



BOARD OF SUPERVISORS AGENDA ITEM REPORT
CONTRACTS / AWARDS / GRANTS

Requested Board Meeting Date: August 17, 2015

or Procurement Director Award ☐

Contractor/Vendor Name (DBA): Kimley-Horn & Associates Inc.

Project Title/Description:

Camino de la Tierra Pedestrian Bridge along the Rillito River (4RRVPA)

Purpose:

Amend design contract to extend time for ADOT funding and increase amount for env. clearances and add'l design.

Procurement Method:

Not applicable to amendments

Program Goals/Predicted Outcomes:

The program goal and expected outcome is to provide safe crossing over the road.

Public Benefit:

Multi-use path bridge constructed over Camino de la Tierra Rd, using sustainable methods and recycled materials.

Metrics Available to Measure Performance:

Successful design of the project, with all required clearances obtained for ADOT authorization of construction.

Retroactive:

No

Original Information

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

Effective Date: _____ Termination Date: _____ Prior Contract Number (Synergen/CMS): _____

☐ Expense Amount: \$ _____ ☐ Revenue Amount: \$ _____

Funding Source(s): _____

Cost to Pima County General Fund: _____

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: CT Department Code: PW Contract Number (i.e., 15-123): 13*606

Amendment No.: 2 AMS Version No.: 7

Effective Date: 08/17/2015 New Termination Date: 08/24/2017

☒ Expense ☐ Revenue ☐ Increase ☐ Decrease Amount This Amendment: \$67,490.00

Funding Source(s): Transportation Non-Bond Projects

Cost to Pima County General Fund: _____

To: COB 8.5.15 (1)
Fgs - 24

Procure Dept 07/31/15 PM0231

Contact: Matt Sage, Commodity/Contracts Officer

Department: Procurement, Design and Construction

Telephone: 724-8586

Department Director Signature/Date:

Deputy County Administrator Signature/Date:

County Administrator Signature/Date:

(Required for Board Agenda/Addendum Items)

PIMA COUNTY DEPARTMENT OF PUBLIC WORKS

PROJECT: DESIGN ENGINEERING SERVICES:
RILLITO RIVERPATH & CAMINO DE LA
TIERRA BICYCLE & PEDESTRIAN
ENHANCEMENT (4RRVPA)

ADOT NO. 0000 PM PPM SL701 02D

CONSULTANT: KIMLEY-HORN AND ASSOCIATES, INC.
333 East Wetmore Road, Suite 280
Tucson, Arizona, 85705

CONTRACT NO. CT-PW-13000000000000000606

AMENDMENT NO. Two (2)

FUNDING: Transportation Non-Bond Projects

CONTRACT

NO. CT-PW-13000000000000000606

AMENDMENT NO. 02

This number must appear on all
invoices, correspondence and
documents pertaining to this
contract.

CONTRACT TERM: 02/25/2013 - 08/24/2015

TERMINATION PRIOR AMENDMENT: 08/24/15

TERMINATION THIS AMENDMENT: 08/24/17

ORIGINAL CONTRACT AMOUNT: \$ 226,385.00

PRIOR AMENDMENT(S): \$ 7,491.00

AMOUNT THIS AMENDMENT: \$ 67,490.00

REVISED CONTRACT AMOUNT: \$ 301,366.00

CONTRACT AMENDMENT

WHEREAS, COUNTY and CONSULTANT have entered into the Contract referenced above; and

WHEREAS, COUNTY requires additional environmental analysis, and the preparation of additional bridge pier details due to the change in bridge configuration from a 3-span structure to a 9-span structure; and

WHEREAS, COUNTY and CONSULTANT have agreed to modify the Scope to include these additional services and to increase the amount of the Contract to provide payment for said services, and extend the Contract term; and

WHEREAS, CONSULTANT has agreed to provide these services at a cost acceptable to COUNTY.

NOW, THEREFORE, it is agreed as follows:

After the effective date of this Amendment all references in the Contract to **EXHIBIT 'A': SCOPE OF WORK AND FEE PROPOSAL** and **EXHIBIT 'A-1': ADDITIONAL SCOPE OF WORK AND FEE PROPOSAL**, as previously amended in Amendment 1, are changed to **EXHIBIT 'A': SCOPE OF WORK AND FEE PROPOSAL**, **EXHIBIT 'A-1': ADDITIONAL SCOPE OF WORK AND FEE PROPOSAL**, and **EXHIBIT 'A-2': BRIDGE CONFIGURATION CHANGES SCOPE OF WORK AND FEE PROPOSAL**.

ADD EXHIBIT 'A-2': BRIDGE CONFIGURATION CHANGES SCOPE OF WORK AND FEE PROPOSAL (22 pages) as an attachment to this Contract.

CHANGE the first paragraph of **ARTICLE I - TERM AND EXTENSION/RENEWAL/CHANGES** as follows:

FROM: "This Contract shall commence on February 25, 2013 and shall terminate on August 24, 2015 unless sooner terminated or further extended pursuant to the provisions of this Contract."

TO: "This Contract shall commence on February 25, 2013, and shall terminate on August 24, 2017, unless sooner terminated or further extended pursuant to the provisions of this Contract."

CHANGE the first paragraph of **ARTICLE III – COMPENSATION AND PAYMENT**, as previously amended in Amendment 1, as follows:

FROM: "In consideration of the services specified in this Contract, the COUNTY agrees to pay CONSULTANT as follows: Not To Exceed Two Hundred Thirty-Three Thousand, Eight Hundred Seventy-Six Dollars (\$233,876.00)."

TO: "In consideration of the services specified in this Contract, the COUNTY agrees to pay CONSULTANT as follows: Not To Exceed Three Hundred and One Thousand, Three Hundred Sixty-Six Dollars and Zero Cents (\$301,366.00)."

This Amendment shall be effective on August 17, 2015

All other provisions of the Contract, not specifically changed by this Amendment, shall remain in effect and be binding upon the parties.

