



BOARD OF SUPERVISORS AGENDA ITEM REPORT **CONTRACTS / AWARDS / GRANTS**

Requested Board Meeting Date: February 2, 2016

or Procurement Director Award ☐

Contractor/Vendor Name (DBA): Kimley-Horn and Associates, Inc. (Headquarters: Cary, NC)

Project Title/Description:

Design Engineering Services for Valencia Road: Wade Road to Ajo Highway (SR 86).

Purpose:

Award of Contract: Contract No. CT-TR-16-205 to the most qualified consultant in an amount not to exceed \$2,673,558.40 for a contract term through December 30, 2020 for planning and design of the widening of Valencia Road between Wade Road & Ajo Highway (SR86). Administering Department: Transportation.

Procurement Method:

Solicitation for Qualifications No. 193374 was conducted pursuant to A.R.S. § 34-603 and Pima County Board of Supervisors Policy D 29.1(IV). Three (3) responsive statements of qualifications were received and evaluated by a seven (7) member committee using a qualifications and experience based selection criteria. The evaluation included consideration of Small Business Enterprise participation and Small Local Architectural and Engineering Firm Preference in accordance with Pima County Procurement Code 11.12.030 (D). Based upon the scoring of the statements of qualifications, all three (3) firms were invited to participate in interviews. As a result of the combined scoring from the statement of qualifications and interviews, Kimley-Horn and Associates, Inc. was determined to be the highest ranked firm with which the County subsequently negotiated the not to exceed amount of the contract.

Program Goals/Predicted Outcomes:

Final Plans will be available for the bidding and construction of Valencia Road between Wade Road/Ajo Highway (SR86).

Public Benefit:

The project will improve safety, reduce congestion, improve operations and increase mobility for commuters along the Valencia Road corridor, more specifically between Wade Road and Ajo Highway (SR86).

Metrics Available to Measure Performance:

Project design is completed, allowing for bidding and construction of roadway.

Retroactive:

Yes, Contract was not submitted by the agenda addendum deadline for the January 19, 2016 meeting.

10: COB- 1-19-16 (1)
Ver. 1
Pgs. - 44

Procure Dept 01/19/16 PM08:45

Original Information

Document Type: CT Department Code: TR Contract Number (i.e., 15-123): 16-205
Effective Date: 1/14/2016 Termination Date: 12/30/2020 Prior Contract Number (Synergen/CMS): _____
☒ Expense Amount: \$ 2,673,558.40 ☐ Revenue Amount: \$ _____
Funding Source(s): Regional Transportation Authority 40%
Impact Fees 60%

Cost to Pima County General Fund: \$00.00

Contract is fully or partially funded with Federal Funds? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards
Were insurance or indemnity clauses modified? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards
Vendor is using a Social Security Number? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards

If Yes, attach the required form per Administrative Procedure 22-73.

Amendment Information

Document Type: _____ Department Code: _____ Contract Number (i.e., 15-123): _____
Amendment No.: _____ AMS Version No.: _____
Effective Date: _____ New Termination Date: _____
☐ Expense ☐ Revenue ☐ Increase ☐ Decrease Amount This Amendment: \$ _____
Funding Source(s): _____

Cost to Pima County General Fund: _____

Contact: Anthony V. Schiavone

Department: Procurement

Telephone: (520) 724-3245

Department Director Signature/Date: [Signature] 12/31/15

Deputy County Administrator Signature/Date: [Signature] 1/4/16

County Administrator Signature/Date: [Signature] 1/6/16

(Required for Board Agenda/Addendum Items)

PIMA COUNTY DEPARTMENT OF TRANSPORTATION	
PROJECT:	Design Engineering Services for Valencia Road: Wade Road to Ajo Highway (SR 86)
CONSULTANT:	Kimley-Horn and Associates, Inc. 333 East Wetmore Road, Suite 280 Tucson, AZ 85705
AMOUNT:	Not to Exceed \$2,673,558.40
FUNDING:	RTA 40% Impact Fees 60%

CONTRACT
NO. <u>CT-TR-16 * 205</u>
AMENDMENT NO. _____
This number must appear on all invoices, correspondence and documents pertaining to this (stamp here)

CONSULTANT SERVICES CONTRACT

THIS Contract is entered into between Pima County, a body politic and corporate of the State of Arizona, hereinafter called COUNTY, and Kimley-Horn and Associates, Inc., hereinafter called CONSULTANT, collectively referred to as the Parties.

WITNESSETH

WHEREAS, COUNTY requires the services of a CONSULTANT registered in the State of Arizona and qualified to provide Design Engineering Services for the Valencia Road: Wade Road to Ajo Highway (SR 86) Project; and,

WHEREAS, CONSULTANT is qualified and willing to provide such services; and

WHEREAS, based on CONSULTANT'S representations in response to Pima County Solicitation No. 193374, CONSULTANT was determined to be the most qualified for this Project, and

WHEREAS, CONSULTANT has proposed to perform the work at a price acceptable to COUNTY.

NOW, THEREFORE, in consideration of the foregoing recitals and other valuable and good consideration the Parties agree as follows:

ARTICLE 1 – TERM AND EXTENSION/RENEWAL/CHANGES

This Contract as approved by the Board of Supervisors commences on January 19, 2016, and terminates on December 30, 2020, unless sooner terminated or further extended pursuant to the provisions of this Contract.

COUNTY has the option to extend the Contract termination date for project completion. Any modification or extension of the Contract termination date will be by formal written amendment executed by the Parties. The Procurement Director or the COUNTY Board of Supervisors, as required by the Pima County Procurement Code must approve change orders to the Contract or the Scope of Work before CONSULTANT performs the work authorized by the change order.

ARTICLE 2 – SCOPE OF SERVICES

CONSULTANT agrees to provide Design Engineering Services for the Valencia Road: Wade Road to Ajo Highway (SR 86) Project for the COUNTY as described in **EXHIBIT A: SCOPE OF WORK** (24 pages), attached to this Contract.

ARTICLE 3 – COMPENSATION AND PAYMENT

In consideration of the services specified in this Contract, COUNTY agrees to pay CONSULTANT Not to Exceed Two Million, Six Hundred Seventy-three Thousand, Five Hundred Fifty-eight Dollars, and Forty Cents (\$2,673,558.40). CONSULTANT'S fees are as stated in **EXHIBIT B: CONSULTANT FEE PROPOSAL** (6 pages), attached to this Contract. 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.

Unless otherwise agreed, CONSULTANT will submit invoices monthly. 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 Work 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 will be supported by appropriate documentation with each separate invoice submitted.

For the period of record retention required under Article 22, COUNTY reserves the right to question any payment made under this article and to require reimbursement therefor by setoff or otherwise for payments determined to be improper or contrary to the Contract or law.

CONSULTANT will not perform work in excess of the Contract Amount without prior authorization by an amendment executed by COUNTY. Work performed in excess of the Contract Amount without prior authorization by amendment is at CONSULTANT'S own risk.

ARTICLE 4 – 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. The CONSULTANT is free to purchase additional insurance.

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.

4.1 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.

4.1.1 Commercial General Liability (CGL) – Occurrence Form with limits of \$1,000,000 Each Occurrence and \$2,000,000 General Aggregate. Policy will include bodily injury, property damage, and broad form contractual liability coverage, and products – completed operations.

4.1.2 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.

4.1.3 Workers' Compensation and Employers' Liability - Statutory requirements and benefits. Coverage is compulsory for employers of one or more employees. Employer's Liability - \$500,000.

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.

- 4.1.4 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.

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 two (2) years beginning at the time work under this Contract is completed.

Examples of Professional Services requiring E&O insurance: Accounting, Architecture, Asbestos Design, Inspection or Abatement Contractors, Licensed Health Care Practitioners, Legal Services, Engineering Services, or Surveying

4.2 Additional Insurance Requirements:

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

- 4.2.1 Additional Insured Endorsement: 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 with respect to liability arising out of the activities performed by or on behalf of the CONSULTANT.

- 4.2.2 Subrogation Endorsement: 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 the CONSULTANT.

- 4.2.3 Primary Insurance Endorsement: The CONSULTANT'S policies will stipulate that the insurance afforded the 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, as provided by A.R.S. § 41-621 (E).

- 4.2.4 Insurance provided by the CONSULTANT will not limit the CONSULTANT'S liability assumed under the indemnification provisions of this Contract.

4.3 Notice of Cancellation:

For each insurance policy required by the insurance provisions of this Contract, the CONSULTANT must provide to COUNTY, within two (2) business days of receipt, a notice if a policy is suspended, voided, or cancelled for any reason. Such notice will be mailed, emailed, hand-delivered or sent by facsimile transmission to Pima County Procurement Department, 130 W. Congress, Tucson AZ, 85701, (520) 724-4434.

4.4 Verification of Coverage:

CONSULTANT will furnish COUNTY with certificates of insurance (valid ACORD form or equivalent approved by COUNTY) as required by this Contract. An authorized representative of the insurer will sign the certificates.

- 4.4.1 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 coverage or policies as required by this Contract, or to provide evidence of renewal, is a material breach of contract.

4.4.2 All certificates required by this Contract will be sent directly to the Pima County Procurement 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.

4.5 Approval and Modifications:

COUNTY Risk Management reserves the right to review or make modifications to the insurance limits, required coverage, or endorsements throughout the life of this contract, as deemed necessary. Such action will not require a formal Contract amendment but may be made by administrative action.

ARTICLE 5 – INDEMNIFICATION

To the fullest extent permitted by law, CONSULTANT indemnifies and holds harmless COUNTY and the RTA, their officers, employees and agents from and against any and all suits, actions, legal administrative proceedings, claims or demands and costs attendant thereto, including reasonable attorney's fees and court costs, to the extent caused by any negligent, reckless or intentionally wrongful act or omission of CONSULTANT, its agents, employees or anyone acting under its direction or control or on its behalf in connection with performance of this Contract. The obligations under this Article do not extend to the negligence of COUNTY or the RTA, their agents, employees or indemnities.

All warranty and indemnification obligations under this Contract survive expiration or termination of the Contract, unless expressly provided otherwise. 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.

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.

ARTICLE 6 – COMPLIANCE WITH LAWS

CONSULTANT will comply with all applicable federal, state, and local laws, rules, regulations, standards and Executive Orders, without limitation to those designated within this Contract. The laws and regulations of the State of Arizona govern the rights of the Parties, the performance of this Contract, and any disputes hereunder. Any action relating to this Contract will be brought and maintained in Superior Court in Pima County. Any changes in the governing laws, rules, and regulations during the term of this Contract apply, but do not require an amendment.

ARTICLE 7 – STATUS OF CONSULTANT

The status of CONSULTANT is that of an independent contractor and CONSULTANT is not considered an employee of Pima County and is not entitled to receive any of the fringe benefits associated with regular employment, and will not be subject to the provisions of the merit system. CONSULTANT will be responsible for payment of all Federal, State and Local taxes associated with the compensation received by CONSULTANT from COUNTY. CONSULTANT will be responsible for program development and operation without supervision by COUNTY.

ARTICLE 8 – CONSULTANT'S PERFORMANCE

CONSULTANT will perform the work in accordance with the terms of the Contract and 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 the approval of COUNTY.

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 Agreement. Without additional compensation, CONSULTANT will correct or revise any errors, omissions, 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 Agreement, regardless of COUNTY having knowledge of or condoning or accepting the products or the services. Correction of such deficiencies will be at no cost to COUNTY.

ARTICLE 9 – 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 thereof 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.

ARTICLE 10 – 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 see to the payment of any money due any SUBCONSULTANT, except as may be required by law.

ARTICLE 11 – NON-ASSIGNMENT

CONSULTANT will not assign its rights to this Contract in whole or in part, without prior written approval of COUNTY. COUNTY may withhold assignment at its sole discretion, provided that COUNTY will not unreasonably withhold such approval.

