

Steven M. Clouse WRC Digester Mixing and System Enhancements Phase 3
Solicitation No.: CO-00455
Job No.: 20-6501

ADDENDUM No. 4 Date: February 17, 2022

To Bidder of Record:

This addendum, applicable to work referenced 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: Please confirm weld process we need to follow if any?

 Response: Welding shall comply with the Contract Documents including, but not limited to, Specification Section 05120

 Paragraph 3.03 Welding and 3.06.A Welds, Specification Section 05500 Paragraph 2.06 Welding Electrodes and Rods,

 Specification Section 15060 Paragraph 1.08 Certification of Welders, and Specification Section 15060 Paragraph 2.20

 Welding and Sandblasting.
- **2.** Question: Are there any testing requirements on stainless steel welds? Response: Testing shall comply with the Contract Documents including, but not limited to, all piping shall follow Specification Section 15060 Paragraph 3.05 Testing of Pipes.
- **3.** Question: Do we need to include radiography? Response: Contractor is directed to review Contract Documents General Conditions Article 5.9 Testing.
- **4.** Question: Could you please provide schedule ratings for pipe and fittings? Response: Pipe and fitting shall comply with the various pipe material thicknesses specified in Specification Sections 15060, 15061, 15062, 15064, and 15070.
- **5.** Question: Could we get exact dimensions for DGS pipe spools?

 Response: Contractor is responsible for the preparation of all Shop Drawings, and shall include relevant costs in the proposal for the development of Shop Drawings. Contract Documents provide sufficient information for cost estimating.
- **6.** Question: Will Insulation be done by others in the field? Response: All work indicated on the drawings and specified, including all work to provide a complete and functional system shall be provided by the Contractor and their sub-contractors and sub-consultants.
- 7. Question: If possible, could we get some clarification on what type of "leak testing" needs to be performed? Response: Testing shall comply with the Contract Documents including, but not limited to, Specification Section 15060 Paragraph 3.05 Testing of Pipes, Specification Section 03003 for Digester leaks, Specification Section 13225 for Digester Gas Equipment leaks, and other specification sections.
- **8.** Question: In spec section #13300.1.01.I.20. Digesters Area Generator Control Panel. Per the specs the enclosure is new. On drawing #01I47 General Sheet Notes #1 Says the existing enclosure is to be reused? Please advise which is correct.

Response: The existing enclosure is to be reused for the new PLC-based control panel. Refer to "Changes to the Specifications" section of this addendum for further clarification.

