D5329.8, D5329.9).....	425.00/each
O.	Crack Sealant, Flexibility (ASTM D5329.15)	305.00/each
P.	Crack Sealant, Flow (ASTM D5329.7).....	155.00/each
Q.	Crack Sealant, Tensile Adhesion (ASTM D5329.14).....	360.00/each
R.	Crack Sealant Preparation (ASTM D5167 Jacketed Melter).....	185.00/each
S.	Cone Penetration (ASTM D5329.6).....	100.00/each
T.	Fiber Content of Crumb Rubber, (CTM 385)	80.00/each
U.	Metal Content of Crumb Rubber, (CTM 385).....	80.00/each
V.	Physical Examination and Gradation of Crumb Rubber.....	Quote
W.	Resilience (ASTM D5329.10).....	100.00/each
X.	Rotational Viscosity, Handheld Viscometer (ASTM D7741)	100.00/each
Y.	Rubber Gradations (ASTM C136, ARIZ 714, CTM 385).....	95.00/each
Z.	Specific Gravity of Crumb Rubber (ASTM D1817, CTM 208)	185.00/each

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Construction Materials Testing and Inspection WSP USA – Phoenix 2023 Fee Schedule

EMULSIONS / CUTBACKS / SEAL COATS

A.	Cement Mixing Test (AASHTO T59, ASTM D6935)	\$ 135.00/each
B.	Classification Test, Uncoated Particles (ARIZ 502)	160.00/each
C.	Coating (AASHTO T59, ASTM D6998)	95.00/each
D.	Cutback Asphalt Blend Development	Quote
E.	Cutback Asphalt Verification, without Water Content, Medium Cure (AASHTO M 81/82)	805.00/each
F.	Cutback Asphalt Verification, without Water Content, Slow Cure (ASTM D2026)	1010.00/each
G.	Demulsibility (ASTM D6936, AASHTO T59)	125.00/each
H.	Direct Flame Test (ASTM D2939.20)	185.00/each
I.	Distillate Fraction on Cutback (ASTM D402, AASHTO T78)	285.00/each
J.	Drying Time (ASTM D2939.13)	260.00/each
K.	Emulsified Rejuvenating Agent, Complete Series (Modified Rostler/Sternberg)	Quote
L.	Emulsified Rejuvenating Agent, Complete Series	Quote
M.	Emulsion Verification, RS-1, RS-2, SS-1, SS-1h (ASTM D977, AASHTO M140)	975.00/each
N.	Emulsion Verification, HFRS-2 (ASTM D977, AASHTO M140)	1100.00/each
O.	Emulsion Verification, QS-1H (ASTM D977, AASHTO M140)	705.00/each
P.	Emulsion Verification, CRS-1, CRS-2, CSS-1, CSS-1h (ASTM D2397, AASHTO M208)	1000.00/each
Q.	Emulsion Verification, CQS-1h (ASTM D2397, AASHTO M208)	805.00/each
R.	Emulsion Verification, CQS-1h (MAG 713)	975.00/each
S.	Emulsion Verification, Partial Series	Quote
T.	Flexibility (ASTM D2939.16)	305.00/each
U.	Float Test (ASTM D139, AASHTO T50)	135.00/each
V.	Freezing (AASHTO T-59, ASTM D6929)	155.00/each
W.	High Float Emulsion Verification (ASTM D977, AASHTO M140)	1075.00/each
X.	Identification test for Cationic Slow Set (AASHTO T59, Section 27)	285.00/each
Y.	Identification of Rapid Setting Cationic Emulsion, (AASHTO T59)	205.00/each
Z.	Low Temperature Distillation (ASTM D6997, AASHTO T59)	195.00/each
AA.	Miscibility (ASTM D244, AASHTO T59)	95.00/each
BB.	Particle Charge (ASTM D7402, AASHTO T59)	95.00/each
CC.	pH Determination of Emulsion	95.00/each
DD.	Residue and Oil Distillate by Distillation (ASTM D6997, AASHTO T59)	195.00/each
EE.	Residue by Evaporation (ASTM D6934, AASHTO T59, ARIZ 512, CTM 331, D2834)	100.00/each
FF.	Residue by Evaporation (ASTM D2393.8, CTM 331)	160.00/each
GG.	Residue by Evaporation, Low Temperature (ASTM D7497)	260.00/each
HH.	Resistance to Freezing (ASTM D2939.6)	160.00/each
II.	Resistance to Water (ASTM D2939.15)	275.00/each
JJ.	Resistance to Heat (ASTM D2939.14)	275.00/each
KK.	Resistance to Kerosene (ASTM D 2939.25)	475.00/each
LL.	Saybolt Furol Viscosity (ASTM D7496, AASHTO T59)	145.00/each
MM.	Settlement, 5-Day (ASTM D6930, AASHTO T59)	195.00/each
NN.	Sieve Test (ASTM D6933, AASHTO T59)	100.00/each
OO.	Storage Stability, 1-Day (ASTM D6930, AASHTO T59)	160.00/each
PP.	Uniformity, (ASTM D2939.5)	175.00/each
QQ.	Vacuum Recover of Modified Emulsion (ARIZ 504)	260.00/each
RR.	Volatile Content of Coatings (ASTM D2369)	275.00/each
SS.	Water Content, (AASHTO T59)	375.00/each
TT.	Weight Per Gallon (ASTM D6937, ASTM D2939.7, AASHTO T59)	160.00/each
UU.	Weight Per Gallon, Density of Liquid Coatings (ASTM D1475)	235.00/each
VV.	Wet Film Continuity (ASTM D2939.22)	105.00/each
WW.	Wet Flow (ASTM D2939.19)	150.00/each