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

APPROVED:

Chair, Board of Supervisors

Date

CONTRACTOR:

Signature

BRENT C CROWTHER, Associate

Name and Title (Please Print)

Date

July 29, 2015

Date

ATTEST:

Clerk of the Board

APPROVED AS TO FORM:

Deputy County Attorney

ANDREW FLAGG

Name (Please Print)

Date

7/24/15

Date

Exhibit A-2

**Bridge Configuration Changes
Scope of Work and Fee Proposal
(22 Pages)**



4RRVPA – Rillito Riverpath and Pedestrian Bridge at Camino de la Tierra

Contract Recap:

Consultant: Kimley-Horn & Associates

Contract No.: CT-PW-13*606

Original Contract: \$226,385.00

Approved Amended Contract: \$233,876.00

Additional Contract Amount Requested: \$67,490.00

Revised Contract Requested: \$301,366.00

Original Contract Time: 910 Calendar Days

Original Completion Date: August 24, 2015

Additional Contract Time Requested: 730 Calendar Days Revised Completion Date Requested: August 24, 2017

Background

Design is underway for the construction of a multi-use bridge over Camino de la Tierra on the south bank of the Rillito River. A separated crossing has been identified as a vital safety benefit for pedestrians, cyclists and other users of the river path in this area. Originally, the scope included a pre-fabricated steel bridge over the roadway. However, subsequent opportunity arose to salvage concrete girders from the Sahuarita Road Helmet Peak Bridge for re-use in this shared-use path bridge. Additional soils analysis and design work, including value engineering practices, are needed to finalize this sustainable design concept. This project is federally funded and therefore subject to federal requirements during the design and construction process. The Arizona Department of Transportation (ADOT) recently pushed out the construction funding for this project to FY17-18, thereby increasing the environmental clearances that must be obtained.

Benefits

Time extension is critical to maintain continuity for the design phase of this project. Additional funds are needed to finalize the design and also to allow for environmental clearances that will be needed once construction phase funding is approved by ADOT. This Amendment allows for the additional time-sensitive environmental clearances to be completed when authorization to construct is received by ADOT, hopefully prior to the currently programmed date of FY17-18.

Recommendation:

Extend the contract to August 24, 2017 and increase the contract amount by \$67,490.00.

Requested by: _____

Sandi L. Garrick, Project Manager, PMO

7/23/2015

Date

Kimley»Horn

June 22, 2015

Ms. Sandi J. Garrick
Project Management Office, Pima County
Public Works Building, 2nd Floor
201 N. Stone, Tucson, AZ 85701
Ofc 520.740.6710
Mbl 520.241.4046

RE: Camino de la Tierra Pedestrian Bridge – Change Order #2
Pima County Project No. 4RRVPA
ADOT Project No. 0000 PM PPM SL701 02D

Dear Ms. Garrick:

Kimley-Horn and Associates, Inc. (KHA) is requesting a change order to the original contract in the amount of \$67,490.00 for environmental analysis, additional geotechnical borings, the preparation of additional bridge pier details due to the bridge configuration expanding from a 3-span structure into a 9-span structure, and the addition of diamond plate joints for the bridge. We have added project management time to account for this additional project length. Please find this amount and associated scope on the attached sub consultant proposal.

The project DBE Goal is 4.48%. This Change Order request does include DBE work in the amount of \$3,434. The resulting project DBE percentage is now 13.2%.

We appreciate the opportunity to provide these services to you. Please contact me at (520) 352-8629 or rick.solis@kimley-horn.com if you have any questions.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Rick P. Solis, P.E.
Project Manager
Associate

PIMA COUNTY DEPARTMENT OF PUBLIC WORKS

DERIVATION OF COST PROPOSAL SUMMARY

Rillito Riverpath and Camino de la Tierra Bicycle and Pedestrian Enhancement Project (4RRVPA)

ESTIMATED DIRECT LABOR:

<u>Classification</u>	<u>Estimated Hours</u>	<u>Estimated Rate</u>	<u>Labor Costs</u>
Project Principal	-	\$240.00	\$0.00
Project Manager	85	\$160.00	\$13,600.00
Senior Professional	44	\$198.00	\$8,712.00
Administrative / Clerical	28	\$112.00	\$3,136.00
Analyst	151	\$91.00	\$13,741.00
Junior Professional	53	\$137.00	\$7,261.00
CADD	64	\$133.00	\$8,512.00

Total Estimated Labor: 425 \$ 64,982

ESTIMATED DIRECT EXPENSES

Delivery Courier	\$0
Reproduction	\$0
Subsurface Utility Engineering (Potholing)	\$1,000.00

Total Estimated Direct Expenses \$ 1,000 EC30

ESTIMATED OUTSIDE SERVICES AND CONSULTANTS

EcoPlan Associates, Inc.	\$8,094 LS
ATEK Engineering Consultants, LLC (DBE)	\$3,434 LS

Total Estimated Outside Services \$ 11,528 EC40

TOTAL COST

\$ 67,490 LS



David D. Perkins, PE - Project Principal

June 22, 2015

Date

**This cost proposal is valid for six months from the date of submittal. If the proposal is accepted after said period, KHA reserves the right to review and retain or modify the cost estimate stated herein in order to appropriately reflect changing costs and salaries and other economic considerations.