ARTICLE 12 – NON-DISCRIMINATION

CONSULTANT will comply with all provisions and requirements of Arizona Executive Order 2009-09 which is hereby incorporated into this Contract as if set forth in full herein **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.

ARTICLE 13 – AMERICANS WITH DISABILITIES ACT

CONSULTANT will comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, including 28 CFR Parts 35 and 36. If CONSULTANT is carrying out government programs or services on behalf of COUNTY, then CONSULTANT will maintain accessibility to the program to the same extent and degree that would be required of COUNTY under 28 CFR Sections 35.130, 35.133, 35.149 through 35.151, 35.160, 35.161 and 35.163. Failure to do so could result in the termination of this Agreement.

ARTICLE 14 – CANCELLATION FOR CONFLICT OF INTEREST

This Contract is subject to the provisions of A.R.S. §38-511 which provides in pertinent part:

"The state, its political subdivisions or any department of either may, within three years after its execution, cancel any contract, without penalty or further obligation, made by the state, its political subdivisions, or any of the departments or agencies of either if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the state, its political subdivisions or any of the

departments or agencies of either is, at any time, while the contract or any extension of the contract is in effect, an employee or agent of any other party to the contract in any capacity or a consultant to any other party to the contract with respect to the subject matter of the contract."

ARTICLE 15 – TERMINATION OF CONTRACT FOR DEFAULT

- A. Upon a failure by CONSULTANT to cure a default under this Contract within ten (10) 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. CONSULTANT and its sureties, if any, will be liable for any damage to COUNTY resulting from CONSULTANT'S default, including any increased costs incurred by COUNTY in completing the work.
- B. The occurrence of any of the following constitutes an event of default:
1. Abandonment of or refusal or failure 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;
 2. Persistent or repeated refusal or failure to supply enough properly skilled workers or materials to perform the work on schedule;
 3. Failure to provide competent supervision at the site;
 4. Failure to take down, rebuild, repair, alter or amend any defective or deficient work, or to remove any defective or deficient Material
 5. Failure to make prompt payment to SUBCONSULTANTS or suppliers for material or labor;
 6. Loss of CONSULTANT'S 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;
 7. Disregard of laws, ordinances, or the instructions of COUNTY or its representatives, or any otherwise substantial violation of any provision of the Contract; or
 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.
- C. In the event of a termination for default:
1. All finished and unfinished as-builts, shop drawings, 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 (5) business days after the effective date of the termination;
 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
 3. Subject to the immediately preceding subparagraph (2), COUNTY'S liability to CONSULTANT will not exceed the reasonable value of work satisfactorily performed prior to the date of termination for which payment has not been previously made.
- D. The Contract will not be terminated for default nor CONSULTANT charged with damages under this Article, if—
1. Excepting item (8) in paragraph B 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—
 - (i) Acts of God or of the public enemy,
 - (ii) Acts of the COUNTY in either its sovereign or contractual capacity,
 - (iii) Acts of another consultant in the performance of a Contract with the COUNTY,
 - (iv) Fires,

- (v) Floods,
 - (vi) Epidemics,
 - (vii) Quarantine restrictions,
 - (viii) Strikes,
 - (ix) Freight embargoes,
 - (x) Unusually severe weather, or
 - (xi) Delays of SUBCONSULTANTS or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both CONSULTANT and the SUBCONSULTANTS or suppliers; and
2. CONSULTANT, within three (3) 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 judgment of COUNTY, the findings warrant such action, the time for completing the work may be extended.
- E. For the purposes of paragraph A above, "receipt of notice" includes receipt by hand by CONSULTANT'S onsite project manager, facsimile transmission, or under the Notices clause of this Contract.
- F. If, after termination of the Contract for default, it is determined 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 the termination had been issued for the convenience of the COUNTY.
- G. 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.

ARTICLE 16 – 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 fifteen (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 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, COUNTY will make no payment for anticipated profit on unperformed services.

ARTICLE 17 – NON-APPROPRIATION OF FUNDS

Notwithstanding any other provision in this Contract, COUNTY may terminate this Contract 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 has no further obligation to CONSULTANT, other than payment for services rendered prior to termination.

ARTICLE 18 – NOTICES

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

COUNTY:

Priscilla S. Cornelio, P.E., Director
Department of Transportation
201 N. Stone Avenue
Tucson, AZ 85701
Tel: (520) 724-6410
Fax: (520) 838-7347

CONSULTANT:

Rick P. Solis, P.E., Project Manager
Kimley-Horn and Associates, Inc.
333 E. Wetmore, Suite 280
Tucson, AZ 85705
Tel: (520) 615-9191
Fax: (602) 944-7423

ARTICLE 19 – OTHER DOCUMENTS

CONSULTANT and COUNTY in entering into this Contract have relied upon information provided in CONSULTANT'S response to a request for fee proposal. 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.

ARTICLE 20 – REMEDIES

Either Party may pursue any remedies provided by law for the breach of this Contract, provided, however, that the procedures in ARTICLE 25 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.

ARTICLE 21 – 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.

ARTICLE 22 – BOOKS AND RECORDS

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.

CONSULTANT will retain all records relating to this Contract at least five (5) 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.

ARTICLE 23 – DELAYS

Neither Party hereto is in default in the performance of its obligations hereunder 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.

ARTICLE 24 – DISPUTES

In the event of a dispute between COUNTY and CONSULTANT 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.

The Parties will continue performance of their respective obligations under this Contract notwithstanding the existence of any dispute.

ARTICLE 25 – OWNERSHIP OF DOCUMENTS

All original drawings, field data, estimates, field notes, plans, specifications, documents, reports, calculations, and other information developed by CONSULTANT under this Contract vest in and become the property of COUNTY and will 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 express permission of CONSULTANT.

ARTICLE 26 – PUBLIC INFORMATION

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.

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 should not include any information considered confidential.

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 ten (10) business days after the date of notice to CONSULTANT of the request for release, unless CONSULTANT has, within the ten (10) day period, secured a protective order, injunctive relief or other appropriate order from a court of competent jurisdiction, 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. CONSULTANT will be notified of any request for such release on the same day of the request for public release or as soon thereafter as practicable.

COUNTY will not, under any circumstances, be responsible for securing a protective order or other relief enjoining the release of records marked CONFIDENTIAL, nor will COUNTY be in any way financially responsible for any costs associated with securing such an order.

ARTICLE 27 – LEGAL ARIZONA WORKERS ACT COMPLIANCE

CONSULTANT hereby 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.

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.

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 will take such steps as may be necessary to either self-perform the services that would have been provided under the subcontract or to 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.

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."

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 Article 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 will be excusable delay for which CONSULTANT is entitled to an extension of time, but not costs.

ARTICLE 28 - ENTIRE AGREEMENT

This document constitutes the entire agreement between the Parties pertaining to the subject matter hereof, and all prior or contemporaneous agreements and understandings, oral or written, are hereby superseded and merged herein. This Contract may be modified, amended, altered or extended only by a written Amendment signed by the Parties.

IN WITNESS WHEREOF, the Parties have affixed their signatures to this Contract on the dates written below.

APPROVED:

Chair, Board of Supervisors

Date

ATTEST:

Clerk of the Board

APPROVED AS TO FORM:

Deputy County Attorney

TOBIN ROSEN

Name (Please Print)

CONSULTANT:

Signature

BRENT C CROWTHER, VICE PRESIDENT

Name and Title (Please Print)

January 5, 2016

Date

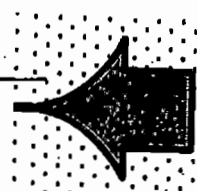


EXHIBIT A: SCOPE OF WORK (24 pages)

Valencia Road: Wade Road to Ajo Highway (AZ 86) Design Concept Report & Environmental Assessment and Mitigation Report & Plans, Specifications, and Estimate

Pima County Solicitation Number 193374

During the term of this Agreement, the engineering consultant, Kimley-Horn, (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.

I. BACKGROUND

Due to growth in the southwest Tucson region, the RTA plan approved by voters in 2006 included roadway improvements for Valencia Road from Mark Road to Ajo Highway (AZ 86). Pima County initiated the design and construction of the section of roadway between Mark Road and Wade Road and with this effort, will complete the design and construction of the remaining portion of the corridor between Wade Road and Ajo Highway (SR 86). This effort is proposing to develop a Design Concept Report (DCR) and associated Initial Design Phase Plans, an Environmental Assessment and Mitigation Report (EAMR), and associated Final Design Phase Plans, along with Initial and then Final Plans, Specifications and Estimate (PS&E) for the final phase of the project [Wade Road to Ajo Highway (SR 86)].

II. PROJECT DESCRIPTION

The overall project consists of widening approximately 2¾ miles of the Valencia Roadway from two lanes to four lanes of traffic from the intersection of Ajo Highway (AZ 86) and matching into the existing 4-lane divided section west of the Valencia and Wade Road intersection. This effort is being pursued to improve safety, reduce congestion, improve operations (with turning lanes to be provided at intersections and cross streets where warranted), increase mobility, and address accessibility/operational issues. Other potential improvements to be considered and evaluated include; a raised landscaped median, multi-use lanes, outside curbs and storm drains, provisions for pedestrians and other uses, landscaped shoulders, and noise mitigation for adjacent areas where warranted.

The scope of work for this effort includes the CONSULTANT providing Engineering Design services according to the Pima County Roadway Design Manual 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, major and minor structures, right-of-way needs, cost estimates for Valencia Road from Wade Road to Ajo Highway (AZ 86).
- Development of an EAMR document with Final Design Plans (as referenced in the Pima County Roadway Design Manual) for the project.
- 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 Pima County Roadway Design Manual) and Post-Design Construction phase services for the project.

III. DESIGN CRITERIA

The 2013 Pima County Roadway Design Manual, and relevant updates, shall be used to provide roadway and drainage design criteria.

IV. RESERVED

V. PROJECT SCHEDULE

The project is estimated to be 48 months in duration. An estimated timeframe for completion of the corridor DCR and EAMR is 12 months. The Final Design effort is estimated to be 12 months and occur subsequent to the approval of the EAMR. Post design services are then estimated to occur over the final 24 months of the contract.

VI. 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 Number 193374 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.

VII. 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
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
PCRCD	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
SOQ	Pima County Solicitation Number 193374
R/W	Right-of-way
TDM	Transportation Demand Management
USFWS	U.S. Fish and Wildlife Service

VIII. PROJECT DOCUMENTATION

The documents listed as "**Deliverables**" in the Work Tasks, Section IX 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.

IX. WORK TASKS

General Assumptions:

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.*
2. *The PROJECT duration is anticipated to be 48 months for the Conceptual Design, Final Design and Post Design Services. The CONSULTANT is responsible for meeting deadlines for their and their sub-consultants' tasks only.*
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.*
4. *The plans will be prepared in accordance with Pima County design practices and standards as identified on the Pima County DOT website and current PAG standards/specifications.*
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.*
6. *Survey file submittals (monumentation, horizontal and vertical control, right-of-way plans) shall be in AutoCad 2002 or AutoCad 2005 format and Microstation Version 8 (V8).*
7. *Originals of all project deliverables will be delivered to the County.*
8. *Meeting summaries will be distributed electronically. Hard copies will not be provided.*
9. *Unless specified within individual tasks, an original and 5 copies of each report will be submitted to the County.*

Valencia Road: Wade Road to Ajo Highway (AZ 86)
Design Concept Report
&
Environmental Assessment and Mitigation Report
&
Plans, Specifications, Estimates

The following tasks are organized and numbered to coincide as closely as possible with Chapter 3, *Design Process*, identifies in the 2013 Pima County Roadway Design Manual.