- **9.** Question: On drawing #01l47 you show an existing Generator PLC enclosure. Per notes 1 & 3. It says we will be using the existing enclosure and replacing the back panel. Can we get dimensions on the existing enclosure so we know what size of back panel to get?
 - Response: Contractor must field-verify exact enclosure dimensions for final design; however, approximate enclosure dimensions that may be used for the purpose of estimating internal component requirements are 79"Hx24"Wx24"D.
- **10.** Question: In spec section #13300.1.05.D. It says the PCSI shall be one of the following (TO BE ADDED) When can we expect this to happen?
 - Response: Refer to additional information issued in Addendum No. 3.
- **11.** Question: Regarding the allowance item #20 Subsurface Utility Investigation Allowance of \$200,000. As the underground utilities are not shown on the drawings nor the availability of as-builts drawings, would SAWS be willing to increase the amount as required during construction, instead of contractors adding hydro-vac excavation to their base bid and inflating the anticipated costs for the unknown conditions. This would allow the bid amounts to be consistent among the contractors and utilize the allowance only as needed.
 - Response: The SUE Allowance line item has been increased to \$350,000. This change is included in the Price Proposal and specification section attached to this addendum.
- **12.** Question: ON sheet 01M41 "Ductless Split heat pump schedule" AHU-1,2,4&5, the total indoor unit BTU's is 60,000. Is this the total for both air handlers, meaning providing 2 2.5 ton wall mounted air handlers on a 60,0000 BTU condensing unit or is it 60,000 BTU's for each air handler to combine with a 120BTU condenser? Response: ACU-1 and ACU-3 are sized for the total capacity of 60,000 BTU cooling and 66,000 BTU heating. Their respective indoor units should each be sized for half that load each (30,000 BTU cooling and 33,000 BTU heating).
- **13.** Question: Does the design engineer have a selection of BOD Equipment used to develop the Ductless split heat pump system schedule?
 - Response: The following equipment was used to develop the ductless split heat pump system. ACU-1,3: Carrier Single Phase VRF Outdoor Unit 38VMA060HDS3-1—Heat Pump and AHU-1,2,4,5: Carrier VRF Indoor Unit 40VMW030---3—High Wall
- **14.** Question: On drawing #01l12 it shows (1) LT/LE, Ultrasonic Level Transmitter. I don't see it in spec section #13312 Level Instruments? Please add to spec section.
 - Response: There is no ultrasonic level instrument shown on the referenced drawing, nor are there any new ones included in the overall project design.
- **15.** Question: Can we get an IO list for all the different PLC's? Response: Refer to I/O List question responses in Addendum No. 3.
- **16.** Question: On I-Drawing #01I34. I don't see a detail for the Temperature Transmitters or the Ultrasonic Level Transmitter. Please provide.
 - Response: For temperature instruments, install according to manufacturer's instructions. There are no ultrasonic level instruments included in the overall project design.
- **17.** Question: Per the instrument specs. There is a section that talks about "Spare Instruments shall be listed in SECTION 13410 PROCESS INSTRUMENT SCHEDULE" I don't see this anywhere? Please provide
 - Response: Instrument spares requirements are included in instrument specification sections. Refer to "Changes to the Specifications" section of this addendum for further clarification.
- **18.** Question: PLW would like to schedule a site visit at the Steven M. Clouse WRC to review the work areas proposed in the Steven M. Clouse WRC Digester Mixing and System Enhancements Phase 3 Project bid documents. While reviewing the bid documents our team has identified areas we would like to see in person. Please advise if a site visit would be possible and what time would work best with your schedule. Thanks in advance for any help on this matter.
 - Response: PLW should contact SAWS Contract Administrator to schedule a site visit.

- **19.** Question: On dwg #01M03 "Heat Exchanger Process Flow Diagram" you show (DPT) with (2) Diaphragm Seals for Differential Pressure Loop. On dwg. #01M26 "Heat Exchanger Section-A" It looks like the Diaphragm Seals are part of the process line. Should these be Annular Seals instead.? Please advise.
 - Response: Diaphragm seals shall be the concentric flange mounted type that are also known as annular seals, as specified in Section 13314 Pressure Instruments Paragraph 2.05 Diaphragm Seal Concentric Flange Mounted.
- **20.** Question: In Section 11382 Digester Tank Cleaning, Part 3 Execution, Item 3.03.E Removal of the Digester Contents it states the digester tank floor and wall shall be thoroughly washed down utilizing high-pressure wash down water.... Please confirm Fire Hose Blasting will be sufficient for high-pressure washdown.

Response: The pressure, flow, nozzle, distance from nozzle to surface, etc. that is needed to remove the debris while simultaneously not damaging the concrete will depend on the actual conditions encountered. Typical plant water pressures are generally not sufficient. Contractor shall coordinate cleaning procedures with their tank penetration and repair sub-contractor.

CHANGES TO THE SPECIFICATIONS

- 1. PRICE PROPOSAL: Delete in its entirety, and replace with the attached. Allowance for Subsurface Utility Investigation has been increased to \$350,000. The Price Proposal attached to this Addendum shall be used by all Respondents.
- 2. Specification 01130 Measurement and Payment: Delete in its entirety, and replace with the attached.
- 3. Section 13300 Process Control Systems General Provisions: Delete paragraph 1.01.I.20 and replace with the following:
 - "20. Digesters Area Generator Control Panel:
 - a. The Digesters Area Generator Control Panel will be a new PLC-based control panel located in the existing generator area Electrical Building. New control panel equipment will be installed in the existing Emerson Remote I/O panel enclosure. Remove existing Emerson Remote I/O equipment from the existing enclosure. Reuse enclosure for Digesters Area Generator Control Panel and provide all new equipment, including, but not limited to, subpanels, Rockwell Automation CompactLogix PLC racks and modules, Ethernet switch, fiber optic patch panel, terminal blocks, UPS, nameplate and other miscellaneous equipment as shown in the Drawings and specified herein."
- 4. Section 13310 Flow Instruments: Delete paragraph 2.03.A and renumber remaining paragraphs of article 2.03.
- 5. Section 13314 Pressure Instruments: Delete paragraph 2.08. A and renumber remaining paragraphs of article 2.08.
- 6. Section 13316 Temperature Instruments: Delete paragraph 2.09. A and renumber remaining paragraphs of article 2.09.

