PROGRAMMABLE LOGIC CONTROLLERS REPLACEMENT – PHASE 4 PROJECT

Solicitation Number: CO-00602 Job No. 21-6006

Addendum No. 3
June 20, 2023

To Bidder of Record:

This addendum, applicable to the work referred to above, is an amendment to the bid proposal, plans, and specifications, and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the bid proposal.

RESPONSES TO QUESTIONS

1. Question: Reference Spec. Section 01 11 00.1.3 and 40 66 00.1.1.D. Per referenced specifications, the spec states that networking SFP modules (GLC-LX-SM) will be furnished by the Owner. Per "Schedule of Manufacturers and Suppliers" Table under Instructions to Bidders, under page SCH-1,it states that "Network Switches and Routers (This equipment has been ordered and will be provided by Owner, except for ancillary components such as SFP modules)." Please clarify if SFP modules will provided by the Owner.

Answer: The Owner is providing twelve (12) GLC-LX-SM-RGD singlemode fiber SFP modules that are for covering the base design requirements. Any additional SFP modules required will be furnished by the Contractor.

2. Question: Reference Instructions to Bidder, Bid Form and Drawing G-0002. The bid form does not list "HQ - Headquarters" and "LCT - Leon Creek Tower". Please advise on which bid items these sites need to be provided under or if these sites will be added to an updated Bid Form.

Answer: The Bid Proposal has been updated to reflect that all work to be carried out in "HQ - Headquarters" is related to the Josephine site, and all work to be carried out in "LTC - Leon Creek Tower" is related to the Toyota N Gate site. Reference changes to Specifications #1.

3. Question: Reference Spec. Section 01 11 00.1.2.A.3. Per referenced specification, it states "If load is added per site, CONTRACTOR to do a load analysis on each site to ensure the transformers have the capacity to handle the additional load." Please advise what constitutes added load as the majority of the sites per the Contract Documents have new equipment being added to the site. Also, the existing electrical information such as transformer sizes, power panel ratings, etc. does not appear to be provided on the Contract Documents. Please advise on the design intent for this specification section.

Answer: A significant change on the loads of each site is not expected. Transformer load analysis is not required. Some panelboards will be receiving an additional circuit, but most panelboards will reuse existing PLC circuits for replacement PLC panels. If a panelboard that requires an additional circuit is found without available spare breaker space, then the existing PLC circuit breaker shall be replaced with two half-size breakers to achieve the needed panelboard circuits.

4. In reference to Specification Section 40 63 00 (PLC Hardware & Software), Section 2.1.B.1. states "Provide memory cards for all PLC CPUs provided on the project." Per Rockwell Document 5069-td002 one (1) 1784-SD2 memory card ships with the controller. Please confirm if additional memory cards are required beyond the one (1) 1784-SD2 card that ships with the controller?

Answer: No additional PLC memory cards will be required.

5. In reference to Specification Section 40 63 00 (PLC Hardware & Software), Section 2.1.H.9. states "All products shall have corrosion protection." Please confirm if corrosion protection is required for all PLCs in the form of the Conformal Coating that is available in a hardened PLC and I/O card offerings?

Answer: Conformal coated PLC equipment is not required for this project. Reference changes to Specifications #8.

6. In reference to Specification Section 40 66 00 (Network Equipment), Section 2.5.C. makes reference to Small and Large Broadband Access Point Site enclosures and Section 2.5.K. makes reference to Small and Large Broadband Access Point Site enclosures, specifically American Products enclosure p/n: AM32P-4036-16/32RU and p/n: AM47P-4042-24/48RU. Different enclosures are referenced for the Communication Grounding & Communication Fiber Optic & Grounding Enclosures in the Contract Drawings, specifically American Products p/n: AMW-242410-A is referenced on Contract Drawings X-0104 and X-0105. We would presume the American Products enclosure p/n: AM32P-4036-16/32RU and p/n: AM47P-4042-24/48RU can be ignored completely, but want to confirm.

Answer: Yes, AM32P-4036-16/32RU and p/n: AM47P-4042-24/48RU are not used on this project. The drawings mentioned are grounding enclosures and not Access Point Site enclosures.

- X-0104 should be AMW-242410-A
- X-0105 should be AMW-322412-A per spec 27 15 23
- Tuleta should be AMW-242410-A
- Golden does have a AM47P-4036-24/48RU security enclosure.

Reference changes to Plans #1 and #2.

CHANGES TO THE SPECIFICATIONS

- 1. Remove Bid Proposal in its entirety and replace with the revised Bid Proposal attached to this addendum. Bidder's shall use the revised version when submitting a bid. Failure to use the revised version may result in the bid being found non-responsive.
- 2. Section 01 11 00 (Summary of Work) Article 1.2-A.2, add paragraph "c." as follows:

c. All verified dead end points and dead end logic shall be removed from PLC and HMI programs."

