City of Chattanooga Moccasin Bend WWTP Secondary Clarifier Upgrades Contract No. W-14-006-201 For Bids Due: September 29, 2016, 2:00 pm (changed by Addendum No. 7)

## ADDENDUM TABLE OF CONTENTS

Addendum (Total – 9 pages) Addendum Instructions Changes to Specifications and Contract Documents Changes to Contract Drawings Questions by Bidders

Addendum Attachments

Attachment No. 1 – Section 004100 – Bid Form (9 pages) Attachment No. 2 – Section 01025 – Measurement and Payment (9 pages) Attachment No. 3 – Section 02200 – Earthwork – Offsite Stockpile Drawing (1 page) Attachment No. 4 – Drawing C01 (1 page)

City of Chattanooga Moccasin Bend WWTP Secondary Clarifier Upgrades Contract No. W-14-006-201 For Bids Due: September 29, 2016, 2:00 pm (changed by Addendum No. 7)

## ADDENDUM INSTRUCTIONS

Contractors submitting Proposals for the above-named Project shall take note of the following changes, additions, deletions, clarifications, etc. in the Contract Documents, which shall become a part of and have precedence over anything contrarily shown or described in the Contract Documents, and all such shall be taken into consideration and be included in the Contractor's Bid Proposal. Where changes, additions, deletions, clarifications, etc. are made to portions of an article, paragraph, or subparagraph, the unaltered provisions of that article, paragraph, subparagraph, or clause shall remain in effect.

## RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED BY ENTRY OF THE ADDENDUM NUMBER IN THE REQUISITE SPACE ON THE BID FORM. FAILURE OF A BIDDER TO ACKNOWLEDGE THIS ADDENDUM MAY CAUSE THE BID TO BE REJECTED AS INCOMPLETE.

## CHANGES TO SPECIFICATIONS AND CONTRACT DOCUMENTS

- 1. SECTION 004100 BID FORM
  - A. Delete this Section in its entirety and replace with the Section included as an attachment to this Addendum.
- 2. SECTION 01025 MEASUREMENT AND PAYMENT
  - A. Delete this Section in its entirety and replace with the Section included as an attachment to this Addendum.
- 3. SECTION 01460 TEMPORARY BYPASS PUMPING
  - A. Paragraph 2.01.A. After "30 MGD" add ", an average flow of approximately 70 MGD".
  - B. Paragraph 2.02.C. Delete the third sentence in its entirety.
- 4. SECTION 02200 EARTHWORK
  - A. Paragraph 3.12.D. Delete the first sentence in its entirety and replace with the following sentence: "Any surplus excavated material not used for backfilling or embankment suitable for reuse shall be deposited at an offsite location located at Dixie Circle, Lupton City, TN. The Contractor shall perform work at this site as shown in the drawing attached at the end of this Section. The Contractor shall apply for and obtain City of Chattanooga Land Development Permit for the offsite location. Application and permit fees will be paid for by Owner."
  - B. Attach to the end of this Section the offsite stockpile drawing included as an attachment to this Addendum.

City of Chattanooga Moccasin Bend WWTP Secondary Clarifier Upgrades Contract No. W-14-006-201 For Bids Due: September 29, 2016, 2:00 pm (changed by Addendum No. 7)

## 5. SECTION 15731 – DUCTLESS SPLIT SYSTEM AIR CONDITIONING UNIT

A. Paragraph 1.02.C. Delete this paragraph in its entirety and replace with the following paragraph:

"C. Control wiring from Control Panels to field devices and equipment shall be provided by HVAC Contractor. Conduit for control wiring shall be provided under Division 16 and as shown on the Drawings, along with power wiring and conduit."

- 6. SECTION 15734 PRECISION CONTROL AIR CONDITIONING UNITS
  - A. Paragraph 2.02.B. Add the following to the end of the fifth sentence "(except stainless steel panel surfaces)".
- 7. SECTION 16482 MOTOR CONTROL CENTERS
  - A. Paragraph 2.01.C. After "Allen-Bradley" add ", General Electric Company Evolution Series E9000".

## CHANGES TO THE CONTRACT DRAWINGS

- 1. DRAWING C01
  - A. Delete this Drawing in its entirety and replace with the Drawing included as an attachment to this Addendum.
- 2. DRAWING M702
  - A. Section A. Add the following note with arrow pointing at new gate: "MOUNT GATE TO CHANNEL FLOOR, AND INSTALL MOUNTING ANGLES WITH GASKETS ON WALLS AS NEEDED TO MOUNT/SEAL".
- 3. DRAWING M770
  - A. Note 6. Delete "TUB" and replace with "AREA AND BUILDING".
- 4. DRAWING D01
  - A. Delete Detail 0227024.

City of Chattanooga Moccasin Bend WWTP Secondary Clarifier Upgrades Contract No. W-14-006-201 For Bids Due: September 29, 2016, 2:00 pm (changed by Addendum No. 7)

### **QUESTIONS BY BIDDERS**

1. QUESTION: Plan Sheet C21 delineates and denotes "Excavation Support", between new Secondary Clarifier No. 16 and the existing plant access road. We have reviewed the existing interferences in this area and feel that, if it will be permissible to close the existing plant access road for a short time, the excavation in this area can be laid back and this portion of the new structure can be safely constructed without temporary shoring. It should be reasonable to expect to have the existing access road back in service, in a temporary state, within +/- 3 months. Since portions of this existing access road are already being cut and patched, we are requesting permission to remove the portion of the existing asphalt pavement/concrete curb & gutter, between the 2 UG electrical crossings and replace this entire section with new full depth asphalt paving and new concrete curb & gutter. This would be very similar to what is shown to be done with the existing plant access road west of new Chlorine Contact Tank No. 7 and would be done with the understanding that access would be maintained for Oxygen, Sodium Bisulfite & Sodium Hypochlorite deliveries as stipulated in Note 28 on Plan Sheet C01 and Note 1 on Plan Sheet C35. Please review and advise if this will be an acceptable alternative to installing expensive temporary shoring in this area.