CLARIFICATIONS

1. The Engineer's Opinion of Probable Construction Cost for this project has been modified from \$23,599,000.00 to \$23,749,000.00.

END OF ADDENDUM

This Addendum is eighteen (18) pages in its entirety.

Attachments: Price Proposal

Specification Section 01130 Measurement and Payment

Joseph A. Daper, P.E.
Whitman, Requardt and Associates, LLP

SAN ANTONIO WATER SYSTEM
Steven M. Clause WRC Digester Mixing and System Enhancements Phase 3 RFCSP | ADDENDUM 4

Project Name: Steven M. Clouse WRC Digester Mixing and System Enhancements Phase 3

Solicitation No. : CO-00455

Job No(s).: 20-6501

PRICE PROPOSAL

PRO	PROPOSAL OF	, a corporation			
a pa	a partnership consisting of				
an iı	an individual doing business as				
Purs and	THE SAN ANTONIO WATER SYSTEM: Pursuant to Instructions and Invitation for Competitive Sealed Pro and materials as specified and perform the work required for the p Specifications for the following prices in the bid proposal to wit:				
PLE	PLEASE SEE ATTACHED LIST OF BID ITEMS.				
	RESPOND	PENT'S SIGNATURE & TITLE			
	FIRM'S NA	MME (TYPE OR PRINT)			
	FIRM'S AD	DDRESS			
	FIRM'S PH	HONE NO. /FAX NO.			
	FIRM'S EN	MAIL ADDRESS			
The	The Contractor herein acknowledges receipt of the following: Ado	dendum No(s)			
owi	OWNER RESERVES THE RIGHT TO ACCEPT THE OVERALL	MOST RESPONSIBLE PROPOSAL.			
to co Res	The Respondent offers to construct the Project in accordance wit to complete the Project within 1080 calendar days after the start despondent understands and accepts the provisions of damages of the project if not completed on time.	ate, as set forth in the Authorization to Proceed. The			
Com	Complete the additional requirements of the Price Proposal which	n are included on the following pages.			
Sta	Statement on President's Executive Orders				
	Has your firm previously performed work subject to the President any preceding similar executive orders (Numbers 10925 and 111				
Tex	Texas Government Code Chapter 2274 Verifications				
(1)	(1) Are you, Contractor, held or controlled by individuals Russia or a country designated by the Governor of the Code Chapter 2274? Yes \(\Boxed{\boxed} \) No \(\Boxed{\boxed}				
(2)	that is owned or controlled by citizens of or directly co- Korea, Russia or a county designated by the Gove	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 county designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274? Yes No			
(3)	(3) Are you, Contractor, headquartered in China, Iran, Nothe Governor of the State of Texas pursuant to Texas Yes No				

Rev. 091021 Addendum 4

Solicitation No. : CO-00455

Job No(s).: 20-6501

PROPOSAL LINE ITEMS

Item No.	Description	Unit	Quantity	Unit Price	Total Price
1	Trench Excavation Safety Protection	LS	1	\$	\$
2	Digesters Cleaning for 9 Digesters	DRY TON	5700	\$	\$
3	Dome Liner and Concrete Repair for 3 Digesters (Exclude #6)	SF	3400	\$	\$
4	Dome Crack Repair for 3 Digesters (Exclude #6)	LF	750	\$	\$
5	Tank Base (Floor, Wall, Joint) Repair for 3 Digesters	LF	1,050	\$	\$
6	Mixing System for 4 Digesters	LS	1	\$	\$
7	Dome Gas System and Dome Appurtenances	LS	1	\$	\$
8	Electrical and Instrumentation Upgrades	LS	1	\$	\$
9	Sludge Plug Valves Replacement	LS	1	\$	\$
10	Combined Sludge Feed Line Piping Modification	LS	1	\$	\$
11	Hot Water Distribution System	LS	1	\$	\$