Pima County - Rillito Riverpath and Camino de la Tierra Bicycle and Pedestrian Enhancement Project (4RRVPA)									
Stage V (Final Design)									
	No.	Proj.	Proj.	Sen.	Admn.	Anal.	Junior	CADD	Total
	Sht's	Princ.	Mngr.	Prof.	Cler.		Prof.		Hours
Project Management, Mtgs, Sched., Site Visits									
PM - General Administration (1.5 hrs/mo. X 14 Months)	N/A		21		21				42
PM - Project Budget Review (0.5 hrs/mo. X 14 Months)	N/A		7		7				14
PM - Project Scheduling (0.5 hrs/mo. X 14 Months)	N/A		7						7
Updating Bike Roundabout and Specials	N/A		4	8		40			52
Project Administration / Meetings		0	39	8	28	40	0	0	115
Stage V Submittal (BRIDGE)									
Bridge Pier Plan and Elevation (As Noted on Plans)	1		16	18		48	24	32	138
Bridge Pier Details (As Noted on Plans)	1		16	18		48	24	32	138
Miscellaneous Tasks:									
Utility Coordination	N/A		1			5			6
Bridge Quantities / Cost Estimates	N/A		10			10	5		25
Environmental Tasks:									
Environmental Concurrence Review Coordination:	N/A		3						3
Phase II - Stage V:		0	46	36	0	111	53	64	310
Totals:		0	85	44	28	151	53	64	425



EcoPlan Associates, Inc.
Environmental Science & Resource Economics

July 30, 2014

Revised June 11, 2015

Rick Solis, P.E.
Kimley-Horn and Associates, Inc.
333 E. Wetmore Road, Suite 280
Tucson, AZ 85705

RE: Rillito Riverpath and Camino de la Tierra Bicycle and Pedestrian Enhancement Project
Scope of Work and Cost Estimate for Environmental Clearance
Pima County Project No.: 4RRVPA
Pima County Contract No.: CT-PW-1300000000000000606
EcoPlan Project No.: 13-452 Amendment 1 *Revised 6-11-15*

Dear Mr. Solis:

EcoPlan Associates, Inc. (EcoPlan) is pleased to submit this revised amendment for environmental clearance services for the above-referenced project. This amendment supersedes our previous Amendment 1 request submitted on July 30, 2014. We understand that due to funding and shifting of project priorities at Pima County, our July 2014 submittal has not yet been accepted. Based on the June 8, 2015 phone call between EcoPlan and Kimley-Horn and Associates, Inc. (Kimley-Horn) it was determined that the project schedule has changed and construction is now set to begin in 2017. Based on this information, EcoPlan should expect continued involvement in the project through September of 2016.

This amendment addresses the extended project schedule and resultant updates or revisions to previous technical reports and environmental clearance documents. We have included a scope of work, assumptions, and cost estimate in this proposal for your review and approval. We estimate the cost for our services will be \$8,093.10. Invoices will be submitted monthly for work completed to date. Terms for payment are net 30 days.

Please contact me at 520-624-4326, extension 117 or Mike Dawson at extension 177 if you have any questions. Thank you for your time and consideration.

Sincerely,
EcoPlan Associates, Inc.

George A. Ruffner, Ph.D.
Principal

Enclosures: As noted



EcoPlan Associates, Inc.
Environmental Science & Resource Economics

SCOPE OF WORK

Rillito Riverpath and Camino de la Tierra Bicycle and Pedestrian Enhancement Project
Pima County Project No.: 4RRVPA
Pima County Contract No.: CT-PW-1300000000000000606
EcoPlan Project No.: 13-452 Amendment 1 Revised 6-11-15

This Transportation Enhancement project is located along the Rillito River Park at Camino de la Tierra in Pima County, Arizona. The project will be developed through Pima County and the Arizona Department of Transportation (ADOT) Statewide Project Management – Transportation Enhancement and Scenic Roads Section. The project length is approximately 0.2 mile and includes a new bicycle/pedestrian bridge over Camino de la Tierra with adjustments to the riverpath as needed to match the bridge alignment. This project will require coordination with the community and Pima County Natural Resources Parks and Recreation Department. The project is funded through the Federal Highway Administration (FHWA) Transportation Enhancement program, administered by ADOT.

This scope of work and cost estimate has been developed to address updates/revisions to previously prepared documents due to passage of time, changes in ADOT process and extension of the project schedule. A brief description of the work to be included in each task follows.

Task 1 – Project Management/Coordination/Meetings

This task includes the overall management of the project, internal assignment of tasks, quality control, scheduling, coordination with the project team (including ADOT Transportation Enhancement and Scenic Roads Section, and ADOT Environmental Planning Group [EPG]), and participation in project-related meetings.

EcoPlan anticipates there will be a total of four project progress/status meetings through September 2016. It is assumed that one representative from EcoPlan will attend each meeting.

Task 1 Deliverables: None anticipated.

Task 2 – Public and Agency Coordination

EcoPlan will prepare a draft coordination letter for FHWA covering Section 4(f). In 2014 the project was determined to be exempt from Section 4(f) as the resulting improvement would be an enhancement to the river park. Subsequent guidance from FHWA indicates the agency now prefers to consider this type of project as “temporary occupancy” rather than exempt. EcoPlan will coordinate with Pima County, ADOT, and FHWA to determine if the exempt or temporary occupancy is preferred.

Coordination with ADOT EPG indicates the previous Sole Source Aquifer Scoping Letter and general Public/Agency scoping completed in 2014 does not need to be re-done.



EcoPlan Associates, Inc.

Environmental Science & Resource Economics

EcoPlan anticipates that one public house open meeting will be held. One EcoPlan representative will attend the meeting to make project presentations.

Task 2 Deliverables: Internal draft Section 4(f) letter with figures for Pima County and ADOT review.

Task 3 – National Environmental Policy Act Compliance

EcoPlan will prepare a Group II Non-Programmatic Categorical Exclusion (CE) Checklist, including project location and project vicinity maps. EcoPlan will submit an internal draft to Kimley-Horn and Pima County for review. Once requested modifications are made, EcoPlan will deliver a draft to ADOT Transportation Enhancement and Scenic Roads Section and ADOT EPG for review. Recent guidance from ADOT EPG indicates a new CE Checklist template is due out this summer for Certified Acceptance Local Agency projects. EcoPlan will utilize the new CE Checklist template while preparing the CE checklist.

Once comments are received from ADOT, EcoPlan will consult with Kimley-Horn and Pima County and proceed with the modification of the CE Checklist. The revised CE Checklist will be delivered to Kimley-Horn and Pima County for review. Upon acceptance, EcoPlan will deliver the Final CE Checklist to ADOT Transportation Enhancement and Scenic Roads Section and ADOT EPG.

Task 3 Deliverables: Internal Draft CE Checklist with maps; Draft CE Checklist with maps; and Final CE Checklist with maps. Up to five (5) hard copies and an electronic version (Word and pdf) of the CE Checklist and maps will be provided for each review.