- 3. Section 01 20 00 (Measurement and Payment) Article 1.3-F.2, replace with the following:
 - "2. Item No. 33: Spare Parts and Manufacturer Training
 - a. Description: Total amount to furnish all required spare parts, consumables, and test equipment, complete in place. Manufacturer Training as specified in 40 61 26 (Process Control System Training) Article 3.3-C, complete in place.
 - b. Measurement: Measurement of this item will be by the lump sum.
 - c. Payment: Payments of the lump sum bid shall be paid for the work as presented in the Contract Documents."
- **4.** Section 40 61 21 (Process Control System Testing) Article 1.1-J, add paragraph "7." as follows: "7. Test Procedures."
- **5.** Section 40 61 21 (Process Control System Testing) Article 3.2-D.3, replace the last sentence with the following:
 - "Prior to the ORT, the PCSI shall submit updated PLC and HMI programs to SAWS for review and loading into the "Sandbox" a minimum of 2 weeks prior to the requested ORT date(s)."
- **6.** Section 40 61 21 (Process Control System Testing) Article 3.4-F, add paragraph "19." as follows: "19. Test all alarm and historian points to verify proper functionality."
- 7. Section 40 61 26 (Process Control System Training) Article 3.3, add paragraph "C." as follows: "C. Manufacturer Training Programmable Logic Controller (PLC) Hardware and Software, and
 - 1. Provide 4-1/2 days of manufacturer's standard training course for the OWNER's personnel in the operation, configuration, programming, installation, and maintenance of the PLC hardware and software, and HMI software supplied. Owner to select specific training class and dates during construction. Travel costs for Owner personnel is not required."
- 8. Section 40 63 00 (PLC Hardware and Software) Article 2.1-H.9, delete without replacement.
- Section 40 63 00 (PLC Hardware and Software) Article 2.2-B.1, replace with the following:
 "1. Allen Bradley 5069 CompactLogix."
- **10.** Section 40 63 00 (PLC Hardware and Software) Article 2.2-C, remove the table and replace with the following:

Description	Manufacturer	Part Number
Power Supply Module	Allen Bradley	5069 (Integrated)
CPU (Processor)	Allen Bradley	5069-L330ERM & 5069-RTB64-SCREW (minimum, CPU shall be sized by CONTRACTOR)
16 Channel Digital Input Module	Allen Bradley	5069-IB16 & 5069-RTB18-SCREW
16 Channel Digital Output Module	Allen Bradley	5069-OB16 & 5069-RTB18-SCREW
8 Channel Analog Input Module	Allen Bradley	5069-IF8 & 5069-RTB18-SCREW

HMI Software:

Description	Manufacturer	Part Number
4 Channel Analog Input Module	Allen Bradley	5069-IY4 & 5069-RTB18-SCREW
8 Channel Analog Output Module	Allen Bradley	5069-OF8 & 5069-RTB18-SCREW
Ethernet module for distributed I/O	Allen Bradley	5069-AENTR

11. Section 40 63 00 (PLC Hardware and Software) Article 2.2-D, remove the table and replace with the following:

Description	Manufacturer	Part Number
Feed-Through 32 Ch. Discrete IFM	Allen Bradley	1492-IFM40F
Feed-Through 8 Ch. Analog IFM	Allen Bradley	1492-AIFM8-3
Modbus/RS232/RS485 to Ethernet IP converter (Gateway Unit)	Red Lion	DA30D 0F 000000 000 SDxxxxx SD Card CBLxxxxx Communications Cable and Adapter CRM0000 xxxxx xxxxx Expansion Module CRA000 BT3V0 00000 Replacement Battery

12. Section 40 63 00 (PLC Hardware and Software) Article 2.9-A, delete the second sentence in its entirety without replacement.

CHANGES TO THE PLANS

- 1. Drawing X-0104 (Electrical Details V), replace note "AMERICAN PRODUCTS ENCLOSURE MODEL NUMBER: AMW-242410-A" with "AMERICAN PRODUCTS ENCLOSURE MODEL NUMBER: AMW-242410-A"
- 2. Drawing X-0105 (Electrical Details VI), replace note "AMERICAN PRODUCTS ENCLOSURE MODEL NUMBER: AMW-242410-A" with "AMERICAN PRODUCTS ENCLOSURE MODEL NUMBER: AMW-322412-A"

END OF ADDENDUM

This Addendum, including these five (5) pages, is eight (8) pages with attachments in its entirety.

Attachments:

Bid Proposal (3 Pages)