Rev. 091021 Addendum 4

Project Name: Steven M. Clouse WRC Digester Mixing and System Enhancements Phase 3

Solicitation No. : CO-00455

Job No(s).: 20-6501

Item No.	Description	Unit	Quantity	Unit Price	Total Price
12	Heat Exchanger System Modifications	LS	1	\$	\$
13	Boiler Area Modifications	LS	1	\$	\$
14	Iron Sponge and Digester Building Demolition and Related Modifications	LS	1	\$	\$
SUBTOTAL (ITEMS 1 - 14)			\$		
15	Heat Exchanger Equipment	ALW	1	\$842,300.00	\$842,300.00
16	Digester Mixing Equipment	ALW	1	\$1,330,033.00	\$1,330,033.00
17	Digester Gas Equipment	ALW	1	\$533,801.00	\$533,801.00
18	Digester Gas Flow Instrumentation	ALW	1	\$353,952.30	\$353,952.30
19	Subsurface Utility Investigation	ALW	1	\$350,000.00	\$350,000.00
20	Permitting Fees	ALW	1	\$10,000.00	\$10,000.00
21	CPS Energy	ALW	1	\$300,000.00	\$300,000.00

Project Name: Steven M. Clouse WRC Digester Mixing and System Enhancements Phase 3

Solicitation No.: CO-00455

Job No(s).: 20-6501

Item No.	Description	Unit	Quantity	Unit Price	Total Price
22	Intermediate Mobilization and Demobilization	EA	1	\$	\$
100	Mobilization and Demobilization, Max 8% of Subtotal Line Items 1 - 14	LS	1	\$	\$

Mobilization shall be limited to the maximum percentage shown. If the percentage exceeds the allowable maximum stated for mobilization, Owner reserves the right to cap the amount at the percentages shown and adjust the extensions of the bid items accordingly.

TOTAL BID PRICE (TO INCLUDE LINE ITEMS 1 - 22 AND 100)	\$

Rev. 091021 Addendum 4

SECTION 01130

MEASUREMENT AND PAYMENT

PART 1- GENERAL

1.01 SUMMARY

A. Scope:

- 1. Items listed starting in Article 1.08 of this Section refer to and are the same pay items listed in the Proposal Form and constitute all pay items for completing the Work.
- 2. No direct or separate payment will be made for providing miscellaneous temporary or accessory works, plant or facility services, Contractor's or Engineer's field offices, layout surveys, project signs, sanitary requirements, testing, safety provisions and safety devices, submittals and record drawings, water supplies, power and fuel, maintenance of traffic, removal of waste, security, coordination with Owner's operations, information technology (including hardware, software, and services) required during construction, commissioning where specified, bonds, insurance, or other requirements of the General Conditions, Supplementary Conditions, Division 01 Specifications, and other requirements of the Contract Documents.
- 3. Compensation for all services, items, materials, and equipment shall be included in prices stipulated for lump sum and unit price pay items listed in this Section and included in the Contract.
- 4. Each lump sum and unit price, as bid, shall include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- 5. Record Drawings and CPM schedules shall be submitted with each pay application. Failure to properly submit will delay payment until they are properly submitted.
- 6. Contractor shall prepare and submit to Owner/Engineer for acceptance a Schedule of Values that allocates cost to each item of the Work. Schedule of Value list of line items shall correspond to each aspect of the Work, establishing in detail the portion of the Contract Price allocated to each major component of the Work.
- 7. Upon request of Owner/Engineer, support values with data that substantiate their correctness.
- 8. Submit preliminary Schedule of Values to Owner/Engineer for initial review at the pre-construction conference. Contractor shall incorporate Owner/Engineer's comments into the Schedule of Values and resubmit to Owner/Engineer. Owner/Engineer may require corrections and resubmittals until Schedule of Values is acceptable.
- 9. Schedule of Values and General Conditions will be the basis for preparing each Application for Payment.

1.02 SUBMITTALS

- A. Submit to Owner/Engineer Schedule of Values via the Internet-Based Contract and Project Management System (CPMS).
- B. Content of Schedule of Values submittals shall be in accordance with this Section.
- C. Schedule of Values: Submit on Contractor's standard form.
- D. Schedule of Estimated Progress Payments:
 - 1. Submit with initially acceptable Schedule of Values.
 - 2. Submit adjustments thereto with Application for Payment.
- E. Application for Payment.
- F. Final Application for Payment.

