

**BOARD OF SUPERVISORS AGENDA ITEM SUMMARY**

Requested Board Meeting Date: June 18, 2013

**ITEM SUMMARY, JUSTIFICATION and/or SPECIAL CONSIDERATIONS:**

Amendment # 02, contract # CT-PW-13000000000000000376, Kimley-Horn & Associates, Inc., Design Engineering Services for Julian Wash, I-10/Drexel to Tucson Diversion Channel at Campbell Avenue. Additional engineering and construction management services are necessary to provide post design services for the east phase of the project, engineering services for neighborhood connections to the major arterials (Alvernon, Palo Verde, Irvington and Country Club), and design from Irvington Road to Palo Verde Road for the pathway location. Funding source: Transportation Operating Funds Administering Department: Public Works Administration

This amendment modifies the Contract to add services and increase funding to provide payment for these services.

Effective Date: June 18, 2013

Termination Date: October 18, 2013

Original Contract Amount: \$243,692.00

Previous Amendment(s): \$35,672.00

Previous Contract Amount: \$279,364.00

Amount this Amendment: \$144,703.00

Revised Contract Amount: \$424,067.00

Cont #	: CT-PW-13000000000000000376-2
Effective:	: 06/18/13
Term	: 10/18/13
Cost	: \$144,703.00
Rev	: 0
Tot	: \$144,703.00
NTE	: \$424,067.00
Timex	: N
Renewal	: 07-18-13
Term	: 10-18-13

Project Manager: Frank Castro

Contract Officer: Chris Barnhill, Ext. 43721  
Procurement Department

Vendor is using a Social Security Number: No

AMS # CT-PW-13000000000000000376

Please return to Harry Lewis.

To: CHH- 6-4-13 By  
Dept

CoB. 6-6-13  
Agenda 6-18-13

Addendum  
(1)

CLERK OF THE BOARD USE ONLY: BOS MTG.

Procure Dept 06/06/13 PM 1:28

**PIMA COUNTY PUBLIC WORKS ADMINISTRATION**

**PROJECT:** Design Engineering Services for Julian Wash,  
I-10/Drexel to Tucson Diversion Channel at  
Campbell Avenue

**CONSULTANT:** Kimley-Horn & Associates, Inc.  
333 East Wetmore Road, Suite 280  
Tucson, AZ 85705

**CONTRACT NO.:** CT-PW-13000000000000000376

**AMENDMENT NO.:** Two (02)

**FUNDING:** Transportation Operating Funds

**CONTRACT**

NO. *CT-PW-13000000000000000376*

AMENDMENT NO. *02*

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

<b>CONTRACT TERM:</b> 10/19/2012 to 10/18/2013	<b>ORIGINAL CONTRACT AMOUNT:</b>	\$	243,692.00
<b>TERMINATION PRIOR AMENDMENT:</b> N/A	<b>PRIOR AMENDMENT(S):</b>	\$	35,672.00
<b>TERMINATION THIS AMENDMENT:</b> 10/18/13	<b>AMOUNT THIS AMENDMENT:</b>	\$	144,703.00
	<b>REVISED CONTRACT AMOUNT:</b>	\$	424,067.00

**CONTRACT AMENDMENT**

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

**WHEREAS,** additional services are necessary which include post design services for the east phase of the project, engineering services for neighborhood connections at the major arterials, and design from Irvington Road to Palo Verde Road; and

**WHEREAS,** CONSULTANT has agreed to provide these services at a cost acceptable to COUNTY; and

**WHEREAS,** COUNTY and CONSULTANT have agreed to modify the Contract to add services and increase funding to provide payment for these additional services.

**NOW, THEREFORE,** it is agreed as follows:

**CHANGE** the first paragraph of ARTICLE II – SCOPE OF SERVICES as follows:

From: "CONSULTANT agrees to provide Civil Engineering Services for the COUNTY as described in **APPENDIX A: SCOPE OF WORK** (28 pages) and **ATTACHMENT A-1 TO APPENDIX A** (4 pages, an attachment to this contract."

To: "CONSULTANT agrees to provide Civil Engineering Services for the COUNTY as described in **APPENDIX A: SCOPE OF WORK** (28 pages), **ATTACHMENT A-1 TO APPENDIX A** (4 pages), and **ATTACHMENT A-2 TO APPENDIX A** (5 pages), attachments to this contract."