CLARIFICATION: Shoring is generally shown and is intended for protection of existing facilities. Alternate excavation details may be acceptable, but sufficient information to make a determination at this time is not available. Access must be maintained for chemical deliveries and other operations and maintenance activities as specified and shown on the Drawings.

2. QUESTION: This question is submitted to further clarify the clarifications provided with Addendum No. 5, addressing requirements to maintain traffic on existing plant access roads. The clarifications provided with Addendum No. 5 indicated that "It is understood that part of the road between the Equalization Basins and the Oxygenation Tanks will be blocked for a short period of time while the temporary bypass pumping or piping system is operating." However, contrary to the specific clarification, Specification Section 01460, 2.02, C. states "Where pipes cross plant access roads, Contractor shall provide ramps or other means necessary to allow fully loaded semi-trucks to pass." Additionally, if the bypass piping option is selected, it would not be practical to construct temporary ramps or other means to allow a fully loaded semi-truck to pass over the single larger pipe (72" dia.). Therefore, since it has been clearly stated that "the clarifications are provided for information only and are not made part of the Contract Documents", please provide an unambiguous statement of exactly what existing plant access roads can be closed for construction and for what length of time. Additionally, please provide any other specific constraints or criteria that will apply to the project requirements for not "impeding the Owner's ability to conduct business". Once these additional clarifications are provided, please make these a part of the Contract

MBWWTP Secondary Clarifier Improvements

City of Chattanooga Moccasin Bend WWTP Secondary Clarifier Upgrades Contract No. W-14-006-201 For Bids Due: September 29, 2016, 2:00 pm (changed by Addendum No. 7)

Documents by revising the existing Contract provisions, like the example previously provided herein. Due to the magnitude of the work included in this project that will have an impact on the internal plant traffic, the clarifying requirements requested could have a significant impact on the order of magnitude of the budgets that will be necessary to comply with the traffic maintenance requirements established.

CLARIFICATION: It is understood that part of the road between the Equalization Basins and the Oxygenation Tanks will be blocked for a short period of time while the temporary bypass pumping or piping system is operating. It is not possible to evaluate all possible road closure and access scenarios during bidding. Viable alternatives for maintaining access and coordination of road closures will be reviewed during construction.

3. QUESTION: In order to comply with the design requirements for the temporary bypass piping system, our design engineers have requested the design data and operating parameters for the existing EQPS pumps. Please provide this information for our use.

CLARIFICATION: The design parameters for the temporary piping system, including velocity, headloss, and maximum pipe elevation limitations, are stated in Section 01461 and shown on the Drawings. Each pump shall have a separate free discharge as stated on the Drawings. The existing pumps can operate within the range of flows and other criteria specified. Additional information is not available at this time.

4. QUESTION: Please refer to Plan Sheets C10 & C30, specifically, the requirement to remove and modify the existing 54" FE line between existing Chlorine Contact Tank No. 5 and existing Junction Box No. 3. The southern edge of the existing Secondary Clarifier Walkway and Wall Support, delineated and called out on Plan Sheet C20, is located immediately adjacent to the existing 54" FE line and could actually be located over-top of the existing line. We previously requested and are still awaiting receipt of some missing details from the Contract 28G As-Built Documents, regarding this "wall support" (Sheet \$709). We looked back into our limited project files, that we keep on-site, and were reminded that 3D actually built this section of concrete as part of the structural remediation work we performed for the Contract 28G Design Engineer, after the original 28G workscope was complete. Please understand that all bidders need to be aware that this "walkway" is not merely a 4" thick concrete sidewalk but instead, a 30" thick heavily reinforced horizontal concrete beam running the full length of the existing Chlorine Contact Tank No. 5 west exterior wall and we have been unable to come up with an obvious way to support and protect this existing mass of concrete and perform the work called for on the 54" FE line. It does not appear that the existing 54" PCCP 90 degree bend will interfere with the SE corner of new Chlorine Contact Tank No. 7; therefore, we propose that these modifications be deleted from the project at this time and that any potential interferences be addressed, if necessary, once the as-built information can be confirmed in the field.

City of Chattanooga Moccasin Bend WWTP Secondary Clarifier Upgrades Contract No. W-14-006-201 For Bids Due: September 29, 2016, 2:00 pm (changed by Addendum No. 7)

CLARIFICATION: Refer to clarification in Addendum No. 6 regarding 54-inch FE pipe.

5. QUESTION: Article 15 – Submittal of Bid, Item 15.01, E. calls for the Certification By Proposed Prime or Subcontractor Regarding Equal Employment Opportunity form be submitted with the Bid. In the past, when these certifications have been required, the certification by the proposed Prime is all that has been required to be submitted with the Bid since we will not know what Subcontractors we will be using or exactly which Subcontractors actually provided us a bid, until very late on Bid Day. Therefore, in the past, we have been able to submit the Subcontractor Certifications after the Bid deadline and wanted to confirm that this would be acceptable for this bid as well.