1.04 RELATED PROVISIONS

A. Changes in Contract Price: Refer to General Conditions and Supplementary Conditions.

1.05 UNIT QUANTITIES SPECIFIED

- A. Quantities and measurements indicated in the Proposal Form are for bidding and contract purposes only. Quantities and measurements supplied or placed in the Work and verified by the Owner/Engineer shall determine payment.
- B. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the unit prices contracted.
- C. Owner reserves the right to increase or decrease unit quantities to suit their needs.

1.06 ALLOWANCES SPECIFIED

- A. Contractor shall include in the Proposal Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. Contractor shall agree that the allowances include the cost to the Contractor of materials and equipment required by the allowances to be delivered at the Site.
- C. Contractor's costs for applicable taxes, unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the allowances have been included in the Proposal Price and is not included in the allowances, and no demand for additional payment on account of the foregoing will be accepted.

1.07 MEASUREMENT OF QUANTITIES

A. Linear and Area Measurements: Unless herein noted differently, linear shall be measured at the item centerline or mean chord, and area measurements calculated from a sufficient number of linear measurements to accurately estimate the area, with survey chain, steel tape, approved distance meter, or by use of Total Surveying Stations and Engineering Software, as approved by Owner/Engineer.

1.08 GENERAL CONSTRUCTION

A. Item 1 – Trench Excavation Safety Protection

- 1. Measurement: All costs associated with protecting trench excavations. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the lump sum price.
- 2. Payment: Lump sum payment for Item 1 will be full compensation for completing trench excavation safety protection to complete the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

B. Item 2 – Digesters Cleaning for 9 Digesters

- 1. Measurement: All costs associated with emptying, processing and disposal of contents of the nine (9) Digesters Nos. 1 through 8, and 10. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for unit price.
- 2. Payment: Unit payment for Item 2 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

C. Item 3 – Dome Liner and Concrete Repair for 3 Digesters (Exclude #6)

- 1. Measurement: All costs associated with repairs to the dome liner and associated concrete for the three (3) Digesters Nos. 5, 7 and 8. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the unit price.
- 2. Payment: Unit price payment for Item 3 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

D. Item 4 – Dome Crack Repair for 3 Digesters (Exclude #6)

- 1. Measurement: All costs associated with dome crack repair for the three (3) Digesters Nos. 5, 7 and 8. It shall include all materials, equipment, labor, tools, and incidental in accordance with the Contract Documents, complete in-place for the unit price.
- 2. Payment: Unit price payment for Item 4 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

E. Item 5 – Tank Base (Floor, Wall, Joint) Repair for 3 Digesters:

- 1. Measurement: All costs associated with tank base (floor, wall, joint) repair for the three (3) Digesters Nos. 5, 7 and 8. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the unit price.
- 2. Payment: Unit price payment for Item 5 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

F. Item 6 – Mixing System for 4 Digesters

- 1. Measurement: All costs associated with the mixing systems and the installation of the secondary overflow for the 4 digesters Nos. 5, 6, 7, and 8, other than that included in the Item 17 Digester Mixing Equipment allowance. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the lump sum price.
- 2. Payment: Lump sum payment for Item 6 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

G. Item 7 – Dome Gas System and Dome Appurtenances

- 1. Measurement: All costs associated with the dome gas system and dome appurtenances, other than that included in the Item 18 Digester Gas Equipment allowance. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete inplace for the lump sum price.
- 2. Payment: Lump sum payment for Item 7 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

H. Item 8 – Electrical and Instrumentation Upgrades

- 1. Measurement: All costs associated with the electrical and instrumentation upgrades, other than that included in the Item 19 Digester Gas Flow Instrumentation allowance. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the lump sum price.
- 2. Payment: Lump sum payment for Item 8 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

I. Item 9 – Sludge Plug Valves Replacement

- 1. Measurement: All costs associated with sludge valves replacements. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the lump sum price.
- 2. Payment: Lump sum payment for Item 9 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

J. Item 10 – Combined Sludge Feed Line Piping Modification

- 1. Measurement: All costs associated with sludge feed line piping modification and valve replacements. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the lump sum price.
- 2. Payment: Lump sum payment for Item 10 will be full compensation for completing the Work, as shown on the Contract Documents or indicated

under Division 01 through Division 17.

