

### **Solicitation Addendum**

Addendum No.: 7

Solicitation No.: 19-TA002970CD

**Project No.:** 6050470

**Solicitation Title:** Lake Manatee Water Treatment Plant Filter Upgrade

Addendum Date: March 1, 2019

Procurement Contact: Chris Daley, CPPO, CPPB, Procurement Manager

IFBC NO. 19-TA002970CD IS AMENDED AS SET FORTH HEREIN. RESPONSES TO QUESTIONS POSED BY PROSPECTIVE BIDDERS ARE PROVIDED BELOW. THIS ADDENDUM IS HEREBY INCORPORATED IN AND MADE A PART OF IFBC NO. 19-TA002970CD.

### Replace:

### APPENDIX I, BID PRICING FORM, PAGES APPENDIX I-2 AND I-3

Replace Bid Pricing form pages Appendix I-2 and I-3 issued with Addendum 6 with the attached Bid Pricing form pages Appendix I-2 and I-3 revised per this Addendum 7.

### Replace:

### BID ATTACHMENT 2, VOLUME 1 TECHNICAL SPECIFICATIONS, SPECIFICATION 01-24-00 MEASUREMENT AND PAYMENT

Replace Specification 01-24-00, Measurement and Payment, with attached Specification 01-24-00, Measurement and Payment revised per this Addendum 7.

### Change to:

### BID ATTACHMENT 2, VOLUME 1 TECHNICAL SPECIFICATIONS, SPECIFICATION 03\_30\_00 SECTION 1.04.A.2.f

Pressure injection and sealing: Continue as specified above until structure is watertight and remains watertight for not less than <u>1 year 3 years</u> after final acceptance or date of final repair, whichever occurs later in time.

### Change to:

## BID ATTACHMENT 2, VOLUME 1 TECHNICAL SPECIFICATIONS, SPECIFICATION 07\_22\_00 SECTION 1.08.B.2

Should a roof leak occur within the first three years of the project from final acceptance, the insulating performance of the roof insulation will be at least 80% of the design thermal resistance within a 2 year period following repair of the leak.

### **Change to:**

### BID ATTACHMENT 2, VOLUME 1 TECHNICAL SPECIFICATIONS, SPECIFICATION 07\_53\_00 SECTION 1.6.A.4.

Authorized installer shall provide written warranty on his letterhead agreeing to replace defective materials and workmanship as required to maintain roofing system in watertight conditions for a period of two three years. This shall be attached to the manufacturer's required warranty.

#### Change to:

**BID ATTACHMENT 2, VOLUME 1 TECHNICAL SPECIFICATIONS, SPECIFICATION 07\_90\_00 SECTION 1.08.A.** Warrant to correct defective products for minimum <u>1 year</u> <u>three years</u> in accordance with manufacturer's standard warranty.

### **Change to:**

BID ATTACHMENT 2, VOLUME 1 TECHNICAL SPECIFICATIONS, SPECIFICATION 08\_71\_00 SECTION 1.6.A The material furnished shall be warranted for one year three years after installation or longer as the individual manufacturer's warranty permits.

### Change to:

BID ATTACHMENT 2, VOLUME 1 TECHNICAL SPECIFICATIONS, SPECIFICATION 22\_31\_10 SECTION 1.09.A As specified in Section  $46_{-}05_{-}10$  01 78 36.

### Change to:

BID ATTACHMENT 2, VOLUME 1 TECHNICAL SPECIFICATIONS, SPECIFICATION 28\_31\_01 SECTION 1.11.A All work performed and all material and equipment furnished under this contract shall be free from defects and shall remain so for a period of one (1) year three (3) years from the date of acceptance. The full cost of maintenance, labor and materials required to correct any defect during this one three year period shall be included in the submittal bid.

### Change to:

BID ATTACHMENT 2, VOLUME 1 TECHNICAL SPECIFICATIONS, SPECIFICATION 32\_12\_15 SECTION 3.03.A All settlement of pavement repairs occurring within a period of one year three years after final acceptance of the project by the Owner shall be repaired or replaced as required by and at no cost to the Owner.

### Change to:

### BID ATTACHMENT 2, VOLUME 1 TECHNICAL SPECIFICATIONS, SPECIFICATION 46\_73\_13 SECTION 1.02.A.3

Manufacturer's standard guarantee as specified in Section 01 78 36.

