

BOARD OF SUPERVISORS AGENDA ITEM SUMMARY

Requested Board Meeting Date: December 3, 2013

ITEM SUMMARY, JUSTIFICATION and/or SPECIAL CONSIDERATIONS:

Amendment # 02 contract # CT-WW-13000000000000000193, Brown and Caldwell, for the North Rillito Interceptor Relief Sewer Design project. Funding source: RWRD Obligations
Administering Department: Regional Wastewater Reclamation Department.

This amendment increases the contract amount by \$52,599.00 for additional design services required for design of a reclaimed water line to the planned odor control facility and design costs for the relocation of a drainage culvert at the Columbus Blvd. cul-de-sac.

Effective Date: December 3, 2013

Termination Date: December 31, 2014

Original Contract Amount: \$450,000.00

Previous Amendment(s): \$74,237.00

Previous Contract Amount: \$524,237.00

This Amount this Amendment: \$52,599.00

Revised Contract Amount: \$576,836.00

Cont #	: CT-WW-130000-02
Effective	: 12-03-2013
Term	: 12-31-2014
Cost	: \$ 52,599.00
Rev	: \$
Tot	: \$ 52,599.00
NTE	: \$ 576,836.00
Timex	: 120
Renewal	: 09-01-2014
Term	: 12-31-2014

Project Manager: Glen Peterson

Contract Officer: Jerome Rizzo, 724-3245
Procurement Department

Vendor is using a Social Security Number: No

AMS # CT-WW-13000000000000000193 Ver.4

Please return to Harry Lewis.

CLERK OF THE BOARD USE ONLY: BOS MTG. _____

ITEM No. _____

Procurement Dept 11/18/13 PM 10:14

To: CoB- 11-20-13
Agenda- 12.3-13
(1)
3

**PIMA COUNTY REGIONAL WASTEWATER RECLAMATION
DEPARTMENT**

PROJECT: NORTH RILLITO INTERCEPTOR RELIEF
SEWER DESIGN

CONSULTANT: Brown and Caldwell

CONTRACT NO.: CT-WW-13000000000000000193

AMENDMENT NO.: Two (02)

FUNDING: RWRD Obligations

CONTRACT

NO. CT-WW-13000000000000000193

AMENDMENT NO. 02

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

CONTRACT TERM: 08/20/12 - 12/31/14	ORIGINAL CONTRACT AMOUNT:	\$	450,000.00
TERMINATION PRIOR AMENDMENT: N/A	PRIOR AMENDMENT(S):	\$	74,237.00
TERMINATION THIS AMENDMENT: 12/31/14	AMOUNT THIS AMENDMENT:	\$	52,599.00
	REVISED CONTRACT AMOUNT:	\$	576,836.00

CONTRACT AMENDMENT

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

WHEREAS, due to changed conditions as the design was progressing, additional design effort is now required; and

WHEREAS, COUNTY requires additional design effort as detailed on ATTACHMENT 2 to EXHIBIT A; and

WHEREAS: CONSULTANT is qualified to provide this additional design effort and has proposed pricing acceptable to COUNTY.

NOW, THEREFORE, it is agreed as follows:

CHANGE: Captioned Amount from NTE \$524,237.00 to NTE \$576,836.00

CHANGE: ARTICLE IV – COMPENSATION AND PAYMENT, fourth paragraph to read:

"The total of all payment to consultant for services provided under this Contract shall not exceed Five Hundred Seventy Six Thousand Eight Hundred Thirty Six Dollars (\$576,836.00)."

ADD: to EXHIBIT A – SCOPE OF PROFESSIONAL ENGINEERING SERVICES, ATTACHMENT 2 TO EXHIBIT A dated October 11, 2013 (5 pages)

ADD: to EXHIBIT B, ATTACHMENT 2 TO EXHIBIT B Tasks 21 - 22 (4 pages)

This Amendment shall be effective on December 3, 2013.

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

THE REMAINDER OF THIS PAGE BLANK

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

APPROVED:

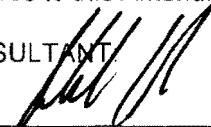
Chair, Board of Supervisors

Date

ATTEST:

Clerk of the Board

CONSULTANT:



Signature

Ronald L. Ablin, Vice President

Name and Title (Please Print)

11/13/13

Date

APPROVED AS TO FORM:



Deputy County Attorney

CHARLES WESSELHOFT

Name (Please Print)

11-7-13

Date

Date

333 E. Wetmore Rd., Suite 165
Tucson, AZ 85705
Tel: 520-624-5744
www.browncaldwell.com

October 11, 2013



Mr. Glen Peterson, P.E., Project Manager
Pima County Regional Wastewater Reclamation Department
201 North Stone Avenue, 3rd Floor
Tucson, Arizona 85701

29-143332.160

**Subject: Request for Contract Amendment on the NRI Relief Sewer Project
for Drainage Mitigation Design
Contract No. CT WW 1300000 00000 00000 193**

Dear Mr. Peterson:

Brown and Caldwell is pleased to submit this request for contract amendment for additional design services on the North Rillito Interceptor Relief Sewer Design Project. The additional design services include design of a reclaimed water line for the North Biofilter, design of drainage improvements at the Columbus turn-about to divert stormwater flows to the Swan Wetlands Habitat Area and associated design efforts due to this mitigation work, and additional project management effort due to extending the design phase and the associated additional meetings.