CLARIFICATION: The Equal Employment Opportunity form shall be submitted with the Bid.

6. QUESTION: Refer to Drawing E02 for the new Overhead Utility shown to the west of Chlorine Contact Tank No. 7. This line will be impacted by the excavation for the new tank unless shoring is used along the west side. Please advise whether the proposed overhead line can be installed further to the west so as not to be impacted by an open-cut excavation for the new chlorine contact tank.

CLARIFICATION: It may be possible to shift the overhead lines but there is not sufficient information available at this time to make a determination. Access in/around the Dechlorination Facility must be maintained.

7. QUESTION: Please provide the burst pressure for the rupture disk shown on drawing M502.

CLARIFICATION: The burst pressure for the rupture disk on drawing M502 is 150 PSI.

8. QUESTION: Section 02200 Earthwork, Article 3.12D refers to an on-site disposal area for suitable excess material "as indicated on the Drawings or as directed by the Engineer" and also states that clearing and grubbing may be required. a) No disposal area is shown on the Drawings. Can you confirm the Contractor will be allowed to dispose of excess suitable material on-site? b) If on-site disposal of excess suitable material will be allowed, can you tell us where the available disposal area is located?

CLARIFICATION: This item has been clarified by changes included in this Addendum.

 QUESTION: Please refer to Specification Section 15731 – Ductless Split System Air Conditioning Unit, paragraph 1.02-C, item 3 which states "Control wiring and conduit from Control Panels to field devices and equipment shall be provided by HVAC Contractor." However, Electrical Conduit and Wire Schedules on Sheets E511 and E774, indicate at

City of Chattanooga Moccasin Bend WWTP Secondary Clarifier Upgrades Contract No. W-14-006-201 For Bids Due: September 29, 2016, 2:00 pm (changed by Addendum No. 7)

HVAC related field devices and equipment "Wiring Installed by HVAC Contractor". Please clarify wiring and conduit to be installed by HVAC contractor.

CLARIFICATION: This item has been clarified by changes included in this Addendum.

10. QUESTION: Please reference the General Conditions EJCDC C-700 paragraph 5.07 Waiver of Rights, subparagraph B. and C., which have both been deleted from the contract. In reviewing this with our insurance provider they indicate they have never seen this important section of the EJCDC document deleted from the contract before. By deleting this language you have placed a considerable monetary risk on the Contractor for loss due to business interruption, loss of use, or other consequential damages. It is virtually impossible to assign a price too this open ended risk which has been shifted to the Contractor based on the deletion of this language. We are requesting the reinstatement of paragraphs 5.07 B. and C., to the contract, in order to make this a fair business agreement for all parties.

CLARIFICATION: No additional changes to the General Conditions and Supplementary Conditions will be made at this time.

11. QUESTION: Referencing Specification Section 15007, please consider Flowtite Pipe as an equal to the specified Hobas Pipe USA products.

CLARIFICATION: Alternate piping materials cannot be reviewed at this time.

12. QUESTION: Will the project require compliance with the most current wage decision and if so can this be incorporated in the documents by addendum? The most current "Heavy" wage decision does not provide rates for some of the required class of workers. According to the US Dept of Labor the Contracting Agency should submit form SF-308 to provide direction on how to classify those workers. At a minimum bidding contractors will need wage rates for Carpenters- Form work, Iron Workers- Reinforcing ( due to the large amount of concrete construction on the project), pipefitter, bricklayer/mason, concrete finisher as well as Painters. Please provide minimum wage rates for these trades or advise if minimum wage rates will be applicable for these trades if not provided.

CLARIFICATION: A request for clarification has been submitted to Southeast Tennessee Development District regarding additional wage rates. In case they are not able to provide a determination before the bid opening, they have recommended using a general labor hourly rate of \$18.75. Additional classifications can be requested during construction.

13. QUESTION: Please refer to Plan Sheet M702, Detail 1/M702 and Section A/702. A 72"wide 120" tall Slide Gate is shown to be installed face to face and bottom of channel. This is a live flow channel and per Specification Section 01520 Operational Constraints 1.04, 2.d., the contractor is only allowed 8 hours of down time to install. This flow channel

City of Chattanooga Moccasin Bend WWTP Secondary Clarifier Upgrades Contract No. W-14-006-201 For Bids Due: September 29, 2016, 2:00 pm (changed by Addendum No. 7)

is likely not perfectly square or plumb due to the width and height of the concrete channel and attempting to fabricate and install a gate surface mount to the sides and bottom of an existing concrete flow channel without a recess in the wall is questionable if it will seal off the flow when closed. The downtime needs to be revised to 4 or 5 days to allow a concrete recess to be cut into the walls and floor and the gate installed in a recess frame or move the location somewhere in the channel where it can be surface mounted to a face of wall opening. Please review and advise.

CLARIFICATION: Cutting a recess in the channel walls and floor is not currently planned. Alternatives could be considered during construction depending on plant operations (there is not sufficient information available at this time to make a determination).

14. QUESTION: Refer to Addendum 8, Question #30 regarding the SCADA allowance. The clarification comment indicates that the question has been addressed by changes in the addendum but we do not see where Question #30 has been addressed. Will this information be included in the next addendum?

CLARIFICATION: System Programmer responsibilities were clarified through changes to Section 17000 included in Addendum No. 8. All other instrumentation work shall be the responsibility of the Instrumentation Subcontractor.