**ADD:** Attachment A-2 –Scope of Services.

**CHANGE** the first and second paragraphs of ARTICLE III – COMPENSATION AND PAYMENT as follows:

From: "In consideration of the services specified in this Contract, the COUNTY agrees to pay CONSULTANT Not To Exceed Two Hundred Seventy-Nine Thousand Three Hundred Sixty-Four Dollars (\$279,364.00). CONSULTANT'S fees shall be as stated in **APPENDIX B: CONSULTANT FEE SCHEDULE** (5 pages) and **ATTACHMENT B-1 TO APPENDIX B: COST PROPOSAL SUMMARY ADD SERVICES #2** (3 pages), an attachment to this Contract."

To: "In consideration of the services specified in this Contract, the COUNTY agrees to pay CONSULTANT Not To Exceed Four Hundred Twenty-Four Thousand Sixty-Seven Dollars (\$424,067.00). CONSULTANT'S fees shall be as stated in **APPENDIX B: CONSULTANT FEE SCHEDULE** (5 pages), **ATTACHMENT B-1 TO APPENDIX B: COST PROPOSAL SUMMARY ADD SERVICES #2** (3 pages) and **ATTACHMENT B-2 TO APPENDIX B: COST PROPOSAL SUMMARY - AMENDMENT NO. 2 - ADD SERVICES#3** (3 pages), attachments to this Contract."

**ADD:** Attachment B-2 to Fee Schedule.

This Amendment shall be effective on June 18, 2013.

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

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

APPROVED:

\_\_\_\_\_  
Chair, Board of Supervisors

\_\_\_\_\_  
Date

ATTEST:

\_\_\_\_\_  
Clerk of the Board

CONSULTANT:

  
\_\_\_\_\_  
Signature

BRENT C CROWTHER, Associate  
\_\_\_\_\_  
Name and Title (Please Print)

6/5/2013  
\_\_\_\_\_  
Date

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Deputy County Attorney  
**HAL GILBREATH**

\_\_\_\_\_  
Name (Please Print)

6.04.13  
\_\_\_\_\_  
Date

## ATTACHMENT A-2 TO APPENDIX A

### Julian Wash Linear Park – Amendment No. 2 - Add Services #3

#### Construction Phase Services:

Task 10: Consultant will attend a single pre-construction meeting.

Consultant will respond to reasonable and appropriate Contractor requests for information and issue necessary clarifications and interpretations of the Contract Documents to Client as appropriate to the orderly completion of Contractor's work. Any orders authorizing variations from the Contract Documents will be made by Client.

Consultant will prepare post-design services as requested.

Consultant shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing the Work. Consultant shall not have the authority or responsibility to stop the work of any Contractor.

This task shall be performed on a time and materials "not to exceed" basis limited to 250 labor hours as shown on attached hours breakdown. Consultant will not conduct labor or invoice for this task until the County has requested services under this task order and issued a notice to proceed.