#### Add:

### **BID ATTACHMENT 3, VOLUME 2 PLANS, DRAWING 00E02, NOTE 55**

Add Note 55 to Drawing 00E02 as follows:

All electrical equipment and material furnished and installed by the Contractor shall be guaranteed against defects in materials and workmanship for a period of three years from the date of acceptance, except if a longer period is required by specifications. The full cost of maintenance, labor and materials required to correct any defect during this three-year period shall be included in the bid.

### Replace:

### **BID ATTACHMENT 3, VOLUME 2 PLANS, PLAN SHEET 00C05**

Replace Plan Sheet 00C05 with the REVISED Plan Sheet 00C05 issued with this Addendum 7.

### Replace:

### **BID ATTACHMENT 3, VOLUME 2 PLANS, PLAN SHEET 00GC01**

Replace Plan Sheet 00GC01 with the REVISED Plan Sheet 00GC01 issued with this Addendum 7.

#### Add:

### BID ATTACHMENT 3, VOLUME 2 PLANS, DRAWING 02M23, NOTE 4

Add Note 4 to Drawing 02M23 as follows:

Each Sample Pump (20-P-730-1 and -2) in the neutralization area shall be mounted to a table (see Sample Panel Detail on 02M23) using 1/8" neoprene material between pump, motor and base plate and anchored with 0.2" diameter chemical anchors. The table shall be constructed of stainless steel with a  $\frac{1}{2}$ " stainless steel plate top. The table top shall be no more than 3 feet above the finished floor.

#### Change to:

### BID ATTACHMENT 3, VOLUME 2 PLANS, DRAWING 02M23, KEY TAGS LEGEND NUMBERING

On Drawing 02M23, the Key Tags legend numbered from 3 through 24 should be renumbered 1 through 22.

#### Replace:

### BID ATTACHMENT 3, VOLUME 2 PLANS, DRAWING 03DM01, KEY NOTE 1

Replace Key Note 1 on Drawing 03DM01 as follows:

Remove two existing 30" overflow pipes for Filter Bay B influent channel. Install two new 30" overflow pipes per mechanical drawings at location shown on 03M04 (i.e. near south ends of the Filter Bay B influent channel). Elevation of the new overflow pipes shall be 69.54 feet (to match elevation of the existing 30" overflow pipes for Filter Bay A influent channel).

### Change to:

### BID ATTACHMENT 3, VOLUME 2 PLANS, DRAWING 00F01, NOTE 15

CONTRACTOR SHALL INCLUDE CERTIFICATION AND MONITORING CONTRACT OF <u>1 YEAR</u> <u>3 YEARS</u> FOR PROPOSED FIRE ALARM SYSTEM. THE FIRE ALARM SYSTEM TESTING, MAINTENANCE AND MONITORING SHALL BE UL CERTIFIED

#### Change to:

### BID ATTACHMENT 3, VOLUME 2 PLANS, DRAWING 00F01, NOTE 23

TWO PHONE LINES SHALL BE INSTALLED TO FIRE ALARM CONTROL PANEL. CONTRACTOR SHALL COORDINATE WITH OWNER FOR ONE DEDICATED PHONE LINE AND ONE SHARE PHONE LINE AS REQUIREMENTS AND PROVIDE ACCORDINGLY. WITH LOCAL FIRE MARSHAL APPROVAL, ONE SHARE LINE CAN BE REPLACED WITH ONE WIRELESS LINE BUT ALL COST ASSOCIATED WITH THE PHONE LINE SERVICE, INCLUDING WIRELESS, SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE. IF WIRELESS SERVICE PROVIDED, CONTRACTOR SHALL PROVIDE ONE YEAR THREE YEARS PRE-PAID SERVICE FOR WIRELESS SERVICE AND THE COST SHALL BE INCLUDED IN THE BID PRICE.

#### Change to:

### BID ATTACHMENT 3, VOLUME 2 PLANS, DRAWING 00F01, NOTE 24

CONTRACTOR SHALL INCLUDE ONE YEAR THREE YEARS PRE-PAID CENTRAL MONITORING SERVICE CONTRACT AS PART OF BID PRICE FOR NEW FIRE ALARM SYSTEM SUPPLIED AND EXISTING FIRE ALARM SYSTEM THAT WILL BE CONNECTED TO THIS NEW SYSTEM

#### Add:

### BID ATTACHMENT 3, VOLUME 2 PLANS, DRAWING 00H02, NOTE 6

Add Note 6 to Drawing 00H02, Louver Schedule, as follows:

Louver L-11 does not have a motorized damper provided for on sheet 03H01. Please provide and install a manual volume control damper which can be locked open in normal operation and locked closed in hurricane mode. The manual damper is like a Greenheck VCD-43 with epoxy coating. Assure clearances before purchase of the unit with the equipment in the room for louver/damper combination.