15. QUESTION: Drawing M770, Note 6 specifies double containment for SBS piping located "outside of a containment tub". We assume no dual containment piping will be required within the chemical storage area. Can you confirm this is correct? Please clarify whether dual containment piping is required in the pump room.

CLARIFICATION: This item has been clarified by changes included in this Addendum. Double containment is not require inside the containment (tank storage) area or inside the building.

16. QUESTION: Addendum 6 addressed question of notes 1, 2 & 3 being selected under schedule for Precision Control Air Conditioning Unit. The specification is calling for stainless steel interior and exterior cabinet – the unit manufacturer says they do not do a coating on stainless steel as they either do stainless steel for corrosive environments or they coat a galvanized unit. Should the units be stainless steel interior and exterior cabinets and coated? Should they be stainless steel interior and exterior cabinet with coated coils only? Please advise to bid appropriately.

CLARIFICATION: Materials shall be as specified and as shown on the Drawings. Coating of stainless steel surfaces is not required.

17. QUESTION: What type of piping is to be provided for storm drains?

City of Chattanooga Moccasin Bend WWTP Secondary Clarifier Upgrades Contract No. W-14-006-201 For Bids Due: September 29, 2016, 2:00 pm (changed by Addendum No. 7)

CLARIFICATION: New storm drain (SD) piping shall be as specified in Section 15390.

#### ++ END OF ADDENDUM ++

ISSUED: September 26, 2016



City of Chattanooga Moccasin Bend WWTP Secondary Clarifier Upgrades Contract No. W-14-006-201 For Bids Due: September 29, 2016, 2:00 pm (changed by Addendum No. 7)

# ADDENDUM ATTACHMENTS

#### MOCCASIN BEND WWTP SECONDARY CLARIFIER UPGRADES CONTRACT NUMBER W-14-006-201

#### **ARTICLE 1 – BID RECIPIENT**

1.01 This Bid is submitted to:

City of Chattanooga, Tennessee Purchasing Department 101 E. 11<sup>th</sup> Street, Suite G13 Chattanooga, Tennessee 37402

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

#### **ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS**

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for period of time after the Bid opening as stated in the Advertisement for Bids, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

#### **ARTICLE 3 – BIDDER'S REPRESENTATIONS**

- 3.01 In submitting this Bid, Bidder represents that:
  - A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

Addendum No.	Addendum Date

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

- C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in SC-4.02 as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in SC-4.06 as containing reliable "technical data."
- E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.
- F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- J. Where this Bid Form contains the provision for a bid based on a lump sum price, the Bidder shall be responsible for having prepared its own estimate of the quantities necessary for the satisfactory completion of the Work specified in these Contract Documents and for having based the lump sum price bid on its estimate of quantities.

## ARTICLE 4 – BIDDER'S CERTIFICATION

- 4.01 Bidder certifies that:
  - A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;

- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
  - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
  - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
  - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
  - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

## ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

ltem No.	Description	Estimated Qty.	Unit	Unit Price	Total Price
1.	Furnishing all products, materials and equipment and performing all labor necessary to complete and put into operation the Moccasin Bend WWTP Secondary Clarifier Upgrades, including all work shown on the Drawings and/or specified and not included in Items 2 through 5 below, the total amount of:		Lump Sum		\$
2.	Temporary Bypass Pumping or Piping				
	Temporary Bypass Pumping				
a.	Rental / Operation	1	LS	\$	\$
b.	Pump System Installation	1	LS	\$	\$
c.	Pump System Installation Mobilization	1	LS	\$	\$
d.	Pump System Tear Down	1	LS	\$	\$
e.	Pump System Tear Down Mobilization	1	LS	\$	\$
f.	Additional Monthly Rate	1	MO	\$	
g.	Additional Weekly Rate	1	WK	\$	
h.	Additional Daily Rate	1	DAY	\$	
	Temporary Bypass Piping		·		
a.	Temporary Piping Purchase / Rental	1	LS	\$	\$
b.	New Piping	1	LS	\$	\$
C.	Temporary Structure(s)	1	LS	\$	\$
d.	Additional Monthly Rate	1	MO	\$	
e.	Additional Weekly Rate	1	WΚ	\$	
f.	Additional Daily Rate	1	DAY	\$	
3.	Offsite Soil Stockpiling		·		
a.	Hauling	27,000	TON	\$	\$
b.	Initial Site Grading	1	LS	\$	\$
C.	Scarify and Remove Existing Pavement	3,756	SY	\$	\$
d.	Erosion Control Silt Soxx	410	LF	\$	\$
e.	Manhole Riser (4-ft dia)	9	EA	\$	\$
f.	Manhole Grade Rings (1-in thick)	4	EA	\$	\$

g.	Temporary Seeding	4,560	SY	\$	\$ 
h.	Construction Entrance	1	EA	\$	\$ 
i.	Cleaning of Construction Entrance Pit	4	EA	\$	\$ 
j.	Street Sweeping in Lupton City	60	DAY	\$	\$
4.	Allowances				
a.	Construction Materials Testing		ALLOWANCE		\$ 30,000.00
b.	Utility Conflict Resolution	ALLOWANCE			\$ 5,000.00
c.	Construction Verification Surveying	ALLOWANCE			\$ 5,000.00
d.	Peristaltic Pump Equipment	ALLOWANCE			\$ 48,268.00
e.	Magnetic Flow Meter Equipment	ALLOWANCE			\$ 103,067.42
f.	Outdoor Switchgear Equipment	ALLOWANCE			\$ 276,282.00
g.	SCADA Integration	ALLOWANCE			\$ 95,000.00
h.	Engineer Overtime Inspection	ALLOWANCE			\$ 50,000.00
i.	Owner's Use	ALLOWANCE			\$ 50,000.00
* * * Additional Work If Ordered By The Engineer * * *					
5.	Contingency Items				
a.	Undercutting and Aggregate Backfill	10	CY	\$	\$
b.	Concrete	10	CY	\$	\$
C.	Concrete Reinforcing Steel	100	LB	\$	\$