Task 4 – Biological Resources

EcoPlan will prepare a Biological Evaluation (BE). Based on current guidance ADOT prefers a BE versus a Biological Review or Urban Project Biological Evaluation. Since the original biological document was prepared for this project in 2014, several protected species status changes have occurred and a new United States Fish and Wildlife Service Information, Planning and Conservation System tool has been developed. Thus, a new BE will be prepared to address the potential for the project to affect federally listed threatened and endangered species, and migratory birds. It is assumed that no protocol surveys for special status, threatened, or endangered species will be required. EcoPlan will submit an internal draft of the BE to Kimley-Horn and Pima County for review. Once requested modifications are made, EcoPlan will deliver a draft to ADOT EPG for review and approval. The CE Checklist will document the results of the BE.

Task 4 Deliverables: Internal Draft and Final BE with maps. Up to five (5) hard copies and an electronic version (Word and pdf) of the BE will be provided for each review.



EcoPlan Associates, Inc.
Environmental Science & Resource Economics

ASSUMPTIONS

Rillito Riverpath and Camino de la Tierra Bicycle and Pedestrian Enhancement Project

Pima County Project No.: 4RRVPA

Pima County Contract No.: CT-PW-1300000000000000606

EcoPlan Project No.: 13-452 Amendment 1 Revised 6-11-15

Assumptions used to generate this scope of work and cost estimate are summarized below. Should additional services be required that are not described in this scope of work, EcoPlan will provide a supplemental scope and cost.

- The project will not substantively deviate from the approved Project Assessment.
- Kimley-Horn will provide 30% design engineering plans.
- No protocol surveys for special status, threatened, or endangered species will be required.
- A new or updated Preliminary Initial Site Assessment will be provided by others.
- Asbestos testing will not be required.
- The project will not result in a direct take or constructive use of a U.S. Department of Transportation Act Section 4(f) property.
- An Environmental Justice/Title VI analysis will not be required.
- Quantitative air and noise analyses will not be required.
- Cultural consultation was completed for the project in 2013. No additional cultural consultation is needed.

Firm: EcoPlan Associates, Inc.
78 W. Cushing Street
Tucson, Arizona 85701
Phone: (520) 624-4326
FAX: (480) 383-6915

Rillito Riverpath & Camino de la
Tierra Bicycle and Pedestrian
Enhancement
Project Name:
EcoPlan No.: 13-452 Amendment 1 Revised 6-11-15
PCDOT Project No.: 4RRVPA
PCDOT Contract No. CT-PW-1300000000000000606

DERIVATION OF COST PROPOSAL - SUMMARY
Estimated Direct Labor

Classification	Estimated Person-Hours	Average Hourly Rate	Labor Costs
Environmental Coordinator/Program Manager	31	\$ 55.75	\$ 1,728.25
Environmental Planner/Scientist - Senior	12	\$ 40.83	\$ 487.56
Environmental Planner/Scientist	18	\$ 28.00	\$ 488.00
Biologist - Senior	3	\$ 38.00	\$ 114.00
Biologist	12	\$ 28.50	\$ 342.00
Associate Biologist	0	\$ 22.00	\$ -
Cultural Principal Investigator	0	\$ 53.50	\$ -
Architectural Historian	0	\$ 34.00	\$ -
Archaeologist - Senior	0	\$ 33.30	\$ -
Archaeologist	0	\$ 24.25	\$ -
Associate Archaeologist	0	\$ 15.00	\$ -
GIS Analyst/Technician - Senior	4	\$ 28.50	\$ 118.00
GIS Analyst/Technician	0	\$ 21.00	\$ -
Technician (Editor)	0	\$ 21.50	\$ -
Administrative	4	\$ 17.20	\$ 68.80
Total	64		\$ 3,326.61

Overhead Rate (Negotiated @)	118.37%	Total Estimated Labor of Total Estimated Labor	\$ 3,326.61 EC-10
			\$ 3,937.71 EC-20
		Subtotal	\$ 7,264.32

Estimated Direct Expenses
(Listed by Item at Estimated Actual Cost -- No Mark-up)

Transportation	\$ 9.35	
Reproduction	\$ 93.00	
Total Estimated Expenses	\$ 102.35	EC-30
Total Estimated Cost to Consultant	\$ 7,366.66	
Net Fee [Direct Labor + Overhead] x Multiplier	10% \$ 726.43	EC-50
TOTAL ESTIMATED COST	\$ 8,093.10	


Signature

7/30/2014, Revised 6/11/2015
Date

Staff Hours

Rillito Riverpath & Camino de la Tierra Bicycle and Pedestrian Enhancement 4RRVPA

CT-PW-13000000000000000606

13-452 Amendment 1 Revised 6-11-15

Description	Environmental Coordinator/Program Manager	Environmental Planner/Scientist - Senior	Environmental Planner/Scientist	Biologist - Senior	Biologist	GIS Analyst/Technician - Senior	Administrative	Total
Task Management								
Task 1. Project Management/Coordination/Meetings	24	0	0	0	0	0	2	26
Task 2. Public and Agency Coordination	2	0	6	0	0	1	0	9
Task 3. National Environmental Policy Act Compliance	4	6	12	0	0	2	2	26
Task 4. Biological Resources	1	6	0	3	12	1	0	23
Total	31	12	18	3	12	4	4	84

ESTIMATE OF DIRECT EXPENSES

EcoPlan Associates, Inc.
Rillito Riverpath & Camino de la Tierra Bicycle and Pedestrian Enhancement
4RRVPA
CT-PW-13000000000000000606

	UNIT	UNIT COST	QTY.	TOTAL COST
<u>Transportation</u>				
Personally Owned Vehicle Mileage	mile	\$ 0.445	21	\$9.35
1 RT (EcoPlan Tucson Office to Open House Meeting = 10.5 miles) = 21 miles				
Total Transportation				\$9.35
<u>Reproduction</u>				
Reproduction (Black and White)		\$ 0.10	580	\$58.00
Reproduction (Color)		\$ 0.50	70	\$35.00
Total Reproduction				\$93.00
TOTAL DIRECT EXPENSES				<u>\$102.35</u>



November 14, 2013
File Number: 130002

Kimley-Horn and Associates, Inc.
333 East Wetmore Road, Suite 280
Tucson, AZ 85705
Ph: 520-615-9191
Dir: 520-352-8629
Cell: 520-247-7691
rick.solis@kimley-horn.com

Attention: Mr. Rick Solis, P.E.