K. Item 11 – Hot Water Distribution System

- 1. Measurement: All costs associated with the hot water distribution system. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the lump sum price.
- 2. Payment: Lump sum payment for Item 11 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

L. Item 12 – Heat Exchanger System Modifications

- 1. Measurement: All costs associated with the heat exchangers and pump station modifications, other than that included in the Item 16 Heat Exchanger Equipment allowance. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the lump sum price.
- 2. Payment: Lump sum payment for Item 12 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

M. Item 13 – Boiler Area Modifications

- 1. Measurement: All costs associated with the Boiler Area modifications. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the lump sum price.
- 2. Payment: Lump sum payment for Item 13 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

N. Item 14 – Iron Sponge and Digester Building Demolition and Related Modifications

- 1. Measurement: All costs associated with the iron sponge and digester building demolition and related modifications. It shall include all materials, equipment, labor, tools, and incidentals in accordance with the Contract Documents, complete in-place for the lump sum price.
- 2. Payment: Lump sum payment for Item 14 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

O. Item 15 – Heat Exchanger Equipment

- 1. Measurement: Allowance for the heat exchanger equipment in the amount of \$842,300.00 associated with the project. This shall include the scope as detailed in the Olympus Technology Inc. price proposal included in the Contract Documents. Costs for all additional Work related to providing a complete and functional heating system as detailed in the Contract Documents shall be included in Item 12.
- 2. Payment: Contractor to pay and be reimbursed for actual amount by Owner. Allowance will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division

17.

P. Item 16 – Digester Mixing Equipment

- 1. Measurement: Allowance for Digester Mixing Equipment in the amount of \$1,330,033.00 associated with the project. This shall include the scope as detailed in the Evoqua price proposal included in the Contract Documents. Costs for all additional Work related to providing a complete and functional digester mixing systems as detailed in the Contract Documents shall be included in Item 6.
- 2. Payment: Contractor to pay and be reimbursed for actual amount by Owner. Allowance will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

Q. Item 17 – Digester Gas Equipment

- Measurement: Allowance for Digester Gas Equipment in the amount of \$533,801.00 associated with the project. This shall include the scope as detailed in the L&J Technologies price proposal included in the Contract Documents. Costs for all additional Work related to providing a complete and functional digester gas system as detailed in the Contract Documents shall be included in Item 7.
- 2. Payment: Contractor to pay and be reimbursed for actual amount by Owner. Allowance will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

S. Item 18 – Digester Gas Flow Instrumentation

- 1. Measurement: Allowance for Digester Gas Flow Instrumentation in the amount of \$353,952.30 associated with the project. This shall include the scope as detailed in the Panametrics price proposal included in the Contract Documents. Costs for all additional Work related to providing a complete and functional digester gas system as detailed in the Contract Documents shall be included in Item 8.
- 2. Payment: Contractor to pay and be reimbursed for actual amount by Owner. Allowance will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

T. Item 19 – Subsurface Utility Investigation

- 1. Measurement: Allowance for \$350,000.00 for completion of unforeseen subsurface utility investigation. This shall include furnishing all tools, labor, materials, equipment and incidentals necessary for the completion of this item to locate existing utilities without any damage.
- 2. Payment: Contractor to pay and be reimbursed for actual amount by Owner.

U. Item 20 – Permitting Fees

1. Measurement: Allowance for \$10,000.00 for fees associated with this project. This shall include furnishing all labor, materials, tools, equipment,

incidentals, required to obtain all necessary permits.

2. Payment: Contractor to pay and be reimbursed for actual amount by Owner.

V. Item 21 – CPS Energy

- 1. Measurement: This item shall be an allowance for CPS Energy fees. Contractor shall provide receipts from CPS Energy to SAWS for reimbursement for the fees. Payments to the Contractor for the work associated with natural gas pipeline work shall also be made from this line item. Any unused portion of the allowance will be credited to SAWS. Contractor is responsible for coordination and scheduling with CPS Energy prior to commencing work.
- 2. Payment: Contractor to pay and be reimbursed for actual amount by Owner.