#### BID TOTAL, ITEMS 1 THROUGH 4, INCLUSIVE, THE AMOUNT OF \_\_\_\_\_

DOLLARS (\$).	
/	-

Unit Prices have been computed in accordance with Paragraph 11.03.B of the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

### **ARTICLE 6 – TIME OF COMPLETION**

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

## ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
  - A. Statement of Bidders Qualifications
  - B. Affidavit of No Collusion by Prime Bidder
  - C. Drug-Free Workplace Affidavit
  - D. Attestation Regarding Personnel Used in Contract Performance
  - E. Certification By Proposed Prime or Subcontractor Regarding Equal Employment Opportunity
  - F. Certification Regarding Debarment, Suspension and Other Responsibility Matters

### **ARTICLE 8 – DEFINED TERMS**

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

# **ARTICLE 9 – BID SUBMITTAL**

9.01	This Bid submitted by:	
<u>An Inc</u>	dividual	
	Name (typed or printed):	
	By: (SE/	AL)
	(Individual's signature) Doing business as:	
	Attest:	
	(Notary) Name (typed or printed):	
<u>A Part</u>	tnership	
	Partnership Name: (SE/	AL)
	By:(Signature of general partner – attach evidence of authority to sign)	
	Name (typed or printed):	
	Attest: (Signature of another Partner)	
	Name (typed or printed):	
<u>A Cor</u>	poration	
	Corporation Name: (SE/	AL)
	State of Incorporation:	
	Type (General Business, Professional, Service, Limited Liability):	
	By:	
	(Signature) Name (typed or printed):	
	Title:	
	(CORPORATE SEAL) Attest: (Signature of Corporate Secretary)	
	(Signature of Corporate Secretary) Name (typed or printed):	
	Date of Qualification to do business in Tennessee is	

### A Joint Venture

Name of Joint Venturer:		
First Joint Venturer Name:		
By:		
Name (typed or printed):		
Title:		
Second Joint Venturer Name:	(SEAL)	
Ву:		
(Signature of second joint venture partner)		
Name (typed or printed):		
Title:		

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

### All Bidders shall complete the following:

Bidder's Business address:		
Phone:	Facsimile:	
Primary Contact:		
E-mail:		
Submitted on	, 201	
State Contractor License No		

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## **SECTION 01025**

## MEASUREMENT AND PAYMENT

#### PART 1 -- GENERAL

#### 1.01 THE REQUIREMENT

- A. The Bid Form lists each item of the Project for which payment will be made. No payment will be made for any items other than those listed in the Bid Form.
- B. Required items of work and incidentals necessary for the satisfactory completion of the work which are not specifically listed in the Bid Form, and which are not specified in this Section, shall be considered incidental to the work. All costs thereof shall be considered as included in the lump sum or unit prices bid for the various Bid items. The Contractor shall prepare the Bid accordingly.
- C. Contractor shall include in the prices provided for the items listed herein adequate amounts considered by Contractor to cover Contractor's overhead and profit for each item.
- D. The quantities shown for extra work unit price pay items listed in the Bid Form represent estimates made solely for the purpose of comparison of Bids. Owner makes no guarantee that actual required quantities will agree with those included in the Bid Form. The Owner reserves the right to increase or decrease any quantity or to eliminate any quantity as Owner may deem necessary. Contractor will not be entitled to any adjustment in the unit bid price as a result of any change in an estimated quantity and agrees to accept the unit bid prices as complete and total compensation for any additions caused by changes or alterations in the Work ordered by the Owner.
- E. Work includes furnishing all plant, labor, equipment, tools and materials, which are not furnished by the Owner and performing all operations required to complete the work satisfactorily, in place, as specified and as indicated on the Drawings.

#### 1.02 DESCRIPTIONS

- A. Measurement of an item of work will be by the unit indicated in the Bid.
- B. Final payment quantities shall be determined from the record drawings. The record drawing lengths, dimensions, quantities, etc. shall be determined by a survey after the completion of all required work. Said survey shall conform to these Specifications. The precision of final payment quantities shall match the precision shown for that item in the Bid.
- C. Payment will include all necessary and incidental related work not specified to be included in any other item of work listed in the Bid.
- D. Unless otherwise stated in individual sections of the Specifications or in the Bid, no separate payment will be made for any item of work, materials, parts, equipment, supplies or related items required to perform and complete the work. The costs for all such items required shall be included in the price bid for item of which it is a part.

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E. Payment will be made by extending unit prices multiplied by quantities provided and then summing the extended prices to reflect actual work. Such price and payment shall constitute full compensation to the Contractor for furnishing all plant, labor, equipment, tools and materials not furnished by the Owner and for performing all operations required to provide to the Owner the entire Project, complete in place, as specified and as indicated on the Drawings.

