## CITY OF CORPUS CHRISTI AMENDMENT NO. 2 CONTRACT FOR PROFESSIONAL SERVICES

The City of Corpus Christi, Texas hereinafter called "CITY", and <u>Urban Engineering</u>, hereinafter called "ENGINEER," agree to the following amendment to the Contract for Professional Services for <u>Staples</u> <u>Street Pumping Plant New 10 MGD (Project No. E12004)</u>, as authorized and amended by:

Original A/E Agreement	March 27, 2012	Motion M2012-065	\$87,400.00
Amendment No. 1	March 19, 2013	Motion M2013-046	\$129,070.00

**EXHIBIT "A", SECTION 1. SCOPE OF SERVICES** shall be amended to include SCADA improvements at the Staples Street Pumping Plant as specified in the attached Amendment No. 2 Exhibit "A".

**EXHIBIT "A", SECTION 2. SCHEDULE** shall be amended as specified in the attached Amendment No. 2 Exhibit "A", Schedule.

EXHIBIT "A", SECTION 3. FEES shall be amended as specified in the attached Amendment No. 2 Exhibit "A", Summary of Fees, for a revised fee not to exceed \$135,640.00 (One Hundred Thirty-Five Thousand Six Hundred Forty Dollars and Zero Cents), for a total restated fee not to exceed \$352,110.00 (Three Hundred Fifty-Two Thousand One Hundred Ten Dollars and Zero Cents). Monthly invoices shall be submitted in accordance with Amendment No. 2 Exhibit "B".

All other terms and conditions of the March 27, 2012 contract between the City and Engineer will remain in full force and effect.

CITY OF CORPUS CHRISTI		URBAN ENGINEERING	Joly	12 7017
Mark Van Vleck, P.E., (I Interim Assistant City Manager for Public Works & Utilities	Date)	James L. Urban, P.E. 2725 Swantner Drive Corpus Christi, Texas 784 (361) 854-3101 Office	,	(Date)
RECCOMENDED		(361) 854-6001 Fax		
Daniel Biles, P.E.,	<u>8/14/ 2</u>			
Director of Engineering Services	, 24.0)			
7.12.1				
Operating Department (	(Date)			
APPROVED				
Office of Management and Budget (	(Date)			

#### **ATTEST**

Armando Chapa, City Secretary

Project No. E12004

Fund Source No. <u>550950-4091-00000-E12004</u>

Fund Name: Water CIP

Encumbrance No. \_\_\_\_

ENTERED

JUL 1 1 2013 Ser

CONTRACT MANAGER



Job No.: 33760.B1.03 Sent via Email

May 17, 2013

Mr. Wm. J. Green, P.E. Assistant Director of Engineering Services City of Corpus Christi P. O. Box 9277 Corpus Christi, Texas 78469

Subject: Staples Street Pumping Plant New 10 MGD Pumps (PN E12004) - Proposed

Contract Amendment

Dear Bill:

We are pleased to submit to you Amendment No. 2 to our contract to provide engineering services for design and construction administration of improvements to the Staples Street Pumping Plant. The proposed amended work consists of SCADA improvements at the pumping station.

The engineering services will include design of the SCADA improvements, preparation of construction bid and contract documents in the City format, review meetings with City staff, assisting the City in bidding the project, providing construction observation and commissioning of the improvements.

We propose to perform the above amended services for a not to exceed fee of \$135,640, which increases the total project fee to \$352,110. If the above is acceptable, please prepare an amendment to our AE Contract for signatures.

If you have any questions please feel free to give me a call.

Sincerely,

URBAN ENGINEERING

J. Douglas McMullan, P.E.

JDM/

Enclosure

xc: Daniel Deng, P.E. Engineering Services, w/encl. via email

(361)854-3101

2725 SWANTNER DR. • CORPUS CHRISTI, TEXAS 78404 www.urbaneng.com TBPE Firm #145 FAX (361)854-6001

AMEND. NO. 2 EXHIBIT "A" Page 1 of 6

### EXHIBIT "A" CITY OF CORPUS CHRISTI, TEXAS

Staples Street Pumping Plant New 10 MGD Pumps SCADA Upgrade - Amendment No. 2 Project No.E12004

#### **GENERAL**

Provide engineering project management, engineering design services, plans, specifications, and other artifacts and services required for the upgrade of the existing Supervisory Control and Data Acquisition (SCADA) to City Standard platform for proper operation and control of the Staples Street Pump Station. Develop control system application and Human Machine Interface (HMI) graphics for the City-standard SCADA platform. Integrate these additions into existing system-wide SCADA. Obtain validation of the new system by the end user.