TASK 3.2 QUALITY CONTROL PLAN AND PROJECT MANAGEMENT

Assumptions:

1. *Management resources are provided for a 48-month Design, Final Design and Post Design period.*
2. *Attendance by CONSULTANT at meetings will be limited to the Project Manager and an average of one Task Manager. Other team members will attend as required.*
3. *For estimating purposes, it is assumed that meetings described in Task 3.2.3 will have the following durations, including time for preparation, travel, prepare meeting summaries, revise meeting summaries with County corrections, and distribute the meeting summaries:*
 - *monthly progress meetings (2 hours);*
 - *pre-review overview meetings (2 hours);*
 - *major review comment meetings (4 hours);*
 - *minor review comment meetings (2 hours).*
4. *The CONSULTANT will be responsible for preparing graphics, handouts, and making arrangements for meetings and for preparing meeting summaries. Locations for CAC meetings will be arranged by the County.*
5. *CONSULTANT's hours for performing quality control shall be billed toward the specific tasks.*

Task 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 15 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.

Task 3.2.2. 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.
- 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.

Deliverables:

- DCR with Initial Design Phase Plans.
- EAMR and Final Design Phase Plans.
- Initial PS&E.
- Final PS&E.
- Project Team Contact List.
- Correspondence files.
- Responses to all review comments.

Task 3.2.3. 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 monthly meeting with the project team (24 total).
- 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 to deliver and explain submittal.
- d. Conduct major review comment meetings to discuss review comments and responses with the County and the project team.
- 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.

Task 3.2.4. Schedule. Create a schedule to prepare DCR with Initial Design Phase, an EAMR with Final Design Phase Plans, Initial PS&E, and Final PS&E submittals within 15 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.
- Monthly invoices for work performed.
- Monthly three month outlook budget projections.
- Responses to all review comments.

TASK 3.2.5. 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 15 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 3.3 UTILITY COORDINATION

Assumptions:

1. *The PCDOT Project Manager will attend the PCDOT monthly Utility Coordination meetings on an as-needed basis. The CONSULTANT is not required to attend these meetings.*
2. *Data collected will be consistent with the level of information needed to designate, locate, and map all utilities.*
3. *Resources are provided for up to 10 potholes under Additional Services. If additional potholes are needed, their number and location will be identified, and a Contract Modification will be prepared to cover this additional pothole work. Potholing shall not begin until the area has received cultural clearance and utility coordination.*
4. *PCDOT will provide utility base maps that have been provided to-date from: Pima County Regional Water Reclamation District, Metro Water, Tucson Electric Power, Trico Electric, Southwest Power, Southwest Gas, Century Link, and Comcast Cable. The CONSULTANT is required to obtain base maps from other utilities present. Additional research may be required by the CONSULTANT to verify and supplement the utility base maps.*
5. *Resources to gather data for utilities is being provided under Task 3.3.1., not Task 3.7.1.*
6. *Resources for surveying Blue Stake information are provided in Task 3.10.7.*
7. *Subsurface utility designations will be shown in the strip map derived in Task 3.10.8.*
8. *Sewer modification plans are not included in this work.*
9. *Tucson Water modification plans are included in Task 3.25*
10. *Joint Trench coordination efforts are considered Additional Services.*
11. *Consultant shall adhere to Pima County Ordinance 2008-72, Regulations for the Use of Public Right of Way.*

Task 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 a website 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 (8) known utility franchises within the corridor (PCRWRD, Metro Water, TEP, Trico Electric, Southwest Power, SW Gas, CenturyLink, Comcast), and any other utilities present in the corridor. Meetings are assumed to be attended by two CONSULTANT team members and have a duration of 2 hours per meeting (2 hours per attendee) to prepare, attend, and provide minutes. Prior to the completion of *Task 3.10.7 Existing Conditions 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. CONSULTANT shall draft onto an Existing Utilities Mapping Package (40 scale) the certified horizontal survey 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 conduct a field review of utility information shown on the Existing Utilities Mapping Package for consistency with utility base maps and utility field survey data.

Task 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 up to sixteen (16) individual meetings (2 per franchise, 8 franchises, 2 hours per meeting) plus correspondences with all utilities.

Task 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.

Task 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
- 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.

TASK 3.4 PUBLIC PARTICIPATION

Assumptions:

1. *Pima County will lead all public participation activities*
2. *Pima County will take the lead in organizing, staffing and preparing for all public meetings.*
3. *Pima County will initiate the formation of the CAC, including public notifications and member selection.*
4. *Pima County will facilitate the CAC meetings and distribute meeting agendas and summaries.*
5. *For estimating purposes, it is assumed the (4) CAC meetings will be attended by an average of 4 CONSULTANT task leaders including the project manager, and have an average duration including travel and preparation of 2 hours for a total of 4 hours per meeting for CONSULTANT staff. Sub-consultants will attend as required.*
6. *For estimating purposes, it is assumed that approximately 8 hours will be required (2 team members at 4 hours each) for CONSULTANT staff to prepare for and attend each of the (2) public meetings. PCDOT Staff will prepare for, attend, and produce meeting summaries of public meetings, but not other follow-up tasks.*

7. *Pima County will reproduce and distribute CAC meeting notices, public meeting notices, surveys, and newsletters, including the mailing lists, handling, and postage.*
8. *Pima County will place and pay for public notification advertisements and reproduce and mail surveys.*
9. *Meals or refreshments will not be provided at CAC or public meetings.*
10. *PCDOT will coordinate meeting dates, times, locations, and set-up for all CAC and public meetings, including rental of all meeting facilities and providing insurance.*
11. *PCDOT will place ad announcements in the local newspapers.*
12. *PCDOT will develop, establish, and control a project web site and will post public notices and other information provided by the consultant.*
13. *PCDOT will distribute news releases to appropriate media.*
14. *PCDOT will distribute government official notifications.*
15. *PCDOT will be the primary contact for community inquiries and concerns.*

Task 3.4.1. Public Participation Plan. Pima County will develop and implement the Public Participation Plan for the project. The CONSULTANT will provide as-needed services in support of the Plan.

Task 3.4.2. Community Advisory Committee Meetings. The CONSULTANT will attend approximately four (4) CAC meetings.

Deliverables:

- Displays/Roll plots as needed.

Task 3.4.3. Public Meetings. The CONSULTANT will attend approximately two (2) public open houses and one (1) public hearing.

Deliverables:

- Displays/Roll plots as needed.

Task 3.4.5. 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

Assumptions:

1. *Federal funding will not be used for this project.*
2. *Pima County will coordinate the IGA with the RTA.*

Task 3.5.1. Coordinate Between Participating Agencies. 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. 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, such as Arizona State Land Department, etc.

Deliverables:

- Display materials as needed.
- Meeting Agenda, Sign-in Sheet, 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

Assumptions:

1. The artist selection panel will be organized by TPAC and Pima County.
2. Pima County Administrative Procedure 3-16 requires one person who is the project or design principal to be part of the public art selection jury. This will be Pima County Project Manager.

Task 3.6.1. Coordination with Artist. The CONSULTANT will include the project artist on the design team 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.

Task 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.

Task 3.7.1. Gather Existing Information. The CONSULTANT will obtain and review assessor maps, zoning maps, plats, reports, and other publicly available data described in Section 3.7 of the Design Manual for use in developing design plans.

Task 3.7.2. Site Visits During Project Design. The CONSULTANT will visit the site as required to obtain necessary design information.

Task 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 SCREENING

Project design should follow the ESR guidelines listed in the Pima County RDM. The project is identified as an ESR because Valencia is a Major Scenic Route and the project traverses several Important Riparian Areas. Generally, modification of Important Riparian Areas requires preservation of 95 percent as natural undisturbed open space, and mitigation is required for modification of up to five percent of the areas. Mitigation varies depending on the type of riparian habitat and may be as much as re-vegetating at a 1.5:1.0 ratio of acres of mitigation land to modified land with 90 trees per acre, 200 shrubs per acre, hydro-seeding with native species, installing irrigation, and providing maintenance. Project coordination and design must follow the ESR guidelines detailed in the Pima County RDM. In addition, Class I and III surveys for cultural resources (See Task 3.18.1) are recommended to identify any important archaeological sites and historic properties.

Assumptions:

1. *Pima County Department of Environmental Quality will serve as a resource to the CONSULTANT, as well as reviewing draft documents.*

Task 3.8.1. Environmental Coordination Meeting. The CONSULTANT will conduct field visits of the project area and arrange a meeting with the project design team to discuss issues that would assist in completing the Questionnaire for Areas of Impact and to review the Summary Impact Matrix. The CONSULTANT will coordinate with Game and Fish regarding potential wildlife corridors.

Task 3.8.2. Questionnaire for Establishing Potential Areas of Impact. The CONSULTANT will complete the questionnaire using field visits, correspondence, other reports, specialists, and other information. All sources will be cited.

Task 3.8.3. Summary Impact Matrix. The CONSULTANT will complete the matrix. The CONSULTANT will use the matrix to establish potential adverse environmental impacts. The Summary Impact Matrix will incorporate the results of the Cultural Resources review effort (by others), Jurisdictional Delineation conducted as part of Task 3.18.4, and Hazardous Materials Investigation conducted as part of Task 3.18.5. Additional data collection for zoning, planned developments, potential annexation and planned developments and relevant planning documents collected as part of Task 3.7.1 will be incorporated as necessary to consider potential design modifications.

Task 3.8.4. Environmental Results Memorandum. The CONSULTANT will prepare a memo to summarize the screening process, discuss issues noted, recommend courses of action, and identify issues that exceed original scope of work. The CONSULTANT will review and discuss the results of the screening with the entire design team.

Task 3.8.5. Team Review. The CONSULTANT will plan, prepare for, and attend a project team meeting to review and discuss environmental concerns.

Task 3.8.6. Project Modifications/Alternatives. The CONSULTANT will document project changes and their anticipated environmental effects.

Task 3.8.7. Quality Control Review. The CONSULTANT will provide quality control reviews of the deliverables listed below.

Deliverables:

- Meeting minutes, prepared, distributed to project team, and revised as needed.
- Completed Questionnaire for Establishing Potential Areas of Impact.
- Completed Summary Impact Matrix.
- Completed Environmental Results Memorandum.
- Memorandum detailing project changes and anticipated environmental effects.
- Responses to all review comments.

TASK 3.9 LOCATION REPORT

Assumption:

1. *A Location Report is not required for this project.*

TASK 3.10 SURVEY AND MAPPING

Assumptions:

1. The CONSULTANT shall meet or exceed Aerial Mapping accuracy standards based on the ASPRS (American Society of Photogrammetry and Remote Sensing) for large scale maps. These standards include the following, Horizontal 1/100 of map scale, Vertical 1/3 of contour interval, spot elevation 1/6 of contour interval. The CONSULTANT will perform additional cross sections on the roadway to enhance vertical accuracy and to aid the design in determining pay quantities in accordance with the Standard Specifications for earthwork, e.g. – roadway excavation, drainage excavation, embankment demand and borrow. This task will require the CONSULTANT checking assumptions 3 and 4 below.
2. PIMA COUNTY SURVEY shall perform a Design Survey from right-of way to right-of-way to verify mapping accuracies such that the topographic mapping and differential digital terrain model (DTM) are sufficiently accurate
3. PIMA COUNTY SURVEY will perform a Geodetic Control Survey based upon the Arizona State Plane Coordinate System of 1983 (NAD 83) and the North American Vertical Datum of 1988 (NAVD 88) by using N.G.S. control points and tying into PC/COT G.I.S. control.
4. PIMA COUNTY SURVEY will provide Vertical and Horizontal control.
5. PIMA COUNTY SURVEY will provide right-of-way, utility base mapping, and supplemental surveys along with the appropriate document research to support these surveys.
6. The CONSULTANT will coordinate utility location activities with utilities. CONSULTANT shall coordinate with County appointed representative coordinating blue stake locating activity.
7. The CONSULTANT will coordinate its survey activities with PIMA COUNTY SURVEY. Field surveys will be conducted in conformance with established Arizona Boundary Survey Minimum Standards and Pima County RDM.
8. Additional survey research will be conducted at the County to identify any benchmarks from previous improvement projects with descriptions and elevations, copies of any section corner recovery records along the right-of-way that tie the project to the Public Land and Survey System (PLSS) corners.
9. The Right of Way plans will depict the existing and proposed Right of Way Lines from Wade Road to Ajo Highway (SR86).
10. Existing right-of-way will be documented in the form of a CAD reference file. This information will be used for the DCR phase of the project.
11. PIMA COUNTY SURVEY will identify and locate Pima County Department of Transportation (PCDOT) GPS stations for use in controlling the surveys for this project.
12. PIMA COUNTY SURVEY will stake approximately 40 boring hole locations as provided by others (geotechnical investigation) and provide existing ground elevations at said locations.
13. PIMA COUNTY SURVEY has the ability to save down AutoCAD files to version 2013.