Re: Proposal for Geotechnical Subsurface Exploration
Rillito Riverpath and Bicycle and Pedestrian Enhancements Mainline Bridge
Project
Tucson, Arizona

ATEK Engineering Consultants, LLC (ATEK) is pleased to present this proposal to perform a geotechnical subsurface exploration at the above referenced site. This proposal is based on a scope of work and a request for proposal provided from Kimley-Horn and Associates, Inc via email on January 2, 2013 (SFQ 68051 - Camino de la Tierra Pedestrian Bridge) which included a Solicitation for Qualifications titled, Rillito Riverpath and Camino De La Tierra Bicycle & Pedestrian Enhancement Project, 15% bridge plan and profile and project email titles, Re: Camino de la Tierra - Boring Plan, dated November 13, 2013.

ATEK is committed to providing a high level of service to its clients, commensurate with their wants and needs. If a portion of this proposal does not meet your needs, or if those needs have changed, ATEK will consider appropriate modifications, subject to the standards of care to which we adhere as professionals. We look forward to the opportunity to serve you.

PROJECT UNDERSTANDING

The proposed project consists of enhancements to the existing Rillito Riverpath and Camino de la Tierra Bicycle & Pedestrian areas in Tucson, Arizona. The enhancements will include earthwork operations, installation of four 24-inch diameter drainage pipe, construction of masonry retaining walls, asphaltic concrete pavement and supplement structures. The proposed scope of work is based on a review of 15% project plans. A Geotechnical investigation is required to develop information relative to subsurface soil characteristics.

SCOPE OF SERVICES

ATEK will perform geotechnical field investigations, engineering analyses and design as required for design purposes to prepare the Initial and Final Foundation Investigation Reports. Geotechnical investigations will be performed in substantial accordance with the requirements of the ADOT Materials Section, Preliminary Engineering and Design Manual, and the accompanying Guidelines for Geotechnical Investigation and Geotechnical Report Preparation.

Task 1 - Review of Existing Data

Available existing geotechnical and geologic information related to the project area, including previous geotechnical investigation reports, will be reviewed and interpreted to identify known and expected geotechnical and geologic conditions.

111 SOUTH WEBER DRIVE, SUITE 1
CHANDLER, AZ 85226

WWW.ATEKEC.COM

P (602) 999-0329
P (480) 656-9658

Task 2 - Field Investigation Program Setup

An initial site reconnaissance will be made to establish local conditions, rights-of-entry, and access and traffic control restrictions. A subsequent detailed site reconnaissance, with the objective of verifying and refining geotechnical characteristics of exposed geologic deposits, structural features and hazards, will be performed concurrent with the geotechnical field investigation.

ATEK will prepare and submit a proposed exploration and access plan to the appropriate governmental agencies for their review and approval prior to beginning the field investigation. Said plan also will be issued for purposes of obtaining environmental and/or cultural clearances if required for field work.

Proposed boring locations will be staked in the field by ATEK personnel utilizing available design plans and surface features. Horizontal coordinate locations for each location will be catalogued using a handheld Global Position System (GPS) unit. Utility clearances will be coordinated through Arizona Blue Stake services and others, as required.

Prior to commencement of the approved field exploration program, ATEK will coordinate with the prime consultant in obtaining a permit if required. If required, a traffic control plans will be prepared in accordance with the current Manual of Uniform Traffic Control Devices (MUTCD) and submitted to accompany the permit applications (not included in our current fee).

Task 3 - Field Investigation Program

An ATEK staff engineer or geologist will direct the field investigation, including the reconnaissance and soil borings. During the course of the field investigation, detailed observations and documentation of the soil sampling and site conditions will be made.

Soil Boring

Test borings will be advanced along the selected alignment to collect subsurface soil information pertaining to geotechnical design. At the locations of the proposed pedestrian bridge abutments, selected ramps and retaining wall locations. For the purpose of this project the soil test borings have been separated into two mobilizations as follows:

There will be a total of 13 test borings advanced for this project. Two borings will be advanced to a depth of twenty feet and will be drilled along the alignment at the proposed retaining wall locations. Two borings will be advanced to a depth of forty feet at the abutment locations. Four borings will be advanced to a depth of fifty feet at pier locations 1a, 1b, 2a and 2b. Four borings will be advanced to a depth of seventy feet at pier locations 3, 4, 5 and 6. One soil boring will be advanced to a depth of five feet and will be drilled along the west access roadway location.

Within each of the borings, standard penetration testing or open-end drive sampling will be performed at 5-foot intervals of depth or less. Representative samples of drill cuttings will be obtained from the near-surface portions of all borings.

ATEK will direct all aspects of the geotechnical investigation. During drilling operations, the ATEK field engineer or geologist will continuously observe drilling activities, prepare boring logs in accordance with ASTM standards, and package/label soil samples. Recovery of soil samples for laboratory testing will be performed in accordance with ASTM/AASHTO/ADOT guidelines. Laboratory tests will be performed to evaluate soil properties for pavement design, earthwork and slope design, excavation conditions and corrosion potential.

Laboratory Testing

Laboratory testing of selected soil samples recovered from the borings will be performed as considered necessary for engineering analysis and design. The laboratory testing program is presented in Table 1, and will include the following tests, including a brief discussion of the relevance of each test:

- Moisture content, sieve analysis and plasticity index (Atterberg limits) - soil classification and moisture condition.
- Density of ring samples - determination of in-place density and moisture content at depth, used in foundation capacity analysis, compressibility and earthwork computations.
- Moisture-density relationship (Proctor) - determination of density targets for construction of compacted fills and used to estimate earthwork factors when compared to in situ densities.
- pH and Resistivity - determination of appropriate drainage pipe/coating type.
- Total soluble sulfates and chlorides - assessment of potential for corrosive effect of the existing soils on concrete; determination of type of cement to be used.