#### 1. SCOPE OF SERVICES

#### A. BASIC SERVICES

#### 1. PRELIMINARY PHASE

- a) Conduct project kick-off meeting to agree on project definition, parameters, and requirements. Establish project critical success factors and agree on the project management approach.
- b) Update the existing Project Manual using the City-approved format and samples. The Project Manual shall be a living artifact subject to management of change procedures established for the project. In the Preliminary phase, the Project Manual shall define project objective, parameters, approach, and characteristics as defined in the City-approved format. In subsequent phases, the Project Manual shall be progressively developed into a project execution plan according to recognized and generally accepted project management practices. Its length and content shall reflect the level of elaboration appropriate for the project phase.

#### 2. DESIGN PHASE

- a) Review background information pertinent to the project
- b) Conduct a site visit to Staples Pump Station to examine and document existing field conditions, equipment, and installations.
- c) Develop and distribute to project participants preliminary schedule of all required project artifacts and assign responsibility for creating, updating, and distributing them. Revise and redistribute the schedule throughout the life cycle of the project as required.
- d) Engineering Services to develop all required drawings and specifications for demolition of existing SCADA panel, legacy displays and chart recorders, and associated wiring.
- e) Engineering services to develop plans and specifications for the construction and installation of new PLC panel to accommodate fully automatic operation of two existing and two future water pumps and associated valves and instrumentation.
- f) Prepare 60% and 100% construction plans and specifications required to achieve the technical objective of the project.
- g) Prepare an opinion of probable construction cost estimate and schedule of the SCADA system upgrade at 60% and 100% submittals.
- h) Conduct monthly progress update meetings and 60% submittal review workshop.

- Provide project management, including managing budgets and schedule, and facilitate communication between project stakeholders. Provide monthly progress report to the City.
- j) Perform quality assurance and quality control (QA/QC) of internal design development processes. Provide to the QA/QC artifacts at 60% and 100% submittals.
- k) Submit two half-size drawings and specifications sets for each of the submittals for City to review. Provide one full size reproducible drawings and specifications set. Provide 100% set of all construction documents in native electronic format and in PDF format. PDF documents shall be bookmarked for ease of navigating to key parts and sections of the document.
- Submit two sets of paper copies of Integration, Verification, and Validation documents. Submit one copy of each document in its native electronic format. PDF documents shall be bookmarked for ease of navigating to key parts and sections of the document.

#### 3. BID PHASE

- a) Prepare project advertisement for the City.
- b) Prepare addenda, attend bid opening, review bids and provide recommendation to the City.
- c) Attend pre-construction meeting, review contract documentation, and respond to Contractors Requests for Information (RFIs).

#### 4. CONSTRUCTION PHASE

- a) Review contractor shop drawing submittals and maintain submittals log.
- b) Respond to RFIs and provide clarification to contract documents.
- c) Review Contractor's requests for change orders
- d) Conduct monthly site visits, progress meetings and maintain outstanding issues log.
- e) Provide construction observation services at the construction milestones. Ensure contactor's and integrator's compliance with construction plans, specifications, and quality assurance plan. Review and approve acceptance checklists, witness and approve acceptance tests, attest to correct operation of the system per end user's intent and engineer's specification.
- f) Conduct final inspection. Complete required commissioning documentation, obtain acceptance signatures from system Owner and Project Manager. Submit final inspection reports and copies of completed commissioning documentation to the City.

#### 5. CLOSE-OUT PHASE

- a) Provide Engineering Services to develop and deliver as-built drawings. Provide the asbuilt set of all documents in native electronic format and in PDF format. PDF documents shall be bookmarked for ease of navigating to key parts and sections of the document.
- b) Other close-out tasks as determined by City Engineer and/or Project Manager

#### **B. ADDITIONAL SERVICES**

#### Items 1-5 No Changes

#### 6. CONTROL LOGIC AND APPLICATION DEVELOPMENT

- a) Assist the City with defining and documenting the User Requirements Specifications (URS) for the control system
- b) Engineering services required to develop and document the Detailed Functional Specification (DFS) based on URS
- c) Engineering services required to develop and document the control system's Sequence of Operation (SOO) based on DFS

- d) Engineering services required to <u>oversee</u> the programing of the SOO for the specified PLC platform.
- e) Engineering services required <u>oversee</u> integrator in developing Human Machine Interface (HMI) graphics for the operator work stations.