Task 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 survey efforts will be coordinated with the CONSULTANT design team.

Task 3.10.2. Horizontal Control. PIMA COUNTY SURVEY will run a Geodetic Control Survey based on NAD 83 and NAVD 88 datums by using N.G.S. control points and tying to PC/COT GIS control points. PIMA COUNTY SURVEY will run a closed field traverse through, or incorporate into, the primary project controls set by PIMA COUNTY. PIMA COUNTY will also field reference control points, and other found monuments, within the existing right-of-way, outside of the construction area. CONSULTANT will review the closed field traverse run by Pima County and the field references.

Task 3.10.3. Vertical Control Traverse. PIMA COUNTY SURVEY will establish a bench circuit originating from PC/COT GIS vertical control points to prescribed field accuracy. The work will include mathematically adjusting the remaining error. The work also includes setting construction benchmarks at 500' intervals outside of the proposed construction areas and on alternating sides of the roadway. CONSULTANT will field verify all vertical control points set from the PC/COT GIS points.

Task 3.10.4. Results of Survey Drawing. PIMA COUNTY SURVEY will prepare a Results of Survey Drawing showing existing section lines, right-of-way, ownership, and existing features from Wade Road to Ajo Highway (SR86). Approximate property lines will be included on the Results of Survey by PIMA COUNTY. If necessary, for easement or R/W acquisitions, the CONSULTANT will perform parcel survey(s) limited to the budget included in the Fee Calculation.

Task 3.10.5. Survey Report. A Survey Report is not required for this project due to PIMA COUNTY performing project survey.

Task 3.10.6. Aerial Mapping. The CONSULTANT will provide photogrammetric mapping in Microstation V8 and AutoCAD 2013 or newer version, including a digital terrain model, ortho-photos, and digital files in County .tif format. Aerial ground control will be provided by PIMA COUNTY SURVEY and will be field checked by the CONSULTANT prior to the results being transmitted to the aerial company. The CONSULTANT will perform cross sections at 50-ft intervals along the existing roadway centerline and edges of pavement, and at critical drainage elements (v-ditches, culvert depressions, drainage break-lines, and all other drainage features) to enhance the aerial ground DTM so that it meets or exceeds 0.1 foot accuracy.

Task 3.10.7. Utility Surveys. PIMA COUNTY SURVEY will locate underground utilities as identified and marked by others from Wade Road to Ajo Highway (SR86). Blue Staking and other utility features will be located during the culture survey. Coordination for underground utilities will be by the County.

Task 3.10.8. Culture Surveys. PIMA COUNTY SURVEY will locate fences, mail boxes, culvert and manhole inverts, drainage features and flows, and match-in locations along the project length from Wade Road to Ajo Highway (SR86). The work will also include the CONSULTANT downloading and converting field results into Microstation V8 CAD format.

Task 3.10.9. Right-of-way of Surveys. After analyzing the initial field survey, PIMA COUNTY SURVEY will field locate all relevant survey monuments to determine the existing right-of-way including street monuments, property corners and occupation and coordinate with the CONSULTANT in defining the existing right-of-way from Wade Road to Ajo Highway (SR86). The CONSULTANT will download and analyze the results and prepare Right-of-Way plans as part of this task.

Task 3.10.10. Roadway Design Manual Survey Efforts. PIMA COUNTY SURVEY will complete other survey related tasks as identified and provided within the Design Manual.

Task 3.10.12 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 as requested by Pima County. Legal description reference maps will be 8.5"x11". The CONSULTANT shall include effort for the preparation of 20 legal descriptions and associated reference maps and the probable need for determining parcel property lines.

Task 3.10.13. Quality Control Review. PIMA COUNTY SURVEY and the CONSULTANT will provide quality control reviews of the Survey and Mapping deliverables listed below.

Deliverables:

- Digital black & white files (uncolored digital photo) to the County in .tif format and digital ASCII points files in comma delimited format.
- Results of survey drawings by PIMA COUNTY.
- Results of 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.

- Field survey of drainage ways by CONSULTANT.
- 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 PCRFC*

Task 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, including but not limited to the following:

- SWAMIP – including JE Fuller hydrology;
- Ongoing Development Proposals;
- Southwest Regional Basin Concept Study;
- Southwest Basin Management Study;
- Black Wash Policy Assessment Report
- SR-86 Drainage Report

Task 3.11.2. Peak Discharge Determination. The CONSULTANT will prepare a drainage map showing watercourses and associated drainage areas for drainage crossing 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.

Task 3.11.3. Existing Hydraulic Conditions. The CONSULTANT will use 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.

Task 3.11.4. Drainage Reports. The CONSULTANT will prepare a report in the phases described in Section 3.11 of the Design Manual. 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.

Task 3.11.5. FEMA Requirements. The CONSULTANT will make final determination of impacts to FEMA floodplain, determine impacts associated with Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) and complete efforts to obtain updates as required.

Task 3.11.6. Quality Control Review. The CONSULTANT will provide quality control reviews of the drainage report for each submittal.

Deliverables:

- Initial Design Phase Drainage Report per Section 3.11 of the Design Manual.
- Final Design Phase Drainage Report per Section 3.11 of the Design Manual.
- Final PS&E Phase Drainage Report per Section 3.11 of the Design Manual.
- CLOMR/LOMR Determination and Updates.
- Responses to all review comments.

TASK 3.12 GEOTECHNICAL INVESTIGATION

Assumptions:

1. *The limits for the investigation associated with pavement structure analysis are from Star Diamond Place to Ajo Highway.*
2. *The limits for the investigation associated with other project structures (e.g. – drainage, walls) are from Star Diamond Place to Ajo Highway.*

Task 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 scope of fieldwork is estimated to include approximately 40 soil borings. Approximately 10 of these borings will be in culvert areas and will be drilled up to 15 feet deep. The remaining 30 will be located in pavement widening areas and will typically be to depths of 5 feet; however, some may be as deep as 10 to 15 feet in proposed cut areas. Soil samples from some of the culvert locations may also be used for the pavement improvements. Consultant will obtain up to 20 shallow depth grab samples for use in resistivity and PH testing in the case metal pipes are used on the project due to Value Engineering.

The CONSULTANT will provide appropriate laboratory testing for representative soil samples. Recommendations will be developed based on applicable PCDOT, Maricopa (MCDOT), and ADOT 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.

Task 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 Design Manual.
- Responses to all review comments.

TASK 3.13 PAVEMENT DESIGN REPORT

Assumptions:

1. *The limits for the Pavement Design Report are from Star Diamond Place to Ajo Highway.*

Task 3.13.1. Pavement Design Report. The CONSULTANT will perform pavement design following the current ADOT 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;
- Recommended structural sections, including alternatives, with criteria such as cost, construction and other factors considered;

Task 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 Design Manual.
- Responses to all review comments.

TASK 3.15 TRAFFIC ENGINEERING MEMORANDUM

Assumptions:

1. *The Traffic Engineering Study for Valencia Road, Mountain Eagle Drive to Mark Road (4RTVMW and 4RTVWE), July 2011, will be used as the basis for the preparation of the new Traffic Engineering Memorandum that will supplement this 2011 study.*
2. *Only one turning movement count and two 24-hr tube counts will be recorded to verify/update traffic in the area and turn lane storage recommendations in the 2011 study.*
3. *Current crash information for the corridor will be provided by the County.*
4. *CONSULTANT will participate in monthly progress meetings, comment review meetings, partnering session, CAC meetings, public open houses and other coordination meetings as necessary.*
5. *CONSULTANT will work with PCDOT staff on a regular basis to complete the traffic engineering memorandum.*
6. *CONSULTANT to provide Ten (10) copies of the Traffic Engineering Memorandum at each submittal.*

Task 3.15.1. Initial Traffic Engineering Memorandum. The CONSULTANT will complete an Initial Traffic Engineering Memorandum that will verify or update the turn lane storage and applicable signal timing for the signalized and un-signalized intersections along Valencia and major side streets.

Task 3.15.2. Final Traffic Engineering Memorandum. The CONSULTANT will complete a Final Traffic Engineering Memorandum.

Task 3.15.3. Meetings. CONSULTANT's Traffic Engineering Memorandum Task Leader will attend project meetings, PCDOT Traffic meetings, CAC meetings, and public meetings as needed.

Task 3.15.4. Quality Control Review. The CONSULTANT will provide quality control review of the Traffic Engineering Memorandum.

Deliverables:

- Initial Traffic Memorandum
- Final Traffic Memorandum.
- 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

Assumptions:

1. None

Task 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 for the following intersections:

- Valencia Road/Valhalla
- Valencia Road/Iberia
- Two other study intersections

Task 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 Design Manual.
- 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

Assumptions:

1. The limits for the Design Concept Report (DCR) are from Wade Road to Ajo Highway (AZ 86).
2. Intersection improvements will extend on all legs of the intersections.
3. Assumes no major opposition to the project and a 12 month project schedule for this component of the project effort.
4. Thirty (30) copies of the draft DCR and thirty (30) copies of the final DCR will be provided.
5. This project is identified as an ESR and is subject to the additional requirements found in Section 4.0 of the RDM.

Task 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.

Task 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 for the following topics:

- Topography and terrain
- Roadway
- Rights-of-Way
- Drainage
- Utilities, Signals and Lighting (Signals and Lighting to be provided by PCDOT Traffic Engineering Division)
- Biology
- Archaeological and Historical Resources
- Visual and Aesthetic Resources
- Existing and Future Land Use
- Intergovernmental Agreements
- Traffic and Accident Data (provided by PCDOT Traffic Division)

Task 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.

Task 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. This description will be consistent with the information necessary to evaluate design alternatives for an Environmentally Sensitive Roadway.

Task 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.

Task 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.

Task 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 Design Manual.
- Cost estimates and quantity take-off calculations.
- Responses to all review comments.

TASK 3.18 ENVIRONMENTAL ASSESSMENT AND MITIGATION REPORT

Assumptions:

1. The limits for the EAMR are from west of Wade Road to Ajo Highway (SR 86),

2. Intersection improvements will extend on all legs of the intersections, with the exception of Ajo Highway (SR 86).
3. Assumes no major opposition to the project and a 12-month project schedule for this component of the project effort.
4. Section 106 Consultations will be the responsibility of Pima County. The CONSULTANT will assist with the consultation performed by the County
5. Pima County's Environmentally Sensitive Roadway Design guidelines apply to this project.
6. Pima Pineapple Cactus (PPC) surveys will be conducted by CONSULTANT.
7. Nationwide Section 404 Permit will be appropriate and anticipate a Pre-Construction Notice Application will be required.
8. No Phase II investigations are included.
9. Cultural Resources survey work efforts will be conducted by the CONSULTANT and coordinated with PCOCRHP, with the results of these surveys summarized in the EAMR.
10. Community Advisory Committee (CAC) will provide letter of review for the EAMR prior to the submittal of the EAMR to the Pima County Board of Supervisors.
11. Thirty (30) copies of the draft EAMR and thirty (30) copies of the final EAMR will be provided.