*Modifications to above testing / specifications, call for quote.

End of Exhibit B - Compensation Schedule



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

8/17/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS **WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Greyling Ins. Brokerage/EPIC 3780 Mansell Road, Suite 370 Alpharetta GA 30022	CONTACT NAME: Sharon Brubaker PHONE (A/C, No, Ext): 770.756.6599 E-MAIL ADDRESS: greylingcerts@greyling.com	FAX (A/C, No): 770.756.6599
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A: National Union Fire Ins Co of Pittsburg		19445
INSURED Psomas 555 S. Flower Street Suite 4300 Los Angeles CA 90071	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES

CERTIFICATE NUMBER: 996141280

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:			GL5268212	4/1/2023	4/1/2024	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$500,000 MED EXP (Any one person) \$25,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COMP/OP AGG \$4,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			CA4489706	4/1/2023	4/1/2024	COMBINED SINGLE LIMIT (Ea accident) \$2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	WC015893764 (AOS) WC015893765 (CA)	4/1/2023 4/1/2023	4/1/2024 4/1/2024	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Re: Psomas Project #7PIM230101; Design Engineering Services for West Valencia Road: Mission to Camino de la Tierra 4VALMR; Client #SFQ-PO-2300012.

Pima County, its departments, districts, boards, commissions, officers, officials, agents, and employees are named as Additional Insureds with respects to General & Automobile Liability where required by written contract. The above referenced liability policies are primary & non-contributory where required by written contract. Waiver of Subrogation in favor of Additional Insureds where required by written contract & allowed by law. Should any of the above described policies be cancelled by the issuing insurer before the expiration date thereof, we will endeavor to provide 30 days' written notice (except 10 days for nonpayment of premium) to the Certificate Holder. Contractual Liability is included under the General Liability Policy.

CERTIFICATE HOLDER**CANCELLATION**

Pima County
Attn: Judy Cooper
150 W. Congress, 5th Floor
Tucson, AZ 85701

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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ENDORSEMENT

This endorsement, effective 12:01 A.M. 04/01/2023 forms a part of

Policy No. CA4489706

issued to Psomas

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - WHERE REQUIRED UNDER CONTRACT OR AGREEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

SCHEDULE

ADDITIONAL INSURED:

ANY PERSON OR ORGANIZATION FOR WHOM YOU ARE CONTRACTUALLY BOUND TO PROVIDE ADDITIONAL INSURED STATUS BUT ONLY TO THE EXTENT OF SUCH PERSON'S OR ORGANIZATIONS LIABILITY ARISING OUT OF THE USE OF A COVERED AUTO.

I. SECTION II - COVERED AUTOS LIABILITY COVERAGE, A. Coverage, 1. - Who Is Insured, is amended to add:

- d. Any person or organization, shown in the schedule above, to whom you become obligated to include as an additional insured under this policy, as a result of any contract or agreement you enter into which requires you to furnish insurance to that person or organization of the type provided by this policy, but only with respect to liability arising out of use of a covered "auto". However, the insurance provided will not exceed the lesser of:

- (1) The coverage and/or limits of this policy, or
- (2) The coverage and/or limits required by said contract or agreement.



AUTHORIZED REPRESENTATIVE

ENDORSEMENT

This endorsement, effective 12:01 A.M. 04/01/2023 forms a part of

policy No. CA4489706 issued to PSOMAS

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

INSURANCE PRIMARY AS TO CERTAIN ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

Section IV - Business Auto Conditions, B., General Conditions, 5., Other Insurance, c., is amended by the addition of the following sentence:

The insurance afforded under this policy to an additional insured will apply as primary insurance for such additional insured where so required under an agreement executed prior to the date of accident. We will not ask any insurer that has issued other insurance to such additional insured to contribute to the settlement of loss arising out of such accident.

All other terms and conditions remain unchanged.