Table 1 - Laboratory Testing Summary

Lab Test	Method	Estimated Number of Tests
Grain Size Analysis (total - coarse and fine)	D6913	10
Atterberg Limits	D4318	10
Moisture Content	D2216	10
Density of Undisturbed Ring Sample	D2937	8
Expansion (swell, constant surcharge)	D4546	2
Consolidation	D2435	4
Direct Shear	D3080	4
Moisture-Density Relationship (Standard Proctor)	D698 (A or B)	4
pH & Resistivity	AZ 236 (Suite)	8
Total Soluble Sulfates and Chlorides	AZ 733 and 736	8

Task 4 - Engineering Analysis and Report

Engineering analysis of the data collected during the field investigations and from laboratory tests will be made. A Foundation Investigation Report will be prepared for the proposed bridge structures.

Items presented in the report will include, at a minimum, the following:

- A description of the geologic setting present within and adjacent to the project limits.
- Test boring logs, site plans showing sample locations, and a description of the procedures and equipment used in the subsurface investigation program.
- Subsurface conditions, including fill material depth.
- Results of laboratory tests including summaries of the test data.
- Descriptions of the site conditions, geotechnical profile and groundwater conditions encountered at the site.
- Discussion of the foundation system or alternative systems recommended for project elements.
- Recommended foundation bearing pressures or capacities, foundation depths and geometries, and foundation design charts.
- Estimated foundation settlements.
- Criteria for the resistance of lateral loads and lateral earth pressure recommendations for retaining walls and foundations.
- Settlement analysis of embankment fills.
- Groundwater and soil moisture conditions and potential corrosion conditions which may require consideration in design of concrete and metal structures and elements.

Task 5- Quality Assurance Review

Quality assurance review of the field investigation, including results of the engineering analysis, recommendations, and report, will be completed by an ATEK Senior Geotechnical Engineer not directly involved with the completion of the analyses and/or preparation of the recommendations.

COST AND SCHEDULE

ATEK proposes to perform the geotechnical investigation as summarized above on a lump sum basis. A tabulated Cost Summary for phase is attached. This fee also assumes that one (1) color PDF report will be provided. Extra 'hard copy' reports will be provided if requested prior to the initial report printing.

Work will be scheduled upon receipt of your authorization to proceed. It is our understanding that the Client will provide access to the property. Once the Client has provided ATEK with access to the site, we estimate the geotechnical report will be complete within fifteen (15) working days following receipt of your authorization to proceed. If necessary ATEK can adjust the geotechnical exploration schedule to accommodate project requirements.

ASSUMPTIONS

Our proposed Scope of Work and cost estimate are based on the following assumptions:

- The project owner will provide right-of-entry and unrestricted access to all locations for borings.
- No traffic control will be required for this project.
- Locations of the borings will be checked by "Blue Stake". The client will provide any other possible utility or underground facility locations. Damage to unknown buried facilities, not detected through "Blue Stake" or review of available utility maps provided to us, will not be the responsibility of ATEK.
- The Scope of Work included within our fee estimate does not include any services in connection with the discovery of potential contamination during our drilling and

- sampling operations. In the event that such material is suspected, we will notify you immediately for direction before proceeding on any out-of-scope services.
- All borings will be backfilled with the excavated materials and asphalt pavement will be patched with cold-patch asphalt.
 - This proposal assumes that the site is accessible with a truck-mounted drill rig, under its own power, without the need for towing or pushing.
 - This proposal includes drilling to a maximum depth of 70 feet below existing site grade, if deeper borings are required we will need to revise our Scope of Work and fee estimate.
 - Any service or cost not specifically included in this proposal is not included in the Scope of Work and associated fee. Costs generated from any work requested by the client that is outside the above Scope of Work will be charged to the client.
 - The above estimate applies to work performed within 60 days. After that time, we should review the proposal.

All borings will be drilled to the proposed depths or auger refusal. Based on our experience within the project area, it is not anticipated that auger refusal may be encountered. The borings will be advanced with a truck-mounted drill rig (Diedrich D-50 or equivalent) using hollow and/or solid-stem augers. ATEK will maintain a log of the soils encountered and obtain samples for visual observation, classification and laboratory testing. The depth to groundwater will be measured, if encountered.

At the completion of the fieldwork, representative samples will be sealed in plastic bags or brass and plastic containers and transported to our laboratory. The samples will then be classified in general accordance with the Unified Soil Classification System (USCS) and reviewed by an experienced geotechnical engineer. Field boring logs will be prepared presenting a description of the soils encountered by the borings. Laboratory testing completed for this project will include natural moisture content, sieve analysis, Atterberg limits, one dimensional consolidation tests, sulfate content, chloride content, pH and resistivity. All tests will be performed in general accordance with applicable ASTM procedures.

AUTHORIZATION

The work will be conducted in accordance with the attached General Conditions. Your signature on this proposal indicates your acceptance of these Conditions and authorization for ATEK to proceed with the Scope of Work outlined herein. If this proposal is acceptable, we can begin work as soon as we receive an ORIGINAL signature in the "acceptance" field.

If there is a need for any change in the scope of services or schedule described in the proposal, please call us immediately. Changes may require revision of the proposed fee, which will be communicated to you upon assessment of the requested changes effect on the fee.

LIMITATIONS

ATEK will perform its services in a manner consistent with the standards of care and skill ordinarily exercised by members of the profession practicing under similar conditions in the geographic vicinity and at the time the services will be performed. No warranty or guarantee, express or implied, is provided as part of the services offered by this proposal. This proposal neither makes nor intends a warrantee or guarantee, express or implied, nor does it create a fiduciary responsibility to Client by Consultant.