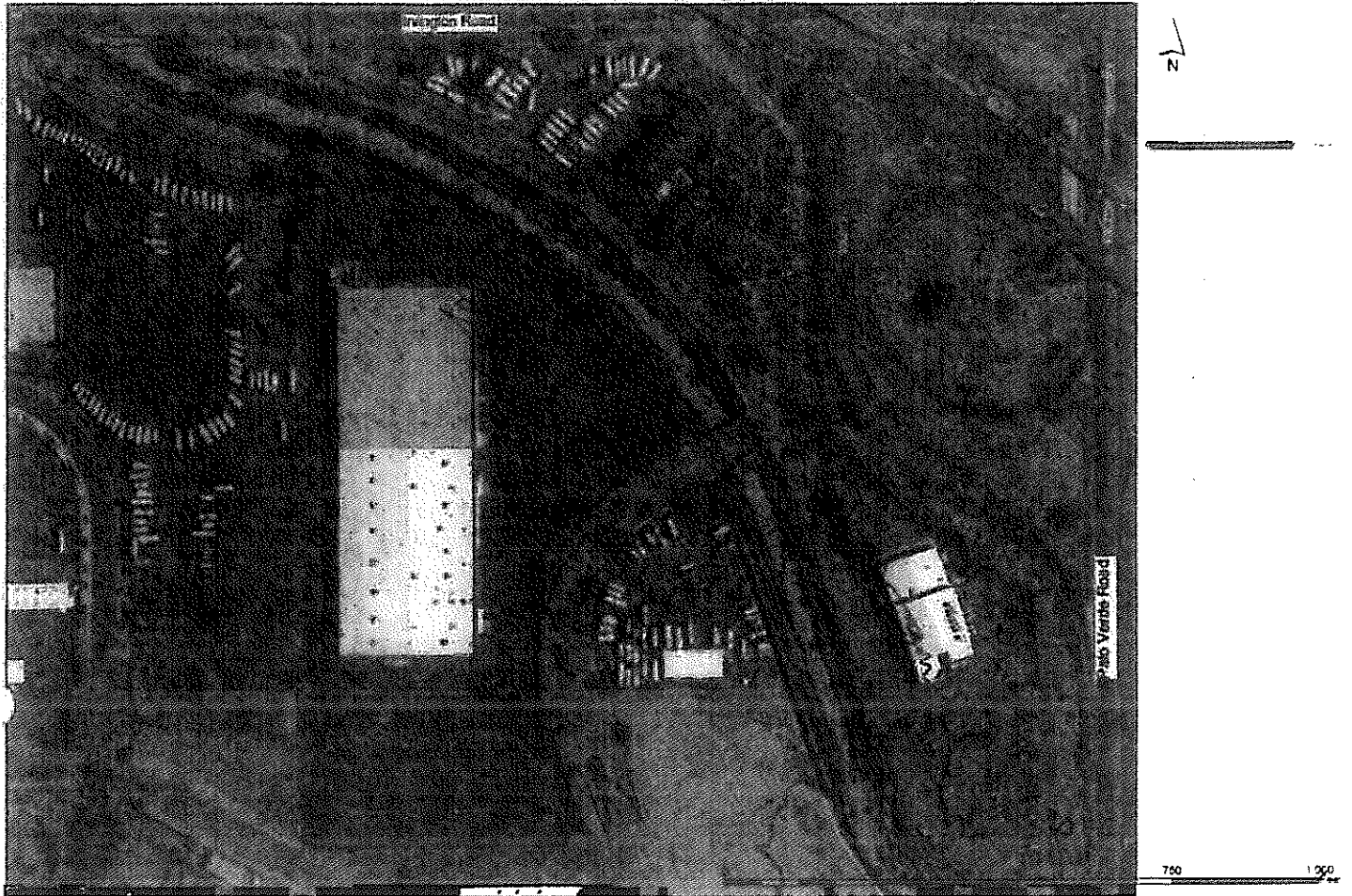
#### Civil:

Task 11: Underpass Ramp Plans (as described in original contract) will be modified to add plans for pathway connections to the arterial roadways at the underpass locations including: Alvernon Way, Palo Verde Road, Irvington road, and Country Club. Plans will provide design for northbound and southbound directions on each arterial (signing design is not included). Additionally, task includes pathway geometry layout for eastern end of pathway project from Catalina Ave to Drexel Rd along and within ADOT right-of-way.

Plans for this task will consist of (5) Plan Sheets at 20 Scale; (1) Plan Sheet at 40 Scale; or as determined by consultant.

Task 12: Prepare pathway geometry layout and design to provide an engineered pathway as follows: Irvington to Julian Drive (north bank); Julian Drive to Palo Verde Rd (west bank exclusive of benched area and west ramp at Palo Verde which is already included in original contract); See Exhibit below:

## Task 12: Geometric Design Limits



Plans will consist of (1) Cover Sheet/Index; (1) Notes/Detail Sheet; (1) Horiz Control Sheet; (3) Plan & Profile Sheets at 40 Scale;

**Lighting Design:**

Task 13: KHA will prepare pedestrian lighting plans for three (3) existing box culverts along Julian Wash. The three box culverts are under Irvington Rd, Palo Verde Rd, and Alvernon Way. It is understood that the system will be designed to operate on photovoltaic solar panels. KHA will coordinate with solar panel and lighting manufacturers to provide a complete system at each culvert and will coordinate with the County on the types of lighting fixtures. KHA will evaluate up to three (3) different lighting fixtures and perform photometric calculations of the proposed lighting to ensure light levels inside the culverts will be an average of 0.5fc. KHA will perform power distribution design for the lighting system that will include voltage drop calculations, conduit percent fill calculation, and fault-current analysis calculations per the requirements of the National Electrical Code. KHA will prepare lighting plans consisting of one (1) sheet consisting of general notes and a street lighting legend, (1) plan sheet showing light locations and conduit runs, one (1) Solar Panel System Detail and lighting fixture details sheet, one (1) Single Line Diagram and Lighting Control Schematic Detail sheet. KHA will conduct one over-the-shoulder review with the Client, address the Client's comments and submit the final sign and sealed plans. KHA will prepare a bid list of lighting items.