Authorized Representative or
Countersignature (in States Where
Applicable)

ENDORSEMENT

This endorsement, effective 12:01 A.M. 4/01/2023 forms a part of

policy No. CA4489706 issued to PSOMAS

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

Section IV - Business Auto Conditions, A. - Loss Conditions, 5. - Transfer of Rights of Recovery Against Others to Us, is amended to add:

However, we will waive any right of recovery we have against any person or organization with whom you have entered into a contract or agreement because of payments we make under this Coverage Form arising out of an "accident" or "loss" if:

- (1) The "accident" or "loss" is due to operations undertaken in accordance with the contract existing between you and such person or organization; and
- (2) The contract or agreement was entered into prior to any "accident" or "loss".

No waiver of the right of recovery will directly or indirectly apply to your employees or employees of the person or organization, and we reserve our rights or lien to be reimbursed from any recovery funds obtained by any injured employee.



AUTHORIZED REPRESENTATIVE

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
ANY PERSON OR ORGANIZATION WHOM YOU BECOME OBLIGATED TO INCLUDE AS AN ADDITIONAL INSURED AS A RESULT OF ANY CONTRACT OR AGREEMENT YOU HAVE ENTERED INTO.	PER THE CONTRACT OR AGREEMENT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II 6 Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

- C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable limits of insurance;
whichever is less.

This endorsement shall not increase the applicable limits of insurance.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
ANY PERSON OR ORGANIZATION WHOM YOU BECOME OBLIGATED TO INCLUDE AS AN ADDITIONAL INSURED AS A RESULT OF ANY CONTRACT OR AGREEMENT YOU HAVE ENTERED INTO.	PER THE CONTRACT OR AGREEMENT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY AND NONCONTRIBUTORY - OTHER INSURANCE CONDITION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

The following is added to the **Other Insurance** Condition and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

(1) The additional insured is a Named Insured under such other insurance; and

(2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

04/01/2023

04/01/2024

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
ELECTRONIC DATA LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART DESIGNATED SITES
POLLUTION LIABILITY LIMITED COVERAGE PART DESIGNATED SITES
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY DESIGNATED TANKS

SCHEDULE

Name Of Person(s) Or Organization(s):
PURSUANT TO APPLICABLE WRITTEN CONTRACT OR AGREEMENT YOU ENTER INTO.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph 8. **Transfer Of Rights Of Recovery Against Others To Us** of Section IV – Conditions:

We waive any right of recovery against the person(s) or organization(s) shown in the Schedule above because of payments we make under this Coverage Part. Such waiver by us applies only to the extent that the insured has waived its right of recovery against such person(s) or organization(s) prior to loss. This endorsement applies only to the person(s) or organization(s) shown in the Schedule above.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement changes the policy to which it is attached effective on inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy).

This endorsement, effective 12:01 AM 04/01/2023 forms a part of Policy No. WC015893764(AOS)

Issued to PSOMAS

By NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.

This agreement shall not operate directly or indirectly to benefit any one not named in the Schedule.

Schedule

ANY PERSON OR ORGANIZATION TO WHOM YOU BECOME
OBLIGATED TO WAIVE YOUR RIGHTS OF RECOVERY
AGAINST, UNDER ANY CONTRACT OR AGREEMENT YOU ENTER
INTO PRIOR TO THE OCCURRENCE OF LOSS.

This form is not applicable in California, Kentucky, New Hampshire, New Jersey, North Dakota, Ohio, Tennessee, Texas, Utah, or Washington. This form is not applicable in Missouri when there is a construction code on the policy and there is Missouri premium or exposure.

WC 00.03.13
(Ed. 04/84)

Countersigned by _____

Authorized Representative



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

8/17/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER AssuredPartners Design Professionals Insurance Services, LLC 3697 Mt. Diablo Blvd Suite 230 Lafayette CA 94549	CONTACT NAME: Lisa Shimizu-Fookes PHONE (A/C, No. Ext): 714-427-3482 FAX (A/C, No): E-MAIL ADDRESS: CertsDesignPro@AssuredPartners.com
INSURED PSOMAS 555 South Flower Street, Suite 4300 Los Angeles CA 90071	INSURER(S) AFFORDING COVERAGE INSURER A: XL Specialty Insurance Co. INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:
License#: 6003745 PSOMAS	NAIC # 37885

COVERAGES**CERTIFICATE NUMBER:** 406284770**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG \$ \$ \$ \$ \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) \$ \$ \$ \$
	UMBRELLA LIAB EXCESS LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE AGGREGATE \$ \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below <input type="checkbox"/> Y/N <input type="checkbox"/> N/A						PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT \$ \$ \$
A	Professional Liability Claims Made			DPR5003444	10/15/2022	10/15/2023	Per Claim Annual Aggregate \$2,000,000 \$4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Psomas Project #7PIM230101, Project: Design Engineering Services for West Valencia Road: Mission to Camino de la Tierra 4VALMR, Client Reference #SFQ-PO-2300012

CERTIFICATE HOLDER**CANCELLATION** 30 Day Notice of CancellationPima County
150 W. Congress, 5th Floor
Tucson AZ 85701

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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