SCOPE OF WORK

Task 21 - North Biofilter Reclaimed Water Service

Brown and Caldwell had designed the North Biofilter water service off of an existing Tucson Water potable waterline. It was recently determined that Tucson Water is going to abandon the waterline and that Pima County Regional Wastewater Reclamation Department (PCRWRD) will need to design and install a new potable waterline in order to feed water to the North Biofilter. Another option is to tie into an existing Pima County Natural Resources, Parks, and Recreation reclaimed waterline pipeline located in the vicinity of the North Biofilter. This Scope of Work includes:

- Coordinate with Pima County Natural Resources, Parks, and Recreation, and Tucson Water regarding the design of the reclaimed water feed to the North Biofilter.
- Design the reclaimed water service piping and connection.
- Coordinate with the City of Tucson Development Services Department, submit the reclaimed water service design, and assist PCRWRD apply for a permit to construct the reclaimed waterline. Fees for the permit application will be charged to the as-needed design services of the existing contract and is not included in this Scope of Work and Fee.
- Design a self-cleaning reclaimed water filter at the North Biofilter to prevent clogging of the North Biofilter media.
- Design electrical feed to supply power to the reclaimed water filter.

It is assumed that the reclaimed water feed can be tied into at the location adjacent to the North Biofilter and that no additional work on the main reclaimed waterline is required. The reclaimed water service will include an isolation valve and meter at the tie-in point, and an isolation valve at the North Biofilter. Any work on securing an agreement to utilize reclaimed water for this project is excluded from this Scope of Work and Fee. Brown and Caldwell is requesting a fee of \$8,778 for design and coordination of the reclaimed water service.

Task 22 - Columbus Boulevard Drainage Design

As part of the mitigation work associated with construction of the NRI Relief Sewer, Pima County Regional Flood Control District (PCRFCF) would like to divert existing drainage from the Columbus Turnabout to the Swan Wetlands Habitat Area. In order to divert drainage from Columbus Boulevard, several improvements will be required including:

- Fill in the Columbus turnabout median in such a way that any flow that enters this area continues through the median and exits back on the turnabout pavement to the north. A grouted riprap will be utilized to prevent sand and fines from being washed onto the roadway.
- Relocate the existing storm water catch basin slightly such that the inlet elevation can be increased (elevation increase to be determined) or re-grade the pavement to divert storm water flows to the Swan Wetlands Habitat Area. The capacity of the existing storm water catch basin will be assumed to be the design capacity of the proposed drainage channel through the Swan Wetlands Habitat Area. The existing storm water catch basin will remain in place and serve as a backup outlet during large storm events. By keeping the existing drainage structures in place, it is assumed that no drainage study is required for these improvements.
- Install sidewalk scuppers to divert storm water to flow to the north – northeast direction from the location of the existing storm water catch basin. If the scuppers are clogged or become overloaded, storm water will backup and flow into the existing storm water catch basin.
- Excavate a channel extending from the Columbus Boulevard turnabout, through the Swan Wetlands Habitat Area, to the existing Rillito River soil cement wall. The existing RCP at the soil cement wall will be relocated approximately 20 feet to the east such that the drainage channel does not conflict with the NRI Relief Sewer pipeline via infiltration into the pipe trench. The drainage channel slope will follow the existing elevation change between the Columbus Boulevard turnabout and the existing RCP at the soil cement wall. Sections of the channel will be lined with a layer of clay or clay-like material to discourage infiltration and allow some ponding to occur during storm events.