#### Replace:

#### BID ATTACHMENT 3, VOLUME 2 PLANS, DRAWING 02M27, Detail R

Replace Detail R on Drawing 02M27 with the REVISED Detail R issued with this Addendum 7.

### **QUESTIONS AND RESPONSES:**

Q1. Reference Note 4 on Drawing No. 03S02 which states "Where conflict occurs notify engineer and install steel trough support per Detail 26/03S11"; from the mechanical drawings, there does not appear to be a conflict, and since this actual quantity and location cannot be determined at this time, please consider providing a quantity required for bidding purpose.

R1: Replacement of existing trough support(s) to be performed if conflict(s) are determined in the field by Contractor and Engineer. A unit price bid item has been established to replace existing concrete supports at Filter Bay B and install new steel trough supports per Drawing 03S02 and Detail 26/03S11. A revised Bid Form and Measurement and Payment section are included in this Addendum.

Q2. Appendix C is showing the quantity that is provided by the MSS for each item. However, HEATED WASH WATER SYSTEM is showing discrepancies between the tag numbers and the quantities, also the pipe system is 8" while the size of the valves is 10". which size is correct? Please, make the needed adjustments.

R2: The eight inch (8") size is correct. MSS will update the Bill of Materials (BOM) accordingly.

### Q3. In the case that the project is delayed, what are the charges by the MSS resulting from storing their equipment at their facilities?

R3. The MSS does not have storage facilities. If there is delay and an alternate place of delivery is needed, it will be provided by the owner/contractor. See Article 9.E of the MSS Agreement regarding point of destination for delivery.

# Q4. The contract with the MSS supplier states that no partial deliveries are acceptable unless approved by the owner. Will the MSS impose additional freight fees if partial deliveries are requested? And if so, what are these fees?

R4: Partial deliveries are allowed in the procurement documents. In the membrane system supplier proposal (Section 8, Lead Times), a sample equipment shipment of partial deliveries is provided. There are no additional freight fees for partial shipments if done per an agreed schedule, similar to the breakdowns in Section 8.2 and an updated schedule similar to Section 8.2 of MSS proposal.

Q5: I'm looking for the fiber optic cable specifications as referenced in specification section 230900, section page 10 of 10. Please advise. 2.7 CONTROL CABLE A. Electronic and fiber-optic cables for control wiring are specified in Division 27.

R5: Change reference from Division 27 to Division 40.

# Q6. Are there any locations on site, outside of work described in the bid documents, where excess soil and/or rock can be placed?

R6: Depending on volume, the area north of the Contractor's Staging Area (north of Filter Building C; see Drawing 00C03) may be used for temporary storage with Owner's approval, but it should be cleared by the end of the project.

## Q7. Are the pump fillets shown in Detail 18 on 02S10 made of Stainless Steel and provided by the Pump Manufacturer Spec.

R7: Pump fillets shall be 316 stainless steel anchored to the concrete with 316 stainless steel anchors. Contractor is responsible to coordinate fillets with pump manufacturer as noted on detail.

# Q8. Specification 33 05 12 Temporary By-pass Pumping. This specification is written for wastewater by-passing after reviewing the documents and drawings is it anticipated that by-passing of flows for raw, process or finished water will require bypass pumping?

R8: Please refer to response for Q19 in Addendum 4, for clarification about temporary bypass piping/pumping. Bypassing of raw flow is not anticipated. Bypassing of water flows related to specific means and methods for Contractor's sequencing and construction schedule are the Contractor's decision. Specification 33\_05\_12 can be used for any bypass flow type (not just wastewater flow) required during the project.

Q9. Please confirm that all sheeting and shoring driven below must be left in place per UG-15 on Drawing OGC02. Does this only apply to the deep large diameter piping between Train B and Train C of to all piping anywhere on site?

R9: It applies to all piping.

# Q10. Drawing 02M03, section B is calling for a ball valve in the loop while P&ID 00N25 is calling for two more ball valves inside the loop. Can you please clarify if one or three ball valves are required inside the loop?

R10: Three ball valves are required as shown on Sheet 00N25.

# Q11. Drawing 02M11 is calling for 10" Vent for the tanks while drawing 02M12 is calling for the vent to be 8". Please, clarify which dimension is correct?