Task 3.18.1. Cultural Resources Inventory and Report. The CONSULTANT will prepare a Class I and Class III Cultural Resources Survey Report. Results of the Cultural Resources effort (including Section 106 consultation) will be summarized in the EAMR and include the consultation in the Appendix.

Task 3.18.2. Biological Evaluation/Wildlife Habitat. The CONSULTANT will prepare a biological evaluation using the ADOT format. The CONSULTANT shall conduct a Pima Pineapple Cactus (PPC) survey. Technical assistance from the USFWS shall be included for all federal threatened or endangered species. The CONSULTANT shall include a summary of the Biological Evaluation in the EAMR and include the report in the Appendix. The CONSULTANT shall provide five (5) copies of the Draft Biological Evaluation for Pima County's review and comments. Upon approval of the Draft report, five (5) copies of the Final Report shall be forwarded to Pima County for their records.

Task 3.18.3. Vegetation Sampling/Measurement. After wash disturbances are identified, the CONSULTANT will conduct an inventory of vegetation and protected plant species using methods described in Chapter 4 of the RDM for an ESR. The CONSULTANT will develop a technical report detailing the methodology and outcome of said investigation, along with the appropriate mitigation requirements. The CONSULTANT shall include a summary of this effort and results in the EAMR.

Task 3.18.4. Clean Water Act Permitting. The CONSULTANT will prepare a preliminary Jurisdictional Delineation Report and identify Section 404 Permit requirements. The CONSULTANT shall prepare appropriate documents for a nationwide permit. Should an individual permit be needed, said efforts are identified as Additional Services.

Task 3.18.5. Hazardous Materials Survey. The CONSULTANT will complete a Preliminary Initial Site Assessment (PISA) for hazardous materials within the current right-of-way, potential right-of-way, and easements associated with the project and provide a Draft and Final PISA Report. The PISA shall comply with ASTM E-1528-06 (Standard Practice for Limited Environmental Due Diligence). This will include:

1. Conduct Site Reconnaissance (Section 9 of Standard)
2. Regulatory Database Review (Section 10.1 of Standard)
3. Historical Source Review (Section 10.2 of Standard)

Task 3.18.6. Air Quality. The CONSULTANT will review potential effects on air quality and report findings.

Task 3.18.7. Environmental Documentation. The CONSULTANT will prepare an EAMR per Section 3.18 of the Roadway Design Manual that will satisfy Pima County requirements for this phase of the project.

Task 3.18.8. Noise Analysis. The CONSULTANT will provide a Traffic Noise Analysis, evaluating potential traffic noise impacts to sensitive uses adjacent to Valencia Road improvements (initial 2.0 miles west of Wade Road, in accordance with PCDOT Procedure 03-5, dated April 8, 2008 and further discussed in Chapter 4 of the RDM for an ESR. The Traffic Noise Model will be used to predict future (2040) noise levels within the project area and to identify, as appropriate noise mitigation components. A Draft and Final Traffic Noise Analysis Report will be prepared.

Task 3.18.9. Quality Control Review of EAMR. The CONSULTANT will provide a quality control review of the Environmental Assessment and Mitigation Report.

Deliverables:

- Biological Evaluation prepared to U. S. Fish and Wildlife Service and Pima County requirements.
- Vegetation Inventory, including listing of protected plants done in conformance with methods identified in the RDM for an ESR.
- Preliminary Jurisdictional Delineation Report and appropriate nationwide permits prepared to meet COE standards and Pima County requirements.
- Draft and Final Preliminary Initial Site Assessment for hazardous materials.
- Draft and Final Traffic Noise Analysis Report.
- EAMR, including Final Design Phase Plans per Section 3.18 of the RDM for the initial phase of the project.
- Responses to all review comments.

TASK 3.19 RIGHT-OF-WAY ACQUISITION SUPPORT

Assumptions:

1. *The limits for the Right-of-Way tasks are from west of Wade Road to Ajo Highway (AZ 86).*
2. *The CONSULTANT will identify parcels from which right-of-way or easements will be required, with title research for said parcels being the responsibility of the County.*
3. *PCDOT will obtain any Rights-Of-Entry required for this project.*
4. *The preparation of legal descriptions and reference maps by CONSULTANT are covered under Task 3.10.12.*

Task 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.

Task 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.

Task 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:

- Results of survey 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.

TASK 3.20 PREPARATION OF CONSTRUCTION DOCUMENTS

Assumptions:

1. *Segment for Design and PS&E Plans is from west of Mark Road to Ajo Highway (AZ 86).*
2. *Roadway cross sections will be provided by the CONSULTANT.*
3. *Noise wall design is considered an additional service.*
4. *Final Design Plans will be at a level of detail such that right-of-way acquisition and environmental permits can proceed.*

Task 3.20.1. Initial Design Phase Plans. The CONSULTANT will prepare initial roadway, median opening, and striping plans for Valencia Road from west of Wade Road to Ajo Highway. 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.

Task 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.

Task 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, noise wall plans and updating project cost estimate for the Initial PS&E.

Task 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.

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

TASK 3.25 TUCSON WATER RELOCATION PLANS

Assumptions:

1. Data collected will be consistent with the level of information needed to designate, locate, and map Tucson Water facilities.
2. Resources are provided for up to 37 potholes under Additional Services. If additional potholes are needed, their number and location will be identified, and a Contract Modification will be prepared to cover this additional pothole work. Potholing shall not begin until the area has received cultural clearance and utility coordination.
3. PCDOT will provide utility base maps that have been provided to-date from Tucson Water. Additional research may be required by the CONSULTANT to verify and supplement the utility base maps.
4. Resources to gather data for Tucson Water is being provided under this task
5. Resources for surveying Blue Stake information are provided in Task 3.10.7.
6. Subsurface utility designations will be shown in the strip map derived in Task 3.10.8.
7. Joint Trench coordination efforts are considered Additional Services.
8. Consultant shall adhere to Pima County Ordinance 2008-72, Regulations for the Use of Public Right of Way.
9. No water design report or system modeling
10. No high-line will be required to relocate facilities in conflict. If during the course of design a highline cannot be avoided, Tucson Water will model the system and identify the appropriate highline size.
11. No alternatives analysis

Task 3.25.1. Data Gathering, Utility Designation, Letter of Acceptance. The CONSULTANT will verify that Tucson Water base maps and prior rights documentation are complete. The PCDOT Utility Coordinator will be the main point of contact for all utility coordination work. The CONSULTANT will provide and maintain a website for project and utility information and make it accessible to Tucson Water.

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 Tucson Water. Meetings are assumed to be attended by two CONSULTANT team members and have a duration of 2 hours per meeting (2 hours per attendee) to prepare, attend, and provide minutes. Prior to the completion of *Task 3.10.7 Existing Conditions Surveys*, the CONSULTANT will request Tucson Water 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. CONSULTANT shall draft onto an Existing Utilities Mapping Package (40 scale) the certified horizontal survey 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. Tucson Water facilities 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 conduct a field review of utility information shown on the Results of Survey Drawing for consistency with utility base maps and utility field survey data.

Task 3.25.2. Design Coordination, Utility Impact Identification. The CONSULTANT will monitor the project's design for impacts to Tucson Water and distribute progress design drawings for review and identification of impacts. The CONSULTANT will update the County as necessary on the status of utility activities and notify the County of any seasonal or other constraints that could impact the construction schedule. Initial and Final Design Phase Plans will be provided to Tucson Water for their review and comment. Resources are also being provided in this task for two CONSULTANT team members and the PCDOT Utility Coordinator to attend up to five (5) individual meetings (2 hours per meeting including the documentation of correspondences/minutes with Tucson Water).

Task 3.25.3. Utility Impact Mitigation. The CONSULTANT will initiate, coordinate and facilitate utility impact meetings with County and Tucson Water to develop mitigation measures acceptable to the County that will minimize costs to the project and minimize impacts to the schedule. The CONSULTANT will incorporate all approved mitigation measures into the List of Utility Impacts.

Task 3.25.4. Initial Design Phase Plans. The CONSULTANT will identify and include utility conflicts associated with Tucson Water facilities from west of Wade Road to Ajo Highway. The Design Concept will include a summary table identifying Tucson Water Utility conflicts along the project corridor.

Task 3.25.5. Final Design Phase Plans. The CONSULTANT will develop preliminary Tucson Water relocation plans for both 12" waterline conflicts and 42" transmission main appurtenances within the Final Design Plans per the checklist found in Chapter 3 of the RDM.

Task 3.25.6. Initial PS&E. The CONSULTANT will develop Initial PS&E Tucson Water relocation plans as part of the 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, and updating project cost estimate for the Initial PS&E.

Task 3.25.7. Final PS&E. The CONSULTANT will develop Final PS&E Tucson Water relocation plans as part of the Final PS&E Plans per the checklist found in Chapter 3 of the RDM, including revisions from Initial PS&E, special provisions, and updating project cost estimate for Final PS&E.

Task 3.25.8. Quality Control Review. The CONSULTANT will provide quality control reviews of the deliverables listed below.

Deliverables:

- Plans for distribution to Tucson Water
- Letter of Acceptance from Tucson Water
- Meeting minutes prepared, distributed to project team, and revised as needed.
- Reviewing the Results of Survey Drawings for inclusion of blues take and utility mapping information, including potholing information.
- List of utility impacts and mitigation measures.
- Responses to all review comments.
- Initial Design Documents including cost estimate and quantity take-off calculations.
- Final Design Plans including cost estimate and quantity take-off calculations.
- Initial PS&E Plans including cost estimate and quantity take-off calculations.
- Final PS&E Plans including cost estimate and quantity take-off calculations.
- Responses to all review comments.

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.*

Task 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.

- 47 (37 water / 10 other utilities) potholes per the attached sub-consultant scope of services
- 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

Task 3.30.2 Value Engineering - TXDOT Box Culvert Calculations / Plans. The CONSULTANT may be called upon to provide analysis, estimated construction costs, and final design plans for nine (9) Reinforced Concrete Box Culverts (RCBC) anticipated on the project utilizing Texas Department of Transportation (TxDOT) RCBC standards as a design baseline. The TxDOT standards will need to be reviewed, verified that they meet LRFD, and Sealed by a Registered Engineer in Arizona. The potential benefit of this task is based on the current Tangerine Road (RTA project) where the TxDOT RCBC are using 20% less reinforcement and concrete versus traditional ADOT RCBC.

Task 3.30.3 RTA Value Engineering Meeting (4 days @ 9hrs/day). The CONSULTANT may be called upon to attend a Value Engineering analysis with the Regional Transportation Authority (RTA). The CONSULTANT and associated team members will work with the VE team to identify and evaluate cost and schedule reduction opportunities.

Task 3.30.4 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 3.30.5 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

Task 3.30.6 Post Construction LOMR. The CONSULTANT may be called upon to provide a post construction letter of map revision.