W. Item 22 – Intermediate Mobilization and Demobilization

- 1. Intermediate Mobilization and Demobilization: this bid item will only be paid if prior authorized in writing by Owner. This bid item is limited to delays outside of the Contractor's control that are not otherwise provided for in the General Conditions. Examples of these types of delays would be Owner easement acquisition, permitting issues (only those permits not controlled by the Contractor), or other Owner activities. Any other provision contained herein notwithstanding Contractor will not be entitled to compensation under this bid item for work suspended during the 10 cumulative days allowed for by the Contract in the General Conditions, Article IV, Paragraph 4.8 Suspension of Work by Owner.
- W. Item 100 Mobilization and Demobilization, Max 8% of Subtotal Line Items 1 14
 - 1. Measurement: This item shall include project move-in and move-out of personnel and equipment, for all work including furnishing all labor, materials, tools, equipment and incidentals required to mobilize, demobilize, clean site upon project completion, and bond and insure the Work in accordance with the Contract Documents, complete in place. Maximum of 8% of the total of Line Items 1 through 14.
 - 2. Payment: Lump sum payment for Item 100 will be full compensation for completing the Work, as shown on the Contract Documents or indicated under Division 01 through Division 17.

1.09 SCHEDULE OF VALUES FORMAT AND CONTENT

- A. Organization and Major Elements of Schedule of Values
 - 1. Prepare Schedule of Values on the "progress estimate" or "continuation sheets", as applicable, of the Application for Payment form indicated herein and in accordance with the Internet-Based Contract and Project Management System (CPMS) system.
 - 2. Include in Schedule of Values itemized list of Work for each major work area included in the Work, for each payment item specified herein.
 - 3. Organization in Accordance with Specification Sections:

- a. Within each work area, organize the Schedule of Values by the various Specifications Section numbers and titles included in the Contract Documents.
- b. Label each row in the Schedule of Values with the appropriate Specifications Section number. Include an amount for each row in the Schedule of Values.
- c. List sub-items of major products or systems, as appropriate or when requested by Owner or Engineer.
- 4. Include in Schedule of Values unit price payment items with their associated quantity.

Provide in the Schedule of Values detailed breakdown of unit prices.

- B. Requirements for preliminary Schedule of Values and Schedule of Values are:
 - 1. Subcontracted Work:
 - a. Schedule of Values shall show division of Work between Contractor and Subcontractors.
 - b. Line items for Work to be done by Subcontractor shall include the word, "(SUBCONTRACTED)".
 - 2. Apportionment between Materials and Equipment, and Installation:
 - a. Schedule of Values shall include breakdown of costs for materials and equipment, installation, and other costs used in preparing the Bid by Contractor and each Subcontractor.
 - b. List purchase and delivery costs for materials and equipment for which Contractor may apply for payment as stored materials.
 - 3. Sum of individual values shown on the Schedule of Values shall equal the total of associated payment item. Sum of payment item totals in the Schedule of Values shall equal the Contract Price.
 - 4. Overhead and Profit: Include in each line item a directly proportional amount of Contractor's overhead and profit. Do not include overhead and profit as separate item(s).
 - 5. Include separate line item for each unit price item.
 - 6. Bonds and Insurance Costs: Include line item for bonds and insurance in accordance with General Conditions. Bonds and insurance shall not amount to more than 2% of the Contract price.
 - 7. Include relevant items for the General Conditions, permits (when applicable), Work Progress Schedule, and other items required by Engineer. Include such items in Applications for Payment on payment schedule acceptable to Owner/Engineer.
 - 8. Line items for Site maintenance such as dust control, compliance with storm water pollution prevention plans and permits, spill prevention control and countermeasures plans, and for construction photographic documentation; temporary utilities and temporary facilities, field offices, temporary controls, field engineering, and similar Work shall be included in the Schedule of Values and proportioned in Applications for Payment throughout duration of the Work.
 - 9. Mobilization and Demobilization:
 - a. Document for Owner/Engineer the activities included in