TERMS AND CONDITIONS

All terms and conditions indicated in this proposal and in the attached General Conditions will be considered by both parties to be in effect from the effective date of the signed proposal through completion of the project. The proposal will remain in effect for 90 days from its date, and thereafter shall be null and void unless it has been signed for the work proposed.

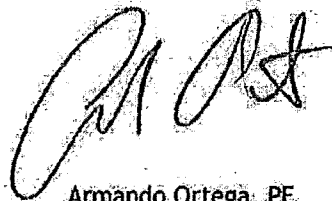
We sincerely appreciate the opportunity to be of service and look forward to working with you on this project.

Sincerely,

ATEK Engineering Consultants, LLC.



James P. Floyd, PE
Project Manager



Armando Ortega, PE
Principal Geotechnical Engineer

Enclosure: General Conditions 2013

Client agrees to the Scope of Work described in this Proposal and Cost Estimate and the General Conditions attached and incorporated herein.

By: _____
Kimley-Horn and Associates, Inc.

Title: _____

Date: _____



**FEE PROPOSAL
SUBCONSULTANT
COST PROPOSAL SUMMARY**

SUBCONSULTANT: ATEK Engineering Consultants, LLC.

CONTRACT NO.: TBA

PROJECT NAME: Rillito Riverpath Bicycle and Pedestrian Enhancement Project

DIRECT LABOR for TASK			
Classifications	Man-hours	Hourly Rates	Labor
Senior Project Engineer/Manager	10	\$ 115.00	\$ 1,150.00
Project Engineer	20	\$ 95.00	\$ 1,900.00
Staff Engineer	60	\$ 85.00	\$ 5,100.00
Administrative	5	\$ 41.00	\$ 205.00
TOTAL	95		

Sub consultant's Total Direct Labor for Task(s) \$ 8,355.00

DIRECT AND OUTSIDE EXPENSES for TASK(S)			
DESCRIPTION			EXPENSE AMOUNT
Mileage	600	\$ 0.45	\$ 267.00
Outside Services - Track hoe		\$ 110.00	\$ -
Outside Services - Water Truck		\$ 70.00	\$ -
Outside Services - Traffic Control		\$ 110.00	\$ -
Outside Services - Per Diem		\$ 250.00	\$ -
Outside Services - Drill Rig	58	\$ 165.00	\$ 9,570.00
Nuclear Density Equipment		\$ 30.00	\$ -
Hydrometer Analysis, Assumed Specific Gravity		\$ 175.00	\$ -
Moisture Content	10	\$ 15.00	\$ 150.00
Full Sieve Analysis, Coarse and Fine, washed	10	\$ 65.00	\$ 650.00
Plasticity Index (dry)	10	\$ 58.00	\$ 580.00
Consolidation	4	\$ 185.00	\$ 740.00
Undisturbed Moisture/Unit Weight	8	\$ 21.00	\$ 168.00
Undisturbed Swell	2	\$ 111.00	\$ 222.00
pH and Resistivity of Soils and Aggregate	8	\$ 150.00	\$ 1,200.00
Direct Shear	4	\$ 189.00	\$ 756.00
Moisture-Density Relationship (Proctor)	4	\$ 108.00	\$ 432.00
Sulfates and Chlorides	8	\$ 36.00	\$ 288.00

Sub Consultant's Total of Direct and Outside Expenses \$ 15,023.00

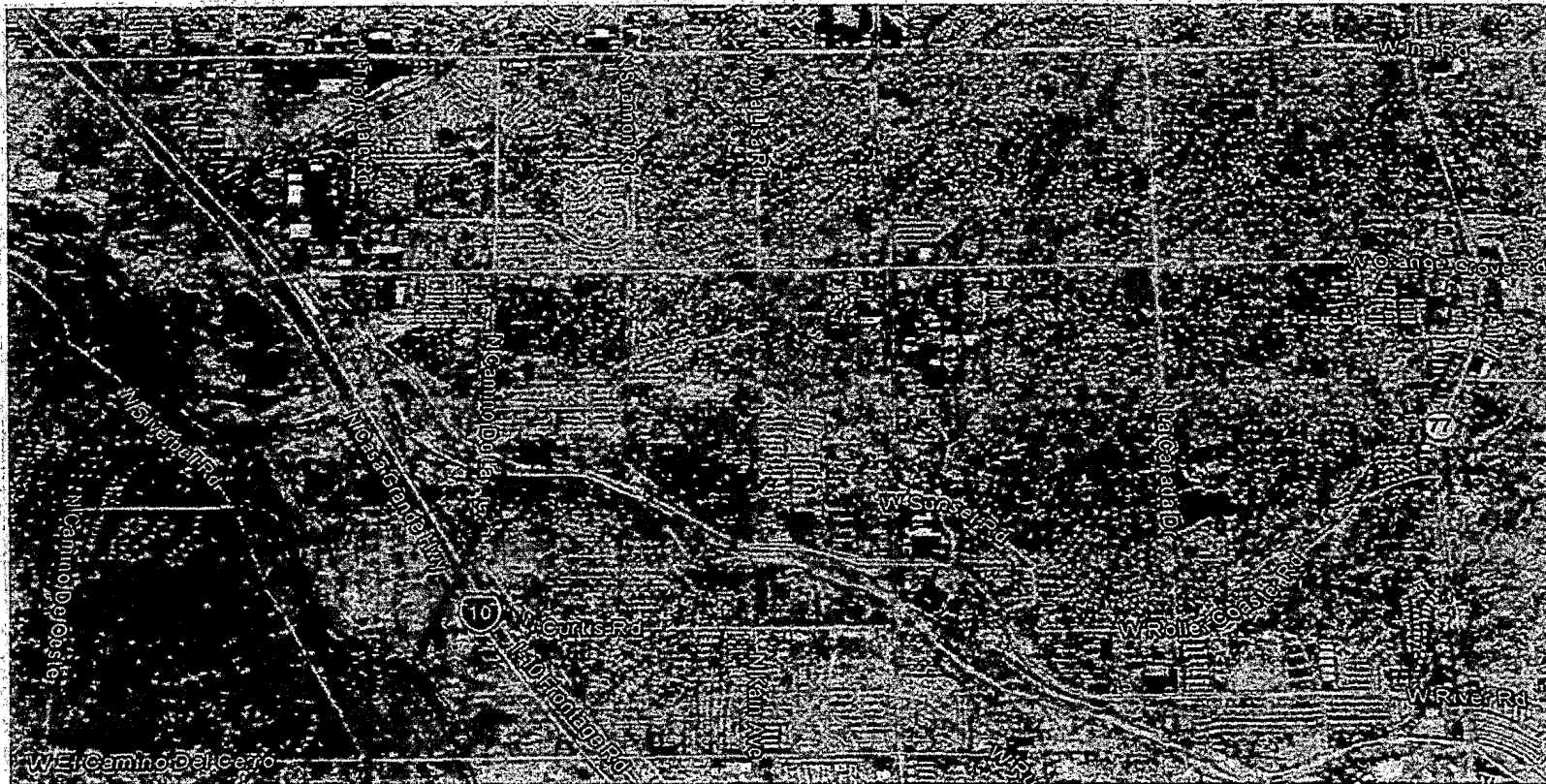
Sub Consultant's Total Labor \$ 8,355.00