**ADOT Permit Assistance:**

Task 14: KHA will coordinate with ADOT and make required encroachment application for pathway construction at east end of project and provide required information to ADOT for a temporary construction access off of their on-ramp to access the north side of the Tucson Diversion Channel and bridge landing. This task shall be performed on a time and materials "not to exceed" basis, limited to 64 labor hours as shown on attached hours breakdown.

**Acquisition Assistance:**

Task 15: KHA staff will provide engineering/planning support on miscellaneous tasks that may arise during the acquisition/negotiation process of adjacent properties, including preparing exhibits, design changes, and meeting/exchanging information with stakeholders. This task shall be performed on a time and materials "not to exceed" basis, limited to 112 labor hours as shown on attached hours breakdown.

**Survey:**

Task 16: CPE will prepare five (5) additional legals and associated record of surveys for recording. CPE will establish the property line and collect existing topography, including tree locations, fencelines, surface utilities, drainage infrastructure, toe of I-10 embankment slope, and surface features for the area

shown on the Figure below:



Additionally, CPE will perform calculations and fieldwork to rectify the 2011 LiDAR topography and aerial photo to the field data.

**Geotechnical:**

Subconsultant will provide additional boring depth to satisfy depths required for the bridge foundation design that were not achieved with the hollow auger drill due to refusal. Detailed scope attached.

**Project Management:**

Consultant will provide Project Management and Administration of the contract amendment to include the following:

- Invoicing of Consultant labor and direct expenses
- Internal management of staffing resources
- Schedule and Budget Management
- Manage design project submittals.
- County and Subconsultant Coordination

**Meetings:**

Consultant will attend weekly meetings throughout project duration, additional 4 Pre-Bid walks, and three additional Over the shoulder review meetings for Phase IV, V, and VI plans.

**Assumptions:**

Pima County will acquire all title reports within the project limits

Pima County will provide the pavement design for pathway

The existing day lighting inside the box culvert at Country Club Drive is sufficient and no additional lighting will be required.

Only one make and model of fixture and pole will be used for the photometric analysis and design of roadway lighting.

KHA shall participate in two coordination meetings for lighting design and one over-the-shoulder review with the Client and perform one (1) site visit. Meetings and/or site visits beyond these would be additional services.

**Exclusions:**

Landscape, habitat mitigation, and irrigation plans

Structural engineering services

Lighting design/photometric calcs

Signing/stripping plans

Drainage Analysis/Design

Pavement Design of pathway

Recording fees

Title Reports and fees

Lighting design report documenting photometric analysis

Structural foundation design

Pedestrian lighting photometric calculations

Evaluate additional luminaire types

Construction observation and inspection services (specific to lighting)

Pedestrian connection design along Catalina Avenue

**CONSTRUCTION PHASE SERVICES; MEANS AND METHODS**

The Consultant shall have no responsibility for any contractor's means, methods, techniques, equipment choice and usage, sequence, schedule, safety programs, or safety practices, nor shall Consultant have any authority or responsibility to stop or direct the work of any contractor. The Consultant's visits will be for the purpose of endeavoring to provide the Client a greater degree of confidence that the completed work of its contractors will generally conform to the construction documents prepared by the Consultant.

Consultant neither guarantees the performance of contractors, nor assumes responsibility for any contractor's failure to perform its work in accordance with the contract documents. The Consultant is not responsible for any duties assigned to the design professional in the construction contract that are not expressly provided for in this Agreement. The Client agrees that each contract with any contractor shall state that the contractor shall be solely responsible for job site safety and for its means and methods; that the contractor shall indemnify the Client and the Consultant for all claims and liability arising out of job site accidents; and that the Client and the Consultant shall be made additional insureds under the contractor's general liability insurance policy.



**ATTACHMENT B-2 TO APPENDIX B:  
COST PROPOSAL SUMMARY – AMENDMENT NO. 2 – ADD SERVICES#3**

**Exhibit 1 - Cost Proposal Summary - Amendment NO. 2 - Add Services#3  
#098022037 - Julian Wash - Drexel/I-10 to Tucson Diversion Channel  
May 7, 2013**

(Costs Rounded to the Nearest \$1.00)

<b>ESTIMATED DIRECT LABOR</b>			
<u>Classification</u>	<u>Estimated Man-Hours</u>	<u>Hourly Rate</u>	<u>Labor Costs</u>
Project Principal		\$244.83	\$ -
Project Manager	0	\$212.18	\$ -
Senior Professional	258	\$163.22	\$ 42,111
Professional	261	\$146.89	\$ 38,338
Junior Professional	396	\$97.93	\$ 38,780
Technical Support	0	\$89.77	\$ -
Support Staff	32	\$75.08	\$ 2,403
<b>Total Man-Hours</b>	<b>947</b>	<b>Total Labor Costs</b>	<b>\$ 121,632</b>