### 1.03 ALLOWANCES

- A. General
  - 1. The Contractor shall include in the Bid Total all allowances stated in the Contract Documents. These allowances shall cover the net cost of the services provided by a firm selected by the Owner. The Contractor's handling costs, labor, overhead, profit and other expenses contemplated for the original allowance shall be included in the items to which they pertain and not in allowances.
  - 2. No payment will be made for nonproductive time on the part of testing personnel due to the Contractor's failure to properly coordinate testing activities with the work schedule or the Contractor's problems with maintaining equipment in good working condition.
  - 3. No payment shall be provided for services which fail to verify required results.
- B. Should the net cost be more or less than the specified amount of the allowance, the Contract will be adjusted accordingly by change order. The amount of change order will not recognize any changes in handling costs at the site, labor, overhead, profit and other expenses caused by the adjustment to the allowance.
- C. Documentation
  - 1. Submit copies of the invoices with each periodic payment request from the firm providing the services.
  - 2. Submit results of services provided which verify required results.
- D. Schedule of Allowances
  - 1. Construction Materials Testing: Allow the amount provided in the Bid for the services of a geotechnical engineering firm and testing laboratory to verify soils conditions including trench excavation and backfill and similar issues, and for the services of an independent testing laboratory for testing concrete aggregate, concrete, bituminous paving materials, structural and reinforcing steel, waterproofing, select backfill, crushed stone or gravel, sand and other materials as requested by the Owner or Engineer.
  - 2. Utility Conflict Resolution: Allow the amount provided in the Bid for resolving utility conflicts through relocation of new and/or existing utilities where existing utilities are not in the location shown on the Drawings, as directed by the Engineer.

- 3. Construction Verification Surveying
  - a. Allow the amount provided in the Bid for construction surveying by an independent surveying firm, selected by the Owner, to perform horizontal and vertical alignment checks at the discretion of the Engineer.
  - b. This allowance is solely for the use of the Engineer for verification of the Contractor's reference points, centerlines and work performed. The presence of this allowance in no way relieves the Contractor of the responsibility of installing reference points, centerlines, temporary bench marks or verifying that the work has been performed accurately.
- 4. Peristaltic Pump Equipment: The allowance shown in the Bid Form represents the pricing provided by the vendor and as negotiated by the Owner for supply of goods and services related to the equipment and as specified in the manufacturer proposal for the work. The proposal for the work is included in the Specifications. Contractor shall include all additional items, services, goods, resources, and manpower necessary to complete the work in the lump sum item for General Construction.
- 5. Magnetic Flow Meter Equipment: The allowance shown in the Bid Form represents the pricing provided by the vendor and as negotiated by the Owner for supply of goods and services related to the equipment and as specified in the manufacturer proposal for the work. The proposal for the work is included in the Specifications. Contractor shall include all additional items, services, goods, resources, and manpower necessary to complete the work in the lump sum item for General Construction.
- 6. Outdoor Switchgear Equipment: The allowance shown in the Bid Form represents the pricing provided by the vendor and as negotiated by the Owner for supply of goods and services related to the equipment and as specified in the manufacturer proposal for the work. The proposal for the work is included in the Specifications. Contractor shall include all additional items, services, goods, resources, and manpower necessary to complete the work in the lump sum item for General Construction.
- 7. SCADA Integration: Allow the amount provided in the Bid for SCADA integration and programming by an independent firm, selected by the Owner, as specified.
- 8. Engineer Overtime Inspection: Allow the amount provided in the Bid for compensation for Engineer's time beyond the specified work period, when required based on construction activities. Use of this allowance shall be at the discretion of the Owner.
- 9. Owner's Use: Allow the amount provided in the Bid for changes to the Contract during construction as specified. The portion of the allowance to be used for compensation of work shall be at the discretion of the Owner. Change orders will be reviewed by the funding agency as required.
- 1.04 EROSION AND SEDIMENT CONTROL
  - A. General

- 1. No separate payment shall be made for temporary and/or permanent erosion and sediment controls, except as noted herein. All other temporary and/or permanent erosion and sediment control costs shall be included in the lump sum bid.
- 2. No payment will be made for any portion of the Project for which temporary erosion and sediment controls are not maintained.
- B. Silt Fence: Payment for additional silt fence, including installation, maintenance, repair, replacement and removal is not a separate payment item and all costs shall be incorporated in the lump sum Item No. 1 on the Bid Form.
- C. Grassing
  - 1. No separate payment will be made for grassing.
- 1.05 EARTHWORK
  - A. Earth Excavation
    - 1. No separate payment shall be made for earth excavation. The cost of such work and all costs incidental thereto shall be included in the price bid for the item to which the work pertains.
    - 2. No separate payment will be made for providing sheeting, bracing, and timbering.
  - B. Rock Excavation
    - 1. Rock excavation shall be unclassified and separate payment will not be made.
  - C. Dewatering: No separate payment will be made for dewatering required to accomplish work.
  - D. Backfilling: No separate payment will be made for backfilling or excavation, hauling, and placement of borrow material. The cost of all such work and all costs incidental thereto shall be included in the unit price bid for the item to which the work pertains.
- 1.06 TRENCH EXCAVATION AND BACKFILL
  - A. Trench Excavation: No separate payment will be made for trench excavation.
  - B. Sheeting, Bracing, and Shoring: No separate payment will be made for providing sheeting, bracing, and timbering.
  - C. Dewatering Excavations: All costs of equipment, labor and materials required for dewatering shall be included in the unit price bid to which it pertains.
  - D. Trench Foundation and Stabilization
    - 1. No separate payment will be made for trench stabilization.
- 1.07 PAVING