Sub Consultant's PROPOSED FEE \$ 23,378.00

Existing Contract, Dated April 30, 2013 \$ 12,453.00

Initial Revised Scope of Work, Dated July 10, 2013 \$ 7,491.00

Change Order Request, Dated November 14, 2013 \$ 3,434.00



Project Site

Site Location Map

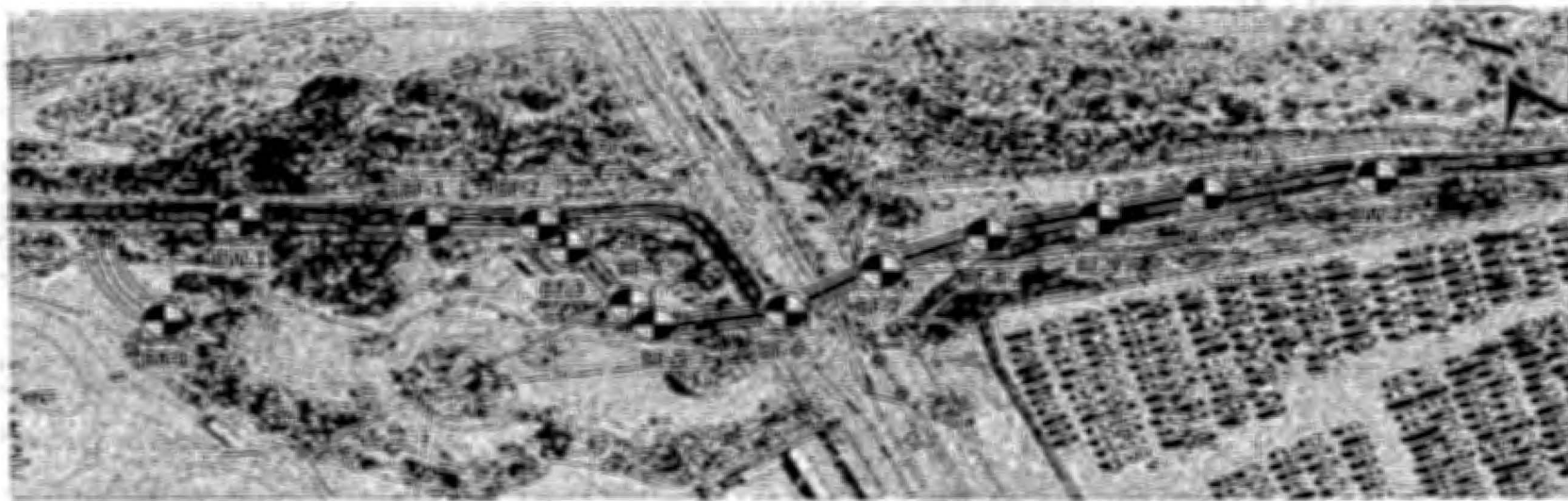


ATEK Engineering Consultants, LLC
111 South Weber Drive, Suite 1
Chandler, AZ 85226

Rillito Riverpath and Bicycle and Pedestrian
Enhancements Mainline Bridge Project

Sheet 1 of 1

Project Number:	130002
Date:	November 14, 2013
Drawn By:	J Floyd



Legend:



Soil Test Boring

Sample Location Plan



ATEK Engineering Consultants, LLC
111 South Weber Drive, Suite 1
Chandler, AZ 85226

Rillito Riverpath and Bicycle and Pedestrian
Enhancements Mainline Bridge Project

Sheet 1 of 1

Project Number: 130002

Date: November 14, 2013

Drawn By: J. Floyd

Sample Location Number	Method of Exploration	Depth (ft.)	Purpose
BR-1	Drill Rig	5	Pavement Recommendations
BW-1	Drill Rig	20	Retaining Wall Foundation Recommendations
BF-1	Drill Rig	40	Bridge Foundation Recommendations
BF-2	Drill Rig	50	Bridge Foundation Recommendations
BF-3	Drill Rig	50	Bridge Foundation Recommendations
BF-4	Drill Rig	50	Bridge Foundation Recommendations
BF-5	Drill Rig	50	Bridge Foundation Recommendations
BF-6	Drill Rig	70	Bridge Foundation Recommendations
BF-7	Drill Rig	70	Bridge Foundation Recommendations
BF-8	Drill Rig	70	Bridge Foundation Recommendations
BF-9	Drill Rig	70	Bridge Foundation Recommendations
BF-10	Drill Rig	40	Bridge Foundation Recommendations
BW-2	Drill Rig	20	Retaining Wall Foundation Recommendations

Sample Location Description



Rillito Riverpath and Bicycle and Pedestrian Enhancements Mainline Bridge Project

ATEK Engineering Consultants, LLC
111 South Weber Drive, Suite 1
Chandler, AZ 85226

Sheet 1 of 1

Project Number: 130002

Date: November 14, 2013

Drawn By: J Floyd