Brown and Caldwell will attend up to three project meetings with relevant stakeholders. The meetings are anticipated to be held in the following order:

- Kickoff and Drainage Coordination Meeting: Will include all team members and relevant stakeholders to discuss main concerns, objectives and project limitations. Attendees include PCRWRD, PCRFCF, City of Tucson Right of Way, and Brown and Caldwell. The drainage analyses will be presented to the group including a layout of drainage improvements in order to gain agreement and support of the layout and alternatives that will be used to generate the draft design documents. Meeting Minutes will be documented and distributed by Brown and Caldwell.
- Conceptual Design Review Meeting: A meeting to be held with relevant stakeholders (PCRWRD, PCRFCF, City of Tucson Right of Way, and Brown and Caldwell) to review the conceptual design based on discussions from the drainage coordination meeting. This meeting is intended to go over specific design modifications to the north end of Columbus Boulevard including multi-use function (ADA, Pedestrian, Bicycle, etc.), roadway grades/pavement drainage, and O&M access, and obtain clarification on designer questions. Meeting Minutes will be documented and distributed by Brown and Caldwell.

- Draft Design Review Meeting: A meeting to be held with relevant stakeholders (PCRWRD, PCRFGD, City of Tucson Right of Way, and Brown and Caldwell) to review the draft design documents. Comments will be addressed and required corrections will be incorporated in the final design documents (100 percent drawings and specifications) that will be incorporated into the 100 percent NRI Relief Sewer biddable documents.

Design Calculations

- Brown and Caldwell will perform design calculations to determine the hydraulic capacity of the existing storm water catch basin at the end of Columbus Boulevard, and a hydraulic analysis of the proposed scupper and inlet, channel, and downstream culvert. Results are to be summarized in a letter report for submission to City of Tucson Right of Way for approval.

Drainage Improvement Plans

Brown and Caldwell will develop draft and final drainage drawings. Comments from the draft design review meeting will be incorporated into the final design drawings. This scope of work and fee was developed based on the following sheet count:

- Coversheet with Legend and Abbreviations (1 drawing)
- Notes, Sheet Layout, and Control (1 drawing)
- Columbus Grading and Paving Plan (1 drawing)
- Drainage Channel Plan and Profile (1 drawing)
- Detail Sheets (2 drawings).

There is expected to be a total of 6 drawing sheets as part of this work.

Assumptions

- It has been requested that Brown and Caldwell not perform a detailed drainage study and that the flows used for designing the new drainage channel be based on the existing drainage capacity of the storm water catch basin. If it is later determined that a detailed flow study is required as part of this work, a separate fee proposal will be submitted for approval. By keeping the existing storm water drainage facilities in place, the addition of a new drainage channel in the Swan Wetlands Habitat Area will not reduce the storm water capacity at the end of Columbus Boulevard. Brown and Caldwell will not be responsible for any flooding that occurs due to these improvements as the existing storm water capacity is not being reduced as part of this project. In addition, the drainage channel through the Swan Wetlands Habitat Area will be based on a maximum flow equal to the capacity of the existing storm water catch basin drainage. Storm water flows above this design flow may cause drainage capacity issues through the Swan Wetlands Habitat Area including scour and ponding. In addition, the channel will be excavated in native soils with the addition of a clay layer to minimize infiltration. This earthen drainage structure will require maintenance over time to keep the bottom of the channel clear and maintain the channel wall slopes which may erode over time. Obstructions in the channel may cause storm water to back up to Columbus Boulevard and flow into the existing storm water catch basin until the obstructions are cleared.
- Brown and Caldwell will utilize the existing survey information for this project. Due to the extremely limited fall, accurate detailed survey is required in the area of the proposed new scuppers to verify proper flow of storm water. It appears that the survey currently covers this area in sufficient detail. If it is determined that additional survey is required, it will be handled on the existing as-needed design phase and not included in this scope and fee.
- Brown and Caldwell will utilize the existing geotechnical report used in the preliminary route study for the NRI Relief Sewer.

- Environmental and Cultural services are not included in this scope and work. Any impact from this work will be addressed by PCRWRD's subconsultant Recon or by others and not included in this scope of work.
- It is assumed that since the drainage channel will be owned and operated by PCRFCO, no permanent or temporary easements are required for these improvements. If easements are required, they will be handled by the as-needed design phase and not included in this scope and fee.
- City of Tucson Right of Way use permit and grading permit will be applied for by the Contractor and is not as part of this work.

Brown and Caldwell is requesting \$37,622 to complete the design for the Columbus Boulevard Drainage Design. A detailed breakdown of labor and expenses is included as Exhibit A to this letter.

Task 01 - Additional Project Management

Brown and Caldwell is requesting additional project management fees for the extension of the project timeframe due to delay regarding mitigation efforts. The original design timeframe has been extended by four (4) months resulting in additional client meetings, invoicing, and other project management duties. Therefore, Brown and Caldwell is requesting an additional fee of \$6,199 to cover the costs of this additional effort.

SCHEDULE

Brown and Caldwell will perform the services described above within 120 days of issuance of the Notice to Proceed.