EXHIBIT B: CONSULTANT FEE PROPOSAL (6 pages)

4RTWWE - Valencia Road: Wade Road to Ajo Highway

Fee Calculation

Kimley-Horn and Associates, Inc.
December 29, 2015

Direct Labor

<u>Classification</u>	<u>Total Hours</u>	<u>Hourly Rate</u>	<u>Labor Cost</u>
Senior Engineer	169	\$74.58	\$ 12,603.51
Project Manager	1727	\$56.81	\$ 98,102.24
Project Engineer	1708	\$54.16	\$ 92,509.09
Registered Landscape Architect	812	\$52.34	\$ 42,499.27
Engineer	1,808	\$39.05	\$ 70,601.50
Analyst/Sr. Designer	725	\$35.31	\$ 25,601.93
CADD / Designer	2,613	\$35.53	\$ 92,845.12
Admin	120	\$38.62	\$ 4,634.28
Clerical	90	\$22.47	\$ 2,022.30
	9772	Total Labor Cost:	\$ 441,419.22

Overhead

Overhead (Audited Overhead Rate)	192.82%	\$ 851,144.55
----------------------------------	---------	---------------

Direct Expenses

<u>Type</u>	<u>Amount</u>	<u>Unit Costs</u>	<u>Cost</u>
SWPPP Document (700 pages)	1	\$221.99	\$ 221.99
Traffic Memorandum (10 reports - 2 submittals)	400	\$0.14	\$ 56.00
Special Provisions (610 pages)	51	\$28.21	\$ 1,438.71
Estimate	51	\$0.14	\$ 7.14
Construction Plans (51 sets @ 300 plan sheets)	15300	\$0.09	\$ 1,377.00
Cross Sections (15 sets @ 60 plan sheets)	900	\$0.09	\$ 81.00
Utility Clearance Bond Plots (22"x34") - 6 sets @ 300 plan sheets	1800	\$0.60	\$ 1,080.00
Mylar (22"x34")	300	\$8.12	\$ 2,436.00
DCR Package (Report and 11"x17" Plans)	60	\$40.02	\$ 2,401.20
DCR Cross Sections (11"x17")	60	\$11.24	\$ 674.40
Existing Utility Plans Packages (11"x17" and 22"x34" per utility)	36	\$6.74	\$ 242.64
Roll Plots - 40 Scale	20	\$75.00	\$ 1,500.00
			\$ 11,516.08

Outside Services and Consultants

<u>Subconsultant</u>	<u>Service</u>	<u>Cost</u>
CMG	Drainage	\$ 241,145.00
Stantec	Water Design & Utility Coordination	\$ 204,401.27
EcoPlan	EAMR	\$ 171,211.00
Ashby Survey	Survey	\$ 99,820.00
Ninyo & Moore	Geotechnical / Pavement Design	\$ 49,900.00
Ninyo & Moore	PISA	\$ 2,900.00
Noise Expert	Noise Study	\$ 10,670.00
Peak Corrosion	Corrosion Consulting	\$ 6,000.00
Field Data Services	Traffic Counts	\$ 443.00
Total of Subconsultants		\$ 786,490.27

Profit (Direct Labor + Overhead) x 10.0%

\$ 129,256.38

Total Fee: \$ 2,219,826.50

Additional Services (PCDOT Allowance)

3.30.1	Utility Coordination and Survey (Additional Services)	\$ 52,976.64
3.30.2	Value Engineering - TXDOT Box Culvert Calculations / Plans	\$ 89,966.56
3.30.3	RTA Value Engineering Meeting (4 days @ 9hrs/day)	\$ 21,843.11
3.30.4	Other Services	\$ 90,190.40
3.30.5	Post Design Services	\$ 150,014.98
3.30.6	Post Construction LOMR	\$ 48,740.22

Total Fee with Additional Services: \$ 2,673,558.40

4RTWWE - Valencia Road: Wade Road to Ajo Highway
Derivation of Hours

Task No.	Description	# Sheets	KH Budget	KH Hours	\$240.21	\$182.97	\$174.46	\$168.58	\$125.78	\$113.74	\$114.45	\$124.39	\$72.38	Direct / Sub Costs	Total Cost (Less KH Directs)
					Senior Engineer	Project Manager	Project Engineer	Registered Landscape Architect	Engineer	Analyst/Sr. Designer	CADD / Designer	Admin	Clerical		
	TASK 3.2 QUALITY CONTROL PLAN AND PROJECT MANAGEMENT		\$ 201,722.75	1246	57	436	285	140	0	18	100	120	90	\$ 104,745.39	\$ 306,468.14
3.2.1	Quality Control Plan		\$ 5,403.98	30	0	20	10	0	0	0	0	0	0		\$ 5,403.98
3.2.2	Project Management		\$ 57,120.14	405	0	195	0	0	0	0	0	120	90		\$ 57,120.14
3.2.3	Conduct monthly meetings @ County (24 total @ 2hrs) / Roll Plot / Agendas / Minutes		\$ 36,369.36	216	0	48	96	48	0	0	24	0	0		\$ 36,369.36
	Conduct sub-consultant and in-house team meetings (30 minutes) (as needed/required)		\$ 23,856.49	129	17	44	44	24	0	0	0	0	0		\$ 23,856.49
	Conduct pre-review overview (@ 2hrs)/explanation meetings with County		\$ 6,804.15	36	8	8	8	12	0	0	0	0	0		\$ 6,804.15
	Conduct major review (4 @ 4hrs) / Roll Plot / Agendas / Minutes		\$ 13,175.22	72	16	16	16	16	0	0	8	0	0		\$ 13,175.22
	Conduct minor review comment meetings (4 @ 2hrs) / Exhibits / Agendas / Minutes		\$ 7,960.64	46	6	8	16	8	0	0	8	0	0		\$ 7,960.64
	Miscellaneous Meetings / Exhibits / Agendas / Minutes		\$ 26,013.93	152	5	57	50	20	0	0	20	0	0		\$ 26,013.93
3.2.4	Schedule		\$ 5,403.98	30	0	20	10	0	0	0	0	0	0		\$ 5,403.98
3.2.5	Cost Estimating - Base Estimate		\$ 19,614.87	130	5	20	35	12	0	18	40	0	0		\$ 19,614.87
	TASK 3.3 UTILITY COORDINATION		\$ 22,028.20	148	0	52	16	0	50	0	30	0	0	\$ 58,193.00	\$ 80,221.20
3.3.1	Data Gathering, Utility Designation, Letter of Acceptance		\$ 1,875.29	14	0	2	0	0	12	0	0	0	0		\$ 1,875.29
3.3.2	Design Coordination, Utility Impact Identification	9	\$ 15,693.25	104	0	38	16	0	20	0	30	0	0		\$ 15,693.25
3.3.3	Utility Impact Mitigation		\$ 2,607.17	18	0	6	0	0	12	0	0	0	0		\$ 2,607.17
3.3.4	Quality Control Review		\$ 1,852.50	12	0	6	0	0	6	0	0	0	0		\$ 1,852.50
	TASK 3.4 PUBLIC PARTICIPATION		\$ 18,023.37	116	0	44	0	32	0	0	40	0	0	\$ 14,770.88	\$ 32,794.25
3.4.1	Public Participation Plan		\$ 2,195.64	12	0	12	0	0	0	0	0	0	0		\$ 2,195.64
3.4.2	Community Advisory Committee Meetings (4 Mtgs @ 4hrs duration) - PM / LS Arch		\$ 6,965.44	48	0	12	0	12	0	0	24	0	0		\$ 6,965.44
3.4.3	Public Meetings (2 Mtgs @ 4hrs duration) - PM / LS Arch		\$ 4,643.63	32	0	8	0	8	0	0	16	0	0		\$ 4,643.63
3.4.5	Quality Control Review		\$ 4,218.66	24	0	12	0	12	0	0	0	0	0		\$ 4,218.66
	TASK 3.5 FEDERAL, STATE, AND LOCAL COORDINATION		\$ 5,489.10	30	0	30	0	0	0	0	0	0	0	\$ 4,012.51	\$ 9,501.61
3.5.1	Coordinate Between Participating Agencies		\$ 5,489.10	30	0	30	0	0	0	0	0	0	0		\$ 5,489.10
	TASK 3.6 PUBLIC ART		\$ 10,186.16	62	0	12	0	42	0	8	0	0	0		\$ 10,186.16
3.6.1	Coordination with Artist		\$ 7,006.42	43	0	6	0	31	0	6	0	0	0		\$ 7,006.42
3.6.2	Quality Control Review		\$ 3,179.74	19	0	6	0	11	0	2	0	0	0		\$ 3,179.74
	TASK 3.7 DATA GATHERING		\$ 15,357.16	98	0	29	15	15	39	0	0	0	0	\$ 17,441.36	\$ 32,798.52
3.7.1	Gather Existing Information		\$ 1,875.29	14	0	2	0	0	12	0	0	0	0		\$ 1,875.29
3.7.2	Site Visits During Project Design		\$ 9,776.88	60	0	15	15	15	15	0	0	0	0		\$ 9,776.88
3.7.3	Quality Control Review		\$ 3,704.99	24	0	12	0	0	12	0	0	0	0		\$ 3,704.99
	TASK 3.8 ENVIRONMENTAL IMPACT SCREENING		\$ 5,693.36	33	0	7	5	21	0	0	0	0	0	\$ 29,146.73	\$ 34,840.09
3.8.5	Team Review Meeting		\$ 3,810.16	22	0	5	5	12	0	0	0	0	0		\$ 3,810.16