#### 7. CONTROL SYSTEM INTEGRATION

- a) Engineering Services to determine and specify all control system configuration parameters such as PID parameters, set points, and alarm levels required to achieve correct operation, alarming, and emergency notification and response of the automated control system. To include parameters for new pumps and equipment as well as modification to control system parameters for existing equipment.
- b) Engineering services to <u>oversee</u> integrate the new PLC panel into the existing SCADA system. Configure Historical server, integrate HMI screens into existing system-wide HMI. Verify and demonstrate to Owner stability of the new, integrated system
- 8. COMMISSIONING AND INSPECTION SERVICES (Work to be completed on T&M basis)
- a) Provide SCADA System Installation Inspections Services
- b) Attend and lead FAT and SAT (IV&V) Testing for SCADA systems

## PROPOSED SCHEDULE FOR STAPLES STREET PUMP STATION NEW 10 MGD PUMPS (With Amendment No.2)

Day	Date	Activity
Monday	April 15, 2013	Begin Design
Monday	June 17, 2013	Prel. Submittal (Pumps)
Thursday	July 11, 2013	City Review
Tuesday	October 8, 2013	Council Approval of SCADA
Thursday	November 7, 2013	
Thursday	December 19, 2013	Prel. Submittal (SCADA)
Thursday	January 2, 2014	
Thursday	January 30, 2014	Pre-Final Submittal
Thursday	February 13, 2014	
Thursday	March 13, 2014	
Monday	March 17, 2014	
Tuesday	April 1, 2014	
Wednesday	April 16, 2014	Receive Bids
Tuesday	May 27, 2014	
Tuesday	June 24, 2014	
Tuesday	December 23, 2014	Complete Construction

#### Summary of Fees Staples Street Pumping Plant New 10 MGD Pumps Project No. E12004

	Amendment No. 1				Amend. No. 2	
	Original Contract	Pump Station Civil/Elec/ Mech	Southside Water Trans. Main	Total Amend. No. 1	Pump Station New SCADA	Total Fee
Basic Services				-		
1 Preliminary Phase	\$9,000.00	\$6,390.00	\$1,490.00	\$7,880.00	\$3,530.00	\$20,410.00
2 Design Phase	38,900.00	27,690.00	6,470.00	34,160.00	63,670.00	\$136,730.00
3 Bid Phase	3,000.00	2,130.00	500.00	2,630.00	4,150.00	\$9,780.00
4 Construction Phase	9,000.00	6,390.00	1,490.00	7,880.00	7,130.00	\$24,010.00
5 Project Close Out	0.00	0.00	0.00	0.00	1,610.00	\$1,610.00
Subtotal Basic Services	\$59,900.00	\$42,600.00	\$9,950.00	\$52,550.00	\$80,090.00	\$192,540.00
Additional Services						
1 Topographic Survey/Field Investigation	11,440.00	0.00	2,040.00	2,040.00	0.00	13,480.00
2 Construction Observation Services	13,980.00	0.00	3,240.00	3,240.00	0.00	17,220.00
3 Warranty Phase	2,080.00	1,100.00	540.00	1,640.00	0.00	3,720.00
4 Engineering Integration and Control Services	0.00	61,500.00	0.00	61,500.00	0.00	61,500.00
5 Flow Meter/Pump Drive Assessment	0.00	8,100.00	0.00	8,100.00	0.00	8,100.00
6 Control Logic and Application Development	0.00	0.00	0.00	0.00		15,890.00
7 Control System Integration	0.00	0.00	0.00	0.00		15,890.00
8 Commissioning and Inspection (Allowance)	0.00	0.00	0.00	0.00	23,770.00	23,770.00
Subtotal Additional Services	\$27,500.00	\$70,700.00	\$5,820.00	\$76,520.00	\$55,550.00	\$159,570.00
Total	\$87,400.00	\$113,300.00	\$15,770.00	\$129,070.00	\$135,640.00	\$352,110.00
	3/27/2012	· · · · · · · · · · · · · · · · · · ·	3/19/2013			
	M2012-065		M2013-046		M2013-	