COMPENSATION

Brown and Caldwell will perform the services described above on a cost plus fixed fee basis, and will invoice PCRWRD in accordance with the terms and conditions in Contract No. CT WW 13**193. The detailed budget for this work is attached as Exhibit A. The estimated fee to perform the Scope of Work is \$52,599. A breakdown of this estimated fee is shown in the table below:

TASK	TOTAL ESTIMATED FEE
Task 21 – North Biofilter Reclaimed Water Service	\$ 8,778
Task 22 – Columbus Boulevard Drainage Design	\$ 37,622
Task 01 – Additional Project Management	\$ 6,199
TOTAL	\$ 52,599

NOTICE TO PROCEED

Brown and Caldwell will perform the Scope of Work described herein in accordance with Contract for Professional Services, Contract No. CT WW 13**193 between PCRWRD and Brown and Caldwell, Inc. dated August 20, 2012. If the Scope of Work and Compensation meet with your approval, please send us a Notice to Proceed to include this scope of work within the NRI relief sewer project.

Mr. Glen Peterson
October 11, 2013
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Brown and Caldwell appreciates the opportunity to work with PCRWRD on this project. If you have any questions regarding this proposal, please do not hesitate to call us at (520) 624-5744.

Very truly yours,

BROWN AND CALDWELL, INC.



Ronald L. Ablin, P.E.
Vice-President



Mark A. Poppe, P.E.
Project Manager

RLA:MAP:sjw

Attachments: Exhibit A – Detailed Budget

Exhibit A: Detailed Budget

TASKS 21 - 22

			Principal-in-Charge/QA/QC Reviewer	Project Manager/Designer Engineer	Project Assistant	Senior Design Engineer	Permitting Specialist	Permitting Specialist	Permitting Support	Cost Estimator	Project Engineer	Senior Structural Engineer	CADD Designer	CADD Drafter	Word Processor	Accounting Support	Design Engineer - Odor Control	Senior Design Engineer - Electrical	TOTAL DIRECT LABOR HRS	
		*Rate	\$83.37	\$40.73	\$27.99	\$77.00	\$45.24	\$40.46	\$28.91	\$50.93	\$30.88	\$69.42	\$43.18	\$28.57	\$27.15	\$29.13	\$41.73	\$65.20		
	North Biofilter Reclaimed Water Design		2	18	2									12	2		16	12	64	
21	TOTAL DIRECT LABOR HOURS		2	18	2	0	0	0	0	0	0	0	0	12	2	0	16	12	64	
	TOTAL COST	\$166.74	\$733.14	\$55.98	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$342.84	\$54.30	\$0.00	\$667.68	\$782.40	\$2,803	
																			FY '11 Indirect Labor Cost @ 1.873	\$5,250
																			Subtotal Direct and Indirect Labor	\$8,053
SUBCONSULTANTS																				
	Total \$	-																		\$0
	Expenses																			
ODC's	Total \$	-																		\$0
Fixed Professional Fee																				
																			(Direct and Indirect Labor) * 9%	\$725
																			TOTAL COST FOR TASK	\$8,778

**Pima County Regional Wastewater Reclamation Department
North Rillito Interceptor Relief Sewer**

EXHIBIT A

Task 22 - Columbus Boulevard Drainage Design

			Principal-in-Charge-QA/QC Reviewer	Project Manager/Design Engineer	Project Assistant	Senior Design Engineer	Permitting Specialist	Permitting Specialist	Permitting Support	Cost Estimator	Project Engineer	Senior Structural Engineer	CADD Designer	CADD Drafter	Word Processor	Accounting Support	Design Engineer - Drainage	Senior Design Engineer - Electrical	TOTAL DIRECT LABOR HRS
		*Rate	\$83.37	\$40.73	\$27.99	\$77.00	\$45.24	\$40.46	\$28.91	\$50.93	\$30.88	\$69.42	\$43.18	\$28.57	\$27.15	\$29.13	\$35.27	\$65.20	

22	Columbus Boulevard Drainage Design	8	72	2			16							120	4		112		334
TOTAL DIRECT LABOR HOURS		8	72	2	0	0	16	0	0	0	0	0	0	120	4	0	112	0	334

TOTAL COST	\$666.96	\$2,932.56	\$55.98	\$0.00	\$0.00	\$647.36	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,428.40	\$108.60	\$0.00	\$3,950.24	\$0.00	\$11,790
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FY '11 Indirect Labor Cost @ 1.873 **\$22,083**

Subtotal Direct and Indirect Labor **\$33,873**

SUBCONSULTANTS

Total \$ -

\$0

Travel 700

ODC's

Total \$ 700

\$700

Fixed Professional Fee

(Direct and Indirect Labor) * 9% **\$3,049**

TOTAL COST FOR TASK \$37,622

TOTAL COST FOR TASK	\$6,199
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