A. No separate payment will be made for paving.

#### 1.08 SITE UTILITIES

- A. Solid sleeves and fittings necessary for connections to existing site utilities, even if not shown on the Drawings, are considered incidental to the Project and will not be paid for separately. Additionally, no payment will be made for fittings provided due to the Contractor's sequence of construction, layout problems, tie-ins or repairs.
- 1.09 TEMPORARY BYPASS PUMPING / PIPING
  - A. A temporary bypass pumping system OR a temporary bypass piping system shall be provided as specified and shown on the Drawings. Costs for temporary bypass pumping system OR temporary bypass piping system shall be shown on the Bid Form as specified.
  - B. Temporary Bypass Pumping
    - 1. Bypass pumping will be paid for as specified and as shown on the Bid Form. Bypass pumping requirements shall be as specified in Section 01460.
    - 2. Contractor shall be responsible for all fuel and maintenance required to keep the pump system in operation during the shutdown period(s) as specified.
    - 3. Rental / Operation: The cost for rental and operation of the temporary bypass pumping system, including fuel.
    - 4. Pump System Installation: The full cost for installing the pump system including all pumps, piping, valves, associated electrical and instrumentation, and all other ancillary equipment needed for an operational system as specified.
    - 5. Pump System Installation Mobilization: The full cost for mobilizing all necessary equipment to the site for installation of the pump system.
    - 6. Pump System Tear Down: The full cost for removing the pump system including all pumps, piping, valves, associated electrical and instrumentation, and all other ancillary equipment associated with the pump system.
    - 7. Pump System Tear Down Mobilization: The full cost for mobilizing all necessary equipment to the site for tear down of the pump system.
    - 8. Additional Monthly Rate: The full cost for having the temporary bypass pumping system onsite and operational, and for operating the system, for a period of 30 days (including fuel). This cost is not included in the base bid total.
    - 9. Additional Weekly Rate: The full cost for having the temporary bypass pumping system onsite and operational, and for operating the system, for a period of 7 days (including fuel). This cost shall apply for a period of one week to three weeks (monthly rates will apply to periods greater than three weeks). This cost is not included in the base bid total.

- 10. Additional Daily Rate: The full cost for having the temporary bypass pumping system onsite and operational, and for operating the system, for a period of one day (including fuel). This cost shall apply for a period of one day to five days (weekly or monthly rates will apply to periods greater than five days). This cost is not included in the base bid total.
- C. Temporary Bypass Piping
  - 1. Bypass piping will be paid for as specified and as shown on the Bid Form. Bypass piping requirements shall be as specified in Section 01461.
  - 2. Contractor shall be responsible for all maintenance required to keep the piping system in operation during the shutdown period(s) as specified. Maintenance for the existing EQ pumps will continue to be performed by the Owner.
  - 3. Temporary Piping Purchase / Rental: The cost for purchase or rental of the piping and appurtenances, including pipe supports, installation, and tear down.
  - 4. New Piping: The cost for removing the existing 36-inch PE piping and providing new 36-inch PE piping as shown on the Drawings.
  - 5. Temporary Structure(s): The full cost for providing the temporary structure(s) as specified and as shown on the Drawings, including supports, installation and tear down, and including all other appurtenances required for a complete operating system. All other ancillary costs associated with the temporary piping system not included in the other costs shown on the Bid Form shall be included in this cost.
  - 6. Additional Monthly Rate: The full cost for having the temporary bypass piping system onsite and operational, and for operating the system, for a period of 30 days. This cost is not included in the base bid total.
  - 7. Additional Weekly Rate: The full cost for having the temporary bypass piping system onsite and operational, and for operating the system, for a period of 7 days. This cost shall apply for a period of one week to three weeks (monthly rates will apply to periods greater than three weeks). This cost is not included in the base bid total.
  - 8. Additional Daily Rate: The full cost for having the temporary bypass piping system onsite and operational, and for operating the system, for a period of one day. This cost shall apply for a period of one day to five days (weekly or monthly rates will apply to periods greater than five days). This cost is not included in the base bid total.

## 1.10 OFFSITE SOIL STOCKPILING

A. Hauling: The quantity of hauling excavated soil to the offsite location as specified in Section 02200 which will be paid for is the volume in cubic yards, that is actually hauled as measured by the scales at the Moccasin Bend WWTP. No soil or other materials hauled to other onsite or offsite locations will be paid for in this item. The unit price per cubic yard will be full compensation for hauling soil to the offsite location and not specifically included under other items or contracts.