Task No.	Description	# Sheets	KH Budget	KH Hours	Senior Engineer	Project Manager	Project Engineer	Registered Landscape Architect	Engineer	Analyst/Sr. Designer	CADD / Designer	Admin	Clerical	Direct / Sub Costs	Total Cost (Less KH Directs)
3.8.7	Quality Control Review		\$ 1,883.20	11	0	2	0	9	0	0	0	0	0		\$ 1,883.20
	TASK 3.10 SURVEY AND MAPPING		\$ 9,990.38	66	0	22	7	0	37	0	0	0	0	\$ 101,500.00	\$ 111,490.38
3.10.1	Initial Planning and Reconnaissance		\$ 1,280.79	7	0	7	0	0	0	0	0	0	0		\$ 1,280.79
3.10.11	Tie-In Survey Elevations		\$ 2,607.17	18	0	6	0	0	12	0	0	0	0		\$ 2,607.17
3.10.8	Culture Surveys		\$ 1,663.80	12	0	1	2	0	9	0	0	0	0		\$ 1,663.80
3.10.12	Legal Descriptions & Maps (20 New Drainage Easements / TCE's)		\$ 2,496.02	17	0	2	5	0	10	0	0	0	0		\$ 2,496.02
3.10.13	Quality Control Review		\$ 1,852.50	12	0	6	0	0	6	0	0	0	0		\$ 1,852.50
	TASK 3.11 DRAINAGE REPORT		\$ 6,123.04	35	0	2	33	0	0	0	0	0	0	\$ 162,885.00	\$ 169,008.04
3.11.6	Quality Control Review		\$ 6,123.04	35	0	2	33	0	0	0	0	0	0		\$ 6,123.04
	TASK 3.12 GEOTECHNICAL INVESTIGATION		\$ 3,167.48	22	0	7	0	0	15	0	0	0	0	\$ 37,600.00	\$ 40,767.48
3.12.1	Geotechnical Testing and Analysis and Report (Coordinate lat/long of boring location)		\$ 2,298.42	16	0	5	0	0	11	0	0	0	0		\$ 2,298.42
3.12.2	Quality Control Review		\$ 869.06	6	0	2	0	0	4	0	0	0	0		\$ 869.06
	TASK 3.13 PAVEMENT DESIGN REPORT		\$ 5,248.74	34	0	17	0	0	17	0	0	0	0	\$ 12,300.00	\$ 17,548.74
3.13.1	Pavement Design Report		\$ 3,396.24	22	0	11	0	0	11	0	0	0	0		\$ 3,396.24
3.13.2	Quality Control Review		\$ 1,852.50	12	0	6	0	0	6	0	0	0	0		\$ 1,852.50
	TASK 3.15 TRAFFIC ENGINEERING MEMORANDUM		\$ 15,869.77	112	0	4	47	0	0	61	0	0	0	\$ 443.00	\$ 16,312.77
3.15.1	Initial Traffic Engineering Memorandum		\$ 6,295.16	51	0	1	7	0	0	43	0	0	0		\$ 6,295.16
3.15.2	Final Traffic Engineering Memorandum		\$ 3,102.65	24	0	1	5	0	0	18	0	0	0		\$ 3,102.65
3.15.4	Monthly, PCDOT Traffic meetings, CAC, Public meetings		\$ 5,233.73	30	0	0	30	0	0	0	0	0	0		\$ 5,233.73
3.15.5	Quality Control Review: Review Traffic Engineering Report		\$ 1,238.23	7	0	2	5	0	0	0	0	0	0		\$ 1,238.23
	TASK 3.16 ARTERIAL STREET LIGHTING DESIGN REPORT		\$ 6,485.45	46	0	4	12	0	20	0	10	0	0		\$ 6,485.45
3.16.1	Draft/Final Lighting Design Report		\$ 5,770.59	42	0	2	10	0	20	0	10	0	0		\$ 5,770.59
3.16.2	Quality Control Review: Review Draft / Final Lighting Report		\$ 714.86	4	0	2	2	0	0	0	0	0	0		\$ 714.86
	TASK 3.17 DESIGN CONCEPT REPORT		\$ 62,462.79	403	0	169	32	37	77	51	37	0	0	\$ 18,018.85	\$ 80,482.64
3.17.1	Executive Summary/Project Overview and Description		\$ 4,831.58	29	0	19	2	0	8	0	0	0	0		\$ 4,831.58
3.17.2	Project Area Characteristics (Existing Conditions)		\$ 18,395.00	121	0	40	2	30	8	41	0	0	0		\$ 18,395.00
3.17.3	Design Standards, Criteria and Features/Alternatives		\$ 3,367.82	21	0	11	2	0	8	0	0	0	0		\$ 3,367.82
3.17.4	Social, Economic, and Environmental		\$ 5,929.40	35	0	25	2	0	8	0	0	0	0		\$ 5,929.40
3.17.5	Design Concept Report with Conclusions and Recommendations		\$ 12,010.26	74	0	43	5	0	26	0	0	0	0		\$ 12,010.26
3.17.6	Cost Estimate		\$ 13,017.31	96	0	6	19	5	19	10	37	0	0		\$ 13,017.31
3.17.7	Quality Control Review of DCR		\$ 4,911.42	27	0	25	0	2	0	0	0	0	0		\$ 4,911.42
	TASK 3.18 ENVIRONMENTAL ASSESSMENT AND MITIGATION REPORT		\$ 41,077.88	289	0	34	10	95	0	100	50	0	0	\$ 108,438.28	\$ 149,516.26
3.18.1	Cultural Resources Inventory and Report		\$ 717.50	4	0	3	0	1	0	0	0	0	0		\$ 717.50

Task No.	Description	# Sheets	KH Budget	KH Hours	Senior Engineer	Project Manager	Project Engineer	Registered Landscape Architect	Engineer	Analyst/Sr. Designer	CADD / Designer	Admin	Clerical	Direct / Sub Costs	Total Cost (Less KH Directs)
3.18.2	Biological Evaluation/Wildlife Habitat		\$ 717.50	4	0	3	0	1	0	0	0	0	0		\$ 717.50
3.18.3	Vegetation Sampling/Measurement (Native Plant Inventory / Invasive Mapping)		\$ 32,312.65	240	0	3	0	87	0	100	50	0	0		\$ 32,312.65
3.18.4	Clean Water Act Permitting		\$ 548.91	3	0	3	0	0	0	0	0	0	0		\$ 548.91
3.18.5	Hazardous Materials Survey		\$ 548.91	3	0	3	0	0	0	0	0	0	0		\$ 548.91
3.18.6	Air Quality		\$ 548.91	3	0	3	0	0	0	0	0	0	0		\$ 548.91
3.18.7	Environmental Documentation		\$ 548.91	3	0	3	0	0	0	0	0	0	0		\$ 548.91
3.18.8	Noise Analysis		\$ 548.91	3	0	3	0	0	0	0	0	0	0		\$ 548.91
3.18.9	Quality Control Review of EAMR		\$ 4,585.79	26	0	10	10	6	0	0	0	0	0		\$ 4,585.79
TASK 3.19 RIGHT-OF-WAY ACQUISITION SUPPORT			\$ 59,375.15	398	0	94	94	0	176	32	0	0	0		\$ 59,375.15
3.19.1	Existing Right-of-Way and Easements		\$ 30,750.06	210	0	40	50	0	88	32	0	0	0		\$ 30,750.06
3.19.2	Right-of-Way Plans		\$ 19,493.67	128	0	27	38	0	63	0	0	0	0		\$ 19,493.67
3.19.3	Quality Control Review of Right-of-Way Documents		\$ 9,131.42	58	0	27	6	0	25	0	0	0	0		\$ 9,131.42
TASK 3.20 PREPARATION OF CONSTRUCTION DOCUMENTS															\$ -
3.20.1	Initial Design Phase Plans		\$ 94,985.74	702	0	49	115	24	273	12	229	0	0	\$ 7,000.00	\$ 101,985.74
	Cover Sheet	1	\$ 937.65	7	0	1	0	0	6	0	0	0	0		\$ 937.65
	Typical Sections	2	\$ 1,942.02	14	0	2	3	0	2	0	7	0	0		\$ 1,942.02
	Pavement Structure Sections	1	\$ 3,011.62	22	0	2	5	0	5	0	10	0	0		\$ 3,011.62
	Geometric Control (40 Scale, double banked)	10	\$ 7,447.20	55	0	5	5	0	45	0	0	0	0		\$ 7,447.20
	Initial Demolition Plans (40 Scale, double banked)	11	\$ 9,683.31	74	0	4	10	0	30	0	30	0	0		\$ 9,683.31
	Initial Roadway Plans (40 Scale)	18	\$ 18,961.56	140	0	10	30	0	40	0	60	0	0		\$ 18,961.56
	Initial Cross Drainage Plans (10 - 20 Scale)	18	\$ 26,525.10	200	0	10	35	0	75	0	80	0	0		\$ 26,525.10
	Water & Sewer Conflicts		\$ 7,447.20	55	0	5	5	0	45	0	0	0	0		\$ 7,447.20
	Landscape Plan	1	\$ 6,272.12	43	0	0	1	24	0	12	6	0	0		\$ 6,272.12
	Pavement Marking Plans (40 Scale, double banked)	9	\$ 7,339.56	57	0	5	6	0	10	0	36	0	0		\$ 7,339.56
	Cross Sections (6 per sheet) - Valencia Only	48	\$ 5,418.40	35	0	5	15	0	15	0	0	0	0		\$ 5,418.40
3.20.2	Final Design Phase Plans		\$ 114,717.45	841	2	59	148	24	295	52	251	0	0	\$ 6,600.00	\$ 121,317.45
	Cover Sheet	1	\$ 937.65	7	0	1	0	0	6	0	0	0	0		\$ 937.65
	Design Sheet - General Notes / Pavement Structure Sections	2	\$ 1,843.98	12	0	5	1	0	6	0	0	0	0		\$ 1,843.98
	Typical Sections	6	\$ 7,210.29	54	0	9	5	0	10	0	30	0	0		\$ 7,210.29
	Geometric Control (40 Scale, double banked)	10	\$ 9,333.89	70	0	5	5	0	60	0	0	0	0		\$ 9,333.89
	Final Demolition Plans (40 Scale, double banked)	11	\$ 12,328.99	94	0	4	15	0	35	0	40	0	0		\$ 12,328.99
	Final Roadway Plans (40 Scale)	18	\$ 20,734.94	155	0	10	30	0	45	0	70	0	0		\$ 20,734.94
	Final Cross Drainage Plans (10 - 20 Scale)	18	\$ 25,896.21	195	0	10	35	0	70	0	80	0	0		\$ 25,896.21
	Water & Sewer Conflicts		\$ 5,560.51	40	0	5	5	0	30	0	0	0	0		\$ 5,560.51
	Landscape Plan	1	\$ 6,446.58	44	0	0	2	24	0	12	6	0	0		\$ 6,446.58
	Pavement Marking Plans (40 Scale, double banked)	9	\$ 7,838.08	60	0	5	10	0	5	40	0	0	0		\$ 7,838.08
	Cross Sections (6 per sheet) - Valencia, Cross Streets	60	\$ 5,418.40	35	0	5	15	0	15	0	0	0	0		\$ 5,418.40
	Cost Estimate		\$ 11,167.93	76	2	10	25	0	13	0	25	0	0		\$ 11,167.93