# COMPLETE PROJECT NAME Project No. XXXX Invoice No. 12345 Invoice Date:

				Total	Amount	Previous	Total	Percent
Basic Services:	Contract	Amd No. 1	Amd No. 2	Contract	Invoiced	Invoice	Invoice	Complete
Preliminary Phase	\$1,000	\$0	\$0	\$1,000	\$0	\$1,000	\$1,000	100%
Design Phase	2,000	1,000	0	3,000	1,000	500	1,500	50%
Bid Phase	500	0	250	750	0	0	0	0%
Construction Phase	2,500	0	1,000	3,500	0	0	0	0%
Subtotal Basic Services	\$6,000	\$1,000	\$1,250	\$8,250	\$750	\$1,500	\$2,500	30%
Additional Services:				•		• •		
Permitting	\$2,000	\$0	\$0	\$2,000	\$500	\$0	\$500	25%
Warranty Phase	0	1,120	0	1,120	0	0	0	0%
Inspection	0	0	1,627	1,627	0	0	0	0%
Platting Survey	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
O & M Manuals	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
SCADA	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
Subtotal Additional Services	\$2,000	\$1,120	\$1,627	\$4,747	\$500	\$0	\$500	11%
Summary of Fees								
Basic Services Fees	\$6,000	\$1,000	\$1,250	\$8,250	\$750	\$1,500	\$2,500	30%
Additional Services Fees	2,000	1,120	1,627	4,747	500	0	500	11%
Total of Fees	\$8,000	\$2,120	\$2,877	\$12,997	\$1,250	\$1,500	\$3,000	23%



# CITY OF CORPUS CHRISTI DISCLOSURE OF INTEREST

City of Corpus Christi Ordinance 17112, as amended, requires all persons or firms seeking to do business with the City to provide the following information. Every question must be answered. If the question is not applicable, answer with "NA". See reverse side for Filing Requirements, Certifications and definitions.

COMPANY	NAME:	Urban E	ngineering							
P. O. BOX:							-			
STREET A	DDRESS	3: 2725 Sw	antner			CIT	Y:	Corpus Christi	ZIP:	7840
FIRM IS:	1. 4.	Corporation Association	$\Box$	2. 5.	Partnersl Other	nip	<b>A</b>	3. Sole Own	ner 🗌	
Name N A		necessary, p of each "em ng 3% or mo	Department (il	ever ne C ershi	se side of ity of Co ip in the a wn)	this properties	Job	or attach separate shee isti having an "owner ed "firm." o Title and	City	
2. State the constituti Name	names of ng 3% or	each "offic more of the	ial" of the Cit ownership in	y of the	above nan	ied	Tit			
2 State the	nomas a	f each "boar		f the	City of C	Corpu	ıs Cl	nristi having an "owner ned "firm."	rship	
Name			Committee				Вс	oard, Commission	or	
NA										
who wo interest" Name	rked on constitut	any matter ing 3% or m	related to the	0 0111	ip in the	us c ibov	e nan	onsultant	rsnip	
NA										

FILING REQUIREMENTS

If a person who requests official action on a matter knows that the requested action will confer an economic benefit on any City official or employee that is distinguishable from the effect that the action will have on members of the public in general or a substantial segment thereof, you shall disclose that fact in a signed writing to the City official, employee or body that has been requested to act in the matter, unless the interest of the City official or employee in the matter is apparent. The disclosure shall also be made in a signed writing filed with the City Secretary. [Ethics Ordinance Section 2-349 (d)] [Ethics Ordinance Section 2-349 (d)]

CERTIFICATION

I certify that all information provided is true and correct as of the date of this statement, that I have not knowingly withheld disclosure of any information requested; and that supplemental statements will be promptly submitted to the City of Corpus Christi, Texas as changes occur.

	James L. Urban, P.E. Title:	Principal
Signature of Certifyin Person:	Type or Print)	Date: 1.4.2013

#### DEFINITIONS

- "Board member." A member of any board, commission, or committee appointed by the City Council of the City of Corpus Christi, Texas.
- b. "Economic benefit". An action that is likely to affect an economic interest if it is likely to have an effect on that interest that is distinguishable from its effect on members of the public in general or a substantial segment thereof.
- Any person employed by the City of Corpus Christi, Texas either on a full or e. "Employee." part-time basis, but not as an independent contractor.
- d. "Firm." Any entity operated for economic gain, whether professional, industrial or commercial, and whether established to produce or deal with a product or service, including but not limited to, entities operated in the form of sole proprietorship, as self-employed person, partnership, corporation, joint stock company, joint venture, receivership or trust, and entities which for purposes of taxation are treated as non-profit organizations.
- The Mayor, members of the City Council, City Manager, Deputy City Manager, Assistant City Managers, Department and Division Heads, and Municipal Court Judges of the City of Corpus Christi, Texas.
- f. "Ownership Interest." Legal or equitable interest, whether actually or constructively held, in a firm, including when such interest is held through an agent, trust, estate, or holding entity. "Constructively held" refers to holdings or control established through voting trusts, proxies, or special terms of venture or partnership agreements."
- "Consultant." Any person or firm, such as engineers and architects, hired by the City of Corpus Christi for the purpose of professional consultation and recommendation.