<b>ESTIMATED DIRECT EXPENSES (See Exhibit 3)</b>	
<u>Item</u>	<u>Cost</u>
Mileage	\$ 0
Reproductions	\$ 560
<b>Total Direct Expenses</b>	<b>\$ 560</b>

<b>ESTIMATED OUTSIDE SERVICES AND CONSULTANTS</b>	
Survey Services (CPE)	\$ 15,101
Geotech Services (Atek)	\$ 7,410
	\$ 22,511
<b>Total Estimated Outside Services</b>	<b>\$ 22,511</b>

Direct Labor	\$ 121,632
Total Direct Expenses	\$ 560
Total Estimated Outside Services	\$ 22,511
<b>TOTAL ESTIMATED COST</b>	<b>\$ 144,703</b>

**Exhibit 2 - Derivation of Person-Hours**  
**#098022037 - Julian Wash - Drexell-10 to Tucson Diversion Channel**  
**May 7, 2013**  
**CLASSIFICATION**

Task	Description	Project Principal	Project Manager	Senior Professional	Professional	Junior Professional	Technical Support	Support Staff	Total
	<b>Julian Wash - Drexell-10 to Tucson Diversion Channel</b>								
10	Construction Phase Services			24	180	40		6	250
11	Pedestrian Pathway Connections Plans			12	35	30		4	141
12	Pathway Geometry Design Plans			24	8	80		8	118
13	Lighting Design								
	Project Coordination Meetings/Site Visits (2 meetings & 1 site visit assumed)			2	6				8
	Coordination with County				2				2
	Solar Panel System Coordination				6	4			10
	Perform Lighting Photometric Calculations				1	12			13
	Perform Voltage Drop & Conduit fill calculations				1	2			3
	Lighting General Notes (1 Sheet)					2			2
	Lighting Plan Sheet (1 Sheet)				4	8			12
	Conduit/Conductor Schedule & Load Center Table (1 Sheet)				2	2			4
	Solar Panel System & Light Fixture Installation Detail (1 Sheet)				3	9			18
	Single Line Diagram Detail & Lighting Control Schematic Detail (1 Sheet)				2	4			6
	QC Plans Review				2	2			4
	Lighting Bid Item List				1	2			3
	Over-the-Shoulder Review					2			2
	Review Plans per County Comments & Sign/Sat Final Plans				2	5			7
14	ADOT Permit Assistance			24		40			64
15	Acquisition Assistance			32		80			112
16	Survey Services								(sub)
	Project Management			80				16	96
	Meetings			80					80
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>268</b>	<b>261</b>	<b>396</b>	<b>0</b>	<b>32</b>	<b>947</b>
									\$ 34,725.16
									\$ 16,213.81
									\$ 13,377.28
									\$ 1,207.78
									\$ 293.78
									\$ 1,273.06
									\$ 1,322.05
									\$ 342.75
									\$ 195.86
									\$ 1,371.00
									\$ 489.64
									\$ 2,203.38
									\$ 685.50
									\$ 283.78
									\$ 342.75
									\$ 195.86
									\$ 783.43
									\$ 7,834.48
									\$ 13,057.44
									\$ 14,258.88
									\$ 11,164.22
									\$ 121,631.88

**Exhibit 3 - Estimated Direct Expenses**  
**#098022037 - Julian Wash - Drexel/I-10 to Tucson Diversion Channel**  
**May 7, 2013**

(Costs Rounded to the Nearest \$1.00)

<b>MILEAGE</b>			
<u>Location</u>	<u>No. of Trips</u>	<u>Miles</u>	<u>Total Miles</u>
(2) Meetings	0	0	0
(1) Site Visit	0	0	0
Total Estimated Miles			0
Total Cost at \$ 0.58 per mile			\$ 0
<b>REPRODUCTIONS</b>			
<u>Type</u>	<u>Amount</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Plotting and sheet preparation	150	\$ 2.00	\$ 300
Photocopy (8 1/2" x 11")	100	\$ 0.05	\$ 5
Photocopy (11" x 17")	300	\$ 0.15	\$ 45
Displays (24" x 36")	0	\$ 80.00	\$ 0
Mylars	15	\$ 14.00	\$ 210
Total Estimated Reproductions			\$ 560
<b>TOTAL ESTIMATED DIRECT EXPENSES</b>			<b>\$ 560</b>