Task No.	Description	# Sheets	KH Budget	KH Hours	Senior Engineer	Project Manager	Project Engineer	Registered Landscape Architect	Engineer	Analyst/Sr Designer	CADD / Designer	Admin	Clerical	Direct / Sub Costs	Total Cost (Less KH Directs)
3.20.3	Initial PS&E		\$ 337,708.17	2445	32	240	397	170	400	210	986	0	0	\$ 6,000.00	\$ 343,708.17
	Cover Sheet	1	\$ 709.29	5	0	2	0	0	0	0	3	0	0		\$ 709.29
	Design Sheets - General Notes / Pavement Structure Sections	3	\$ 3,686.31	26	0	5	5	0	6	0	10	0	0		\$ 3,686.31
	Typical Sections	6	\$ 6,548.81	45	0	10	10	0	10	0	15	0	0		\$ 6,548.81
	Summary Sheets (RCBC, Pipe, Barrier)	3	\$ 2,496.02	17	0	2	5	0	10	0	0	0	0		\$ 2,496.02
	Special Details - Civil	15	\$ 23,954.56	164	15	25	20	0	34	0	70	0	0		\$ 23,954.56
	Special Details - Wingwalls - Barrier	15	\$ 23,283.42	164	15	5	30	0	44	20	50	0	0		\$ 23,283.42
	Initial Demolition Plans (40 Scale, double banked)	11	\$ 13,376.98	104	0	4	20	0	0	0	80	0	0		\$ 13,376.98
	Intersection Staking Sheets (4 Intersections)	8	\$ 12,452.28	91	0	18	10	0	18	0	45	0	0		\$ 12,452.28
	Drainage Inlet-Outlet Details (10 - 20 Scale)	20	\$ 32,150.38	240	0	30	40	0	20	0	150	0	0		\$ 32,150.38
	Geometric Control (40 Scale, double banked)	10	\$ 10,106.63	70	0	10	15	0	45	0	0	0	0		\$ 10,106.63
	Initial Roadway Plans (40 Scale)	18	\$ 27,785.26	205	0	25	35	0	45	0	100	0	0		\$ 27,785.26
	Driveway Plan-Profiles (20 Scale)	6	\$ 12,277.67	92	0	8	20	0	0	0	64	0	0		\$ 12,277.67
	Initial Cross Drainage Plans (10 - 20 Scale)	25	\$ 30,117.15	230	0	20	30	0	55	0	125	0	0		\$ 30,117.15
	SWPPP	16	\$ 21,735.34	140	0	10	30	60	0	30	10	0	0		\$ 21,735.34
	ITS Conduit Plans (40 Scale, double banked)	11	\$ 13,303.52	104	0	2	22	0	0	80	0	0	0		\$ 13,303.52
	Pavement Marking Plans (40 Scale, double banked)	9	\$ 7,212.83	57	0	5	2	0	20	0	30	0	0		\$ 7,212.83
	Signing Plans (40 Scale, double banked)	9	\$ 15,467.25	120	0	9	12	0	35	0	64	0	0		\$ 15,467.25
	Traffic Signal Plans (20 Scale)	7	\$ 15,153.04	110	0	25	7	0	38	0	40	0	0		\$ 15,153.04
	Landscape Plans + Irrigation Plans	22	\$ 34,475.47	265	0	0	5	70	10	80	100	0	0		\$ 34,475.47
	Landscape + Irrigation Details	7	\$ 13,451.45	95	0	0	5	40	10	0	40	0	0		\$ 13,451.45
	Cross Sections (6 per sheet) - Valencia, Cross Streets	60	\$ 6,148.58	35	0	5	30	0	0	0	0	0	0		\$ 6,148.58
	Cost Estimate		\$ 11,815.96	66	2	20	44	0	0	0	0	0	0		\$ 11,815.96
3.20.4	Final PS&E		\$ 290,054.67	2101	28	208	341	140	345	181	858	0	0	\$ 4,140.00	\$ 294,194.67
	Cover Sheet	1	\$ 709.29	5	0	2	0	0	0	0	3	0	0		\$ 709.29
	Design Sheets - General Notes / Pavement Structure Sections	3	\$ 3,088.85	22	0	4	4	0	5	0	9	0	0		\$ 3,088.85
	Typical Sections	6	\$ 5,836.70	40	0	9	9	0	9	0	13	0	0		\$ 5,836.70
	Summary Sheets (RCBC, Pipe, Barrier)	3	\$ 2,195.78	15	0	2	4	0	9	0	0	0	0		\$ 2,195.78
	Special Details - Civil	15	\$ 20,628.46	141	13	22	17	0	29	0	60	0	0		\$ 20,628.46
	Special Details - Wingwalls - Barrier	15	\$ 20,025.14	141	13	4	26	0	38	17	43	0	0		\$ 20,025.14
	Final Demolition Plans (40 Scale, double banked)	11	\$ 11,411.69	89	0	3	17	0	0	0	69	0	0		\$ 11,411.69
	Intersection Staking Sheets (4 Intersections)	8	\$ 10,664.88	78	0	15	9	0	15	0	39	0	0		\$ 10,664.88
	Drainage Inlet-Outlet Details (10 - 20 Scale)	20	\$ 27,590.98	206	0	26	34	0	17	0	129	0	0		\$ 27,590.98
	Geometric Control (40 Scale, double banked)	10	\$ 8,820.07	61	0	9	13	0	39	0	0	0	0		\$ 8,820.07
	Final Roadway Plans (40 Scale)	18	\$ 24,007.10	177	0	22	30	0	39	0	86	0	0		\$ 24,007.10
	Driveway Plan-Profiles (20 Scale)	6	\$ 10,541.28	79	0	7	17	0	0	0	55	0	0		\$ 10,541.28
	Final Cross Drainage Plans (10 - 20 Scale)	25	\$ 25,918.53	188	0	17	26	0	47	0	108	0	0		\$ 25,918.53
	SWPPP	16	\$ 16,913.41	110	0	9	26	40	0	26	9	0	0		\$ 16,913.41
	ITS Conduit Plans (40 Scale, double banked)	11	\$ 11,528.96	90	0	2	19	0	0	69	0	0	0		\$ 11,528.96

Task No.	Description	# Sheets	KH Budget	KH Hours	Senior Engineer	Project Manager	Project Engineer	Registered Landscape Architect	Engineer	Analyst/Designer	CADD / Designer	Admin	Clerical	Direct / Sub Costs	Total Cost (Less KH Directs)
	Pavement Marking Plans (40 Scale, double banked)	9	\$ 6,194.72	49	0	4	2	0	17	0	26	0	0		\$ 6,194.72
	Signing Plans (40 Scale, double banked)	9	\$ 13,276.42	103	0	8	10	0	30	0	55	0	0		\$ 13,276.42
	Traffic Signal Plans (20 Scale)	7	\$ 13,114.08	95	0	22	6	0	33	0	34	0	0		\$ 13,114.08
	Landscape Plans + Irrigation Plans	22	\$ 31,321.76	238	0	0	4	70	9	69	86	0	0		\$ 31,321.76
	Landscape + Irrigation Details	7	\$ 10,778.67	77	0	0	4	30	9	0	34	0	0		\$ 10,778.67
	Cross Sections (6 per sheet) - Valencia, Cross Streets	60	\$ 5,267.78	30	0	4	26	0	0	0	0	0	0		\$ 5,267.78
	Cost Estimate		\$ 10,220.31	57	2	17	38	0	0	0	0	0	0		\$ 10,220.31

3.20.6	Quality Control Review of Plans		\$ 73,047.26	401	34	150	145	72	0	0	0	0	0	\$ -	\$ 73,047.26
	Initial Design		\$ 11,105.71	61	5	20	30	6	0	0	0	0	0	\$ -	\$ 11,105.71
	Final Design		\$ 9,752.99	54	3	20	25	6	0	0	0	0	0	\$ -	\$ 9,752.99
	Initial PS&E		\$ 11,329.46	62	7	20	15	20	0	0	0	0	0	\$ -	\$ 11,329.46
	Final PS&E		\$ 11,329.46	62	7	20	15	20	0	0	0	0	0	\$ -	\$ 11,329.46
	Responses to all review comments		\$ 29,529.63	162	12	70	60	20	0	0	0	0	0		\$ 29,529.63

3.25	TASK 3.25 TUCSON WATER RELOCATION PLANS		\$ 23,095.99	146	16	48	6	0	64	0	12	0	0	\$ 83,254.27	\$ 116,350.26
3.25.1	Data Gathering, Utility Designation, Letter of Acceptance		\$ 1,497.95	11	0	2	0	0	9	0	0	0	0	\$ 1,806.00	\$ 3,303.95
3.25.2	Design Coordination, Utility Impact Identification	9	\$ 6,239.51	42	0	14	6	0	10	0	12	0	0	\$ 4,648.00	\$ 10,887.51
3.25.3	Utility Impact Mitigation		\$ 1,648.73	9	0	9	0	0	0	0	0	0	0	\$ 3,844.00	\$ 5,490.73
3.25.4	Initial Design		\$ -	0	0	0	0	0	0	0	0	0	0	\$ 8,175.00	
3.25.5	Final Design		\$ -	0	0	0	0	0	0	0	0	0	0	\$ 27,045.00	
3.25.6	Initial PS&E		\$ -	0	0	0	0	0	0	0	0	0	0	\$ 22,330.00	
3.25.7	Final PS&E		\$ -	0	0	0	0	0	0	0	0	0	0	\$ 25,406.27	
3.25.8	Quality Control Review		\$ 7,490.81	46	12	8	0	0	25	0	0	0	0		\$ 7,490.81
	Responses to all review comments		\$ 6,220.99	39	4	15	0	0	20	0	0	0	0		\$ 6,220.99

Total Labor Cost / Hours: \$ 1,421,820.15 9,772 169 1,727 1,708 612 1,808 725 2,613 120 90 \$ 786,490.27 \$ 2,208,310.42

	TASK 3.30 ADDITIONAL SERVICES		\$ 306,451.48	1812	85	446	787	165	154	120	55	0	0		
3.30.1	Utility Coordination and Survey (Additional Services)		\$ 1,065.26	6	0	1	5	0	0	0	0	0	0	\$ 51,921.38	\$ 52,976.64
3.30.2	Value Engineering - TXDOT Box Culvert Calculations / Plans		\$ 89,966.56	565	25	20	345	0	15	120	40	0	0	\$ -	\$ 89,966.56
3.30.3	RTA Value Engineering Meeting (4 days @ \$900/day)		\$ 17,343.11	197	0	36	41	0	15	0	15	0	0	\$ 4,500.00	\$ 21,843.11
3.30.4	Other Services		\$ 80,190.40	470	25	110	135	125	75	0	0	0	0	\$ 10,000.00	\$ 90,190.40
3.30.5	Post Design Services		\$ 114,155.93	643	35	270	249	40	49	0	0	0	0	\$ 35,859.05	\$ 150,014.98
3.30.6	Post Construction LOMR		\$ 3,740.22	21	0	9	12	0	0	0	0	0	0	\$ 45,000.00	\$ 48,740.22

Total Additional Labor Cost / Hours: \$ 306,451.48 1,812 85 446 787 165 154 120 55 0 0 \$ 147,280.43 \$ 453,731.91

Client#: 25320

KIMLHORN

ACORD™

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/05/2016

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 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: Jerry Noyola PHONE (A/C, No, Ext): 770-552-4225 FAX (A/C, No): 866-550-4082 E-MAIL ADDRESS: jerry.noyola@greyling.com	
INSURED Kimley-Horn and Associates, Inc. P.O. Box 33068 Raleigh, NC 27636		INSURER(S) AFFORDING COVERAGE	
		INSURER A: National Union Fire Ins Co of P	
		INSURER B: Commerce & Industry Ins. Co.	
		INSURER C: New Hampshire Ins. Co.	
		INSURER D: Lloyds of London	
		INSURER E: INSURER F:	

COVERAGES

CERTIFICATE NUMBER:

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 SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liab GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC		9645227	04/01/2015	04/01/2016	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$500,000 MED EXP (Any one person) \$25,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input checked="" type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS		4982985	04/01/2015	04/01/2016	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$10,000 <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE		BE020733086	04/01/2015	04/01/2016	EACH OCCURRENCE \$5,000,000 AGGREGATE \$5,000,000 \$
C	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 N N/A	39901450	04/01/2015	04/01/2016	<input checked="" type="checkbox"/> WC STATUTORY LIMITS E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
A			39901451	04/01/2015	04/01/2016	
D	Prof. Liab		P070831500	04/01/2015	04/01/2016	Per Claim \$2,000,000 Aggregate \$2,000,000

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

Re: RS-Design Engineering Services for Valencia Road: Wade Road to Ajo Highway (SR 86). The Regional Transportation Authority (RTA), Pima County, its departments, districts, boards, commissions, officers, officials, agents & employees are named as Additional Insureds with respects to General & Automobile Liability where required by written contract. The above referenced liability policies with the exception of professional liability are primary & non-contributory where required by written contract. Waiver of (See Attached Descriptions)

CERTIFICATE HOLDER

CANCELLATION

Pima County Procurement, Design & Construction Division 130 West Congress 3rd Floor DT-AB3-126 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 
---	--

© 1988-2010 ACORD CORPORATION. All rights reserved.

DESCRIPTIONS (Continued from Page 1)

Subrogation in favor of Additional Insured(s) 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, 30 days' written notice (except 10 days for nonpayment of premium) will be provided to the Certificate Holder.

ENDORSEMENT

This endorsement, effective 12:01 A.M. 04/01/15 forms a part of

policy No. 4982985 issued to KIMLEY-HORN & ASSOCIATES, INC.

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

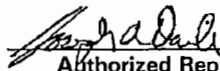
ADDITIONAL INSURED:

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

I. SECTION II - 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 or
Countersignature (in States Where
Applicable)

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 shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED - OWNERS, LESSEES OR
CONTRACTORS - AUTOMATIC STATUS WHEN
REQUIRED IN CONSTRUCTION AGREEMENT WITH YOU**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

- A. Section II - Who Is An Insured is amended to include as an additional insured any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an additional insured 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.

However, the insurance afforded to such additional insured:

1. Only applies to the extent permitted by law; and
2. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

A person's or organization's status as an additional insured under this endorsement ends when your operations for that additional insured are completed.

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

This insurance does not apply to:

1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

- a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or the failure to render any professional architectural, engineering or surveying services.

2. "Bodily injury" or "property damage" occurring after:

- a. 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
- b. 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:

The most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement you have entered into with the additional insured; or
2. Available under the applicable Limits of

Insurance shown in the Declarations;
whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.