Cuff

Andrew Paulson Signature Automation, LLC



Project Name: BROADBAND ACCESS POINTS AND PROGRAMMABLE LOGIC

CONTROLLERS REPLACEMENT - PHASE 4

Solicitation No. : CO-00602

Job No(s): 21-6006

BID PROPOSAL

PR	OPOSAL OF, a corporation
ар	artnership consisting of
an	individual doing business as
Pu as	E SAN ANTONIO WATER SYSTEM: suant to Instructions and Invitation to Bidders, the undersigned proposes to furnish all labor and materials specified and perform the work required for the project as specified, in accordance with the Plans and ecifications for the following prices in the bid proposal to wit:
PL	EASE SEE ATTACHED LIST OF BID ITEMS.
	BIDDER'S SIGNATURE & TITLE
	FIRM'S NAME (TYPE OR PRINT)
	FIRM'S ADDRESS
	FIRM'S PHONE NO. /FAX NO.
	FIRM'S EMAIL ADDRESS
Γhe	Contractor herein acknowledges receipt of the following: Addendum No(s).
OW	NER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIBLE BID.
and Proc	Bidder offers to construct the Project in accordance with the Contract Documents for the contract price, to complete the Project within <u>600</u> calendar days after the start date, as set forth in the Authorization to eed. The bidder understands and accepts the provisions of the contract Documents relating to dated damages of the project if not completed on time.
Com	plete the additional requirements of the Bid Proposal which are included on the following pages.
Sta	ement on President's Executive Orders
las orec	your firm previously performed work subject to the President's Executive Orders Numbers 11246 and 11375 or any eding similar executive orders (Numbers 10925 and 11114)? Yes No No
Геха	s Government Code Chapter 2274 Verifications
(1)	Are you, Contractor, held or controlled by individuals who are citizens of China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274? Yes No
(2)	Are you, Contractor, held or controlled by a company or other entity, including a governmental entity, that is owned or controlled by citizens of or directly controlled by the government of China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274? Yes No
(3)	Are you, Contractor, headquartered in China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274? Yes \(\scale \) No \(\scale \)

Rev. 030323 Addendum No.3

Project Name: BROADBAND ACCESS POINTS AND PROGRAMMABLE LOGIC CONTROLLERS

REPLACEMENT – PHASE 4 Solicitation No. : CO-00602

Job No(s): 21-6006

Item No.	Item	Item Description	Unit	Quantity	Unit Bid Price	Total Price
1	0010	Austin Tank PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
2	0020	Brackenridge RW Station PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
3	0030	& related Site Modifications	LS	1	\$	\$
4	0040	& related Site Modifications	LS	1	\$	\$
5	0050	System, & related site Modifications	LS	1	\$	\$
6	0060	Dreamhill PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
7	0070	System, & related Site Modifications	LS	1	\$	\$
8	0800	& related Site Modifications	LS	1	\$	\$
9	0090	System, & related Site Modifications	LS	1	\$	\$
10	0100	Modifications	LS	1	\$	\$
11	0110	Modifications	LS	1	\$	\$
12	0120	General McMullen DSP PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
13	0130	Golden PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
14	0140	Growdon PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
15	0150	Hickory Hollow PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
16	0160	Highlands Tank PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
17	0170	Hutchins PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
18	0180	System, & related site Modifications	LS	1	\$	\$
19	0190	James Park PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
20	0200	Josephine PLC System, Communication System, related Site Modifications, & all modifications related to HQ – Headquarters	LS	1	\$	\$
21	0210	related Site Modifications	LS	1	\$	\$
22	0220	Lockhill Tank PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
23	0230	System, & related Site Modifications	LS	1	\$	\$
24	0240	Menger Tank PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
25	0250	& related Site Modifications	LS	1	\$	\$
26	0260	Redland PLC System, Communication System, & related Site Modifications	LS	1	\$	\$

Project Name: BROADBAND ACCESS POINTS AND PROGRAMMABLE LOGIC CONTROLLERS

REPLACEMENT – PHASE 4 Solicitation No. : CO-00602

Job No(s): 21-6006

Item No.	Item	Item Description	Unit	Quantity	Unit Bid Price	Total Price
27	0270	Stotzer Tank PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
	0280	Toyota N Gate PLC System, Communication	LS	1	\$	\$
29	0290	Tuleta PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
30	0300	Waterwood PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
31	0310	Wayland PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
32	0320	West Avenue PLC System, Communication System, & related Site Modifications	LS	1	\$	\$
33	SP1	Spare Parts and Manufacturer Training	LS	1	\$	\$
SUBT	SUBTOTAL (Items 1 - 33)				\$	

_	Item No.	Item Description	Unit	Quantity	Unit Bid Price	Total Price
34	AL-1	Unforeseen Subsurface Utility Relocation	ALW	1	\$100,000.00	\$100,000.00
35	AL-2	Permit Fees Reimbursement	ALW	1	\$5,000.00	\$5,000.00
36	AL-3	Technology Upgrade	ALW	1	\$50,000.00	\$50,000.00
37		Mobilization and Demobilization - Maximum of 5% of the total of Line Items 1 through 33.	LS	1		\$
38	102	Intermediate Demobilization and Remobilization	EA	1		\$

Mobilization and Demobilization lump sum bid shall be limited to a maximum 5% of the line items 1 through 33. In the event of a discrepancy between the written percentage and dollar amount shown for Mobilization and Demobilization bid items the written percentage will govern. If the percentage written exceeds the allowable maximum stated for mobilization and demobilization, SAWS reserves the right to cap the amount at the percentages shown and adjust the extensions of the bid items accordingly.

TOTAL BID PRICE	ė
(TO INCLUDE LINE ITEMS 1-38)	•