- B. Initial Site Grading: The full cost of the initial site grading and preparation at the offsite stockpiling location as specified in Section 02200. The lump sum price will be full compensation for providing initial site grading and preparation not specifically included under other items or contracts.
- C. Scarify and Remove Existing Pavement: The quantity of area at the offsite stockpiling location to be scarified and have asphalt/gravel pavement removed which will be paid for is the area in square yards that is performed. The area where soil is to be placed shall be scarified, and asphalt and compacted gravel pavement shall be removed, as specified. The unit price per square yard will be full compensation for scarifying and removing pavement not specifically included under other items or contracts.
- D. Erosion Control Silt Soxx: The quantity of erosion control silt soxx at the offsite stockpiling location which will be paid for is the length in linear feet that is provided as specified. The unit price per linear foot will be full compensation for installing, maintaining, and removing at completion of work all silt soxx not specifically included under other items or contracts.
- E. Manhole Riser (4-ft dia): The quantity of manhole riser sections to be provided at the offsite stockpiling location which will be paid for is the number of sections provided as specified. The unit price per manhole section will be full compensation for providing the manhole sections not specifically included under other items or contracts.
- F. Manhole Grade Rings (1-in thick): The quantity of manhole grade rings to be provided at the offsite stockpiling location which will be paid for is the number of grade rings provided as specified. The unit price per manhole grade ring will be full compensation for providing the manhole grade rings not specifically included under other items or contracts.
- G. Temporary Seeding: The quantity of area where temporary seeding is to be provided at the offsite stockpiling location which will be paid for is the area in square yards that is provided as specified. The unit price per square yard will be full compensation for providing temporary seeding not specifically included under other items or contracts.
- H. Construction Entrance: The full cost of providing the construction entrance as specified in Section 02200. The lump sum price will be full compensation for providing the construction entrance not specifically included under other items or contracts.
- I. Cleaning of Construction Entrance Pit: The quantity of cleanings of the construction entrance pit at the offsite stockpiling location which will be paid for is the cleanings of the construction entrance pit as specified. The construction entrance pit shall be cleaned as specified and as required by the Owner. The unit price per cleaning will be full compensation for cleaning the construction entrance pit not specifically included under other items or contracts.
- J. Street Sweeping in Lupton City: The quantity of street sweeping near the offsite stockpiling location which will be paid for is the number of days the streets along the hauling route are swept as specified. The streets along the hauling route in Lupton City shall be swept as specified to remove debris and as required by the Owner. The unit price per day of street sweeping will be full compensation for sweeping the streets along the hauling route not specifically included under other items or contracts.

## 1.11 CLEAN-UP

- A. No payment will be made for any portion of the Project for which clean-up and restoration has not been completed, to the satisfaction of the Engineer and Owner.
- 1.12 CONTINGENCIES
  - A. General
    - 1. The Contractor shall include in the Bid Total all contingencies stated in the Contract Documents. These contingencies shall cover the cost to compensate Contractor for work for which a specific scope will be established during the course of the construction project. The Contractor's materials, handling costs, labor, overhead, profit, and other expenses contemplated shall be included in the contingency.
  - B. Should the cost be more or less than the specified amount of the allowance, then the Contract shall be adjusted accordingly by change order.
  - C. Documentation
    - 1. Submit to the Owner the value of the work to be performed.
    - 2. Furnish an itemized breakdown of the quantities and prices used in computing the value of the work.
  - D. No consideration for time or money will be given to the Contractor if work is performed prior to written approval from the Owner.
  - E. In calculating the value of the work, labor, materials, and rental charges shall be paid in accordance with the General Conditions.
  - F. Schedule of Contingencies:
    - 1. Undercutting and Aggregate Backfill: Additional excavation will be measured for payment on the basis of the lines and grades ordered by Owner. For pipe trenches, excavation quantities may be assumed to be of rectangular cross section having a width of 2 feet greater than the outside diameter of the pipe. For all other excavations, measurement for payment will be made based on the limits of the additional excavation performed as authorized by Owner. The quantity of additional crushed stone and gravel, will be the computed number of cubic yards placed within the limits shown, specified or ordered by Owner. No payment will be made for crushed stone and gravel used for refill when excavation is carried below the grades specified or ordered nor for crushed stone and gravel used to control groundwater. Measurement of the actual quantities of materials will be made by Owner. Contractor may, at his/her expense, verify quantities. The unit price per cubic yard will be full compensation for providing all additional excavation and crushed stone backfill complete as ordered and not specifically included under other items or contracts.
    - 2. Concrete: The quantity of additional concrete which will be paid for is the volume in cubic yards, not including reinforcing steel, that is actually placed as specified or ordered by OWNER. No concrete placed in structures or elsewhere, which is paid

for by other items will be paid for in this item. The unit price per cubic yard will be full compensation for providing all additional concrete as ordered and not specifically included under other items or contracts.

3. Concrete Reinforcing Steel: Additional reinforcing steel is the number of pounds or reinforcing steel actually placed as specified or ordered by OWNER. The weight shall be determined by multiplying the length of each bar by the standard bar weight. Excessive lap lengths will not be included for payment. No reinforcing steel placed in structures or elsewhere, which is paid for by other items will be paid for in this item. No direct payment will be made for wire, welding, chairs, supports, or any other required accessory for providing additional reinforcing steel. The cost for these items shall be included in the unit price provided for this item. The unit price per pound will be full compensation for providing all additional reinforcing as ordered and not specifically included under other items or contracts.

#### 1.13 ADDITIONAL WORK

- A. Additional work or increase in the quantities of certain classes of work over those included in the lump sum for Item 1 of the Bid, when ordered by the Engineer, shall be measured and paid for in accordance with the following Paragraphs. Measurement of the quantities of additional work shall be made by the Engineer.
- B. The unit prices bid shall be applicable to any single occurrence of additional work ordered by the Engineer, which do not exceed the quantity in the Bid. Should a single occurrence exceed the quantity in the Bid, the Contractor and the Owner shall both have the right to negotiate a new unit price which is more representative of the larger quantity of work being ordered by the Engineer for that single occurrence. The aforementioned shall not relieve the Owner of its right to require the Contractor to provide additional work at the unit prices bid, nor shall it limit the number of times the additional work can be ordered at the unit prices bid, as long as each single occurrence does not exceed the quantity in the Bid.
- C. The unit prices bid under Additional Work if ordered by the Engineer shall include all material costs, labor costs, overhead costs, schedule impact costs, incidental costs, and profit.

PART 2 – PRODUCTS

(NOT USED)

PART 3 – EXECUTION

(NOT USED)

- END OF SECTION -