- mobilization and demobilization line item.
- b. Mobilization and Demobilization will be limited to eight percent of the Contract Price, excluding allowances and Intermediate Mobilization/Demobilization, and will be paid as follows:
 - 1) When 1% of the adjusted contract amount for construction items is earned, 50% of the "lump sum" mobilization bid item will be paid.
 - 2) When 5% of the adjusted contract amount for construction items is earned, 75% of the "lump sum" mobilization bid item will be paid.
 - 3) When 10% of the adjusted contract amount for construction items is earned, 90% of the "lump sum" mobilization bid item will be paid.
 - 4) The remaining 10% of the mobilization bid item will be paid upon completion of all work.
- c. Demobilization shall be not less than 1 percent of the Contract Price and shall be included with the Application for Payment following Substantial Completion, or other schedule acceptable to Owner/Engineer.
- 10. Intermediate Demobilization and Remobilization
 - a. This item shall govern the contractor expenses for an Owner-directed intermediate Project demobilization of personnel and equipment that occurs after the Contract Notice to Proceed has been given and work has been commenced, and the subsequent remobilization of personnel and equipment to complete the project.
 - b. Each Intermediate Demobilization and Remobilization shall only be authorized upon a written directive by the Owner.
- 11. Costs for Shop Drawings, Samples, and other submittals; operations and maintenance manuals; field testing; and training of operations and maintenance personnel shall be as follows, unless otherwise accepted by Owner/Engineer:
 - a. No direct or separate payment will be made for these items.
- 12. Project Record Documents:
 - a. No direct or separate payment will be made for these items.
- 13. Coordinate Schedule of Values with cost-loading of the Progress Schedule, in accordance with General Conditions.

1.10 SCHEDULE OF VALUES

- A. Prepare a separate Schedule of Values for the schedule of the Work under the Agreement.
- B. Upon request of Owner/Engineer, provide support documentation to support the accuracy of the Schedule of Values.
- C. Unit Price Work: Reflect unit price quantity and price breakdown from Proposal Form
- D. Lump Sum Work:

- 1. Reflect Schedule of Values format included in Proposal Form, specified allowances, alternates, and equipment selected by Owner, as applicable.
- 2. List bonds and insurance premiums, mobilization, demobilization, preliminary and detailed progress schedule preparation, facility startup, and contract closeout separately.
- 3. Break down by Division 1 through 17 with appropriate subdivision of each specification for each Project facility.
- E. An unbalanced or front-end loaded schedule will not be acceptable.
- F. Summation of the complete Schedule of Values representing all the Work shall equal the Contract rice.
- G. Submit Schedule of Values via the Internet-Based Contract and Project Management System (CPMS) in a spreadsheet format compatible with latest version of Microsoft Excel.

1.11 SCHEDULE OF ESTIMATED PROGRESS PAYMENTS

- A. Show estimated payment requests throughout Contract Times aggregating initial Contract Price.
- B. Base estimated progress payments on initially acceptable progress schedule. Adjust to reflect subsequent adjustments in progress schedule and Contract Price as reflected by modifications to the Contract Documents.

1.12 APPLICATION FOR PAYMENT

- A. Scope: Contractor's requests for payment shall be in accordance with the Agreement, General Conditions and Supplementary Conditions, and the Specifications.
- B. Form: Applications for Payment shall be in accordance with the Owner's CPMS format and the Sub-contracting Payment and Utilization Reporting (S.P.U.R.) System.
- C. Procedure:
 - 1. Review with Owner/Engineer quantities and the Work proposed for inclusion in each progress payment. Application for Payment shall cover only the Work and quantities recommended by the Owner/Engineer.
 - 2. Contractor will be required to review with Owner/Engineer the status of record documents in connection with Owner's review of each Application for Payment.
 - 3. Submit Application for Payment via CPMS. Upload the following to Owner's CPMS with each monthly payment application:
 - a. Updated Work Progress Schedule as pdf and Microsoft Project or Primavera files.
 - b. Updated redlines/record drawings.
 - c. Narrative/Daily Log documenting Weather Days/Delay Request for previous month.

1.13 NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

- A. Payment will not be made for following:
 - 1. Loading, hauling, and disposing of rejected material.
 - 2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.
 - 3. Rejected loads of material, including material rejected after it has been placed by reason of failure of Contractor to conform to provisions of Contract Documents.
 - 4. Material not unloaded from transporting vehicle.
 - 5. Defective Work not accepted by Owner.
 - 6. Material remaining on hand after completion of Work.

END OF SECTION 01130