R11: The eight inch (8") vent on 02M12 is correct.

## Q12. Drawing 02M16 is showing what it seems to be a valve at the bottom part of the tank overflow pipe. in case it was a valve, please provide the valve type, tag number and details.

R12: The tags for the two valves on the two CIP tanks are 20-HV-702-1 and 20-HV-702-2. Size is ten inch (10") butterfly valves. For valve material, see specification 40\_05\_64, Article 2.01 (General Purpose AWWA Butterfly Valves)

## Q13. Drawing 02M16 is showing what it seems to be a valve at the bottom part of the tank overflow pipe. in case it was a valve, please provide the valve type, tag number and details.

R13: See response to Q12 in this Addendum.

### Q14. Drawing 02M20, section B is showing 8" UM pipe which is not clear where this pipe is coming from. Can you clarify the route of this pipe?

R14: It is assumed that this question is referring to the eight inch (8") UW (utility water) pipe. See Drawing 00C07 (and Keynote 13) for route of eight inch (8") UW pipe external to the chemical building. Once entering the chemical building, the eight inch (8") UW pipe elbows down into the first encountered compartment of the Permeate Storage Tank.

## Q15. Drawing 02M19, key tags 26 and 27 are calling for Flow valve. Can you please provide more details about those valves?

R15: 90-FV-014 and 90-FV-015 are angle seat valves (Burkert Type 2000) provided by the Membrane System Supplier (see Volume 3, Appendix C).

### Q16. Drawing 02M19, section C is calling for detail P607. Please, provide the needed detail.

R16: This sheet should refer to typical detail M607 on Sheet 00GM03.

### Q17. Drawing 02M17 is lacking details for the line 10" FPW. Please, provide a section to have a better idea about the line.

R17: Refer to sheet 02F02 and sheet 00C07 for further information regarding the fire line. The line enters the building at 3'-6" AFF and routes up. The remainder of the system shall be detailed and designed by a licensed fire sprinkler company.

### Q18. Drawing 05M01 is showing 4 EA 54" butterfly valves. Please, provide details for those valves.

R18: Butterfly valves shall be as specified in Section 40\_05\_64 Article 2.01 (General Purpose AWWA Butterfly Valves).

### Q19. Drawing 02M11 is showing the valve 20-HV-740 as a 3" butterfly valve while appendix C is showing the valve as 8". Which size is correct?

R19: 20-HV-740 located on the 3-inch IX line should be a three-inch valve.

Q20. Drawing 03M19, section A is calling for P612 which is totally different than the support detail in the P drawings. Please, provide the correct detail.

R20: The call out for P612 is correct; please refer to both sheets 1 and 2 for this detail as shown on 00GM05.

Q21. Drawing 03M20 is showing piping to the "EJECTOR/AIR SUPPLY ASSEMBLY FOR PRIMING SIPHON". Please, verify the size and material of the intended pipe.

R21: 1/2" OD tubing as indicated on Drawing 00N08. Material shall be 316L stainless steel as indicated on the pipe schedule.

Q22. Drawing 02M14 is calling for 8" HW which per the pipe schedule, it is PVC Sch.80. However, drawing 503188-AP-07 is calling for the line to be 316SS. Which material is correct?

R22: The eight-inch (8") HW piping should be PVC Sch. 80.

Q23. Drawings 05DM01, 05DM02 and 05DM01 identify the new layout of 54" BLW,MFL & CFL lines. This operation includes demolition of existing 54" DIP and installation of new 54" DIP underneath the existing bridge carrying the 48" transfer line. The new 54" line is located 10' below and on the edge of the existing pier foundation of the bridge structure. The excavation for installation of the new 54" line will significantly undermine the existing pier foundation and due to the location of the new 54" pipe we believe there is not enough room to properly protect the existing pier. Please confirm the contractor should include temporary shoring for the entire bridge structure during the excavation for pipe demo and installation or provide plan to protect existing bridge structure.

R23: Provide temporary shoring and bracing at walkway where required for the demolition of existing pipe and installation of new pipe per 31\_50\_00. Submit signed and sealed temporary shoring and bracing plans by an Engineer licensed in the State of Florida.

Q24. Drawing 05DM01, O5DM02, 05M01 & 05M02 indicate that the foundation of the existing walk bridge supporting the interconnecting piping between all trains will be undermined by approximately 10 ft in depth for the demolition and installation of the new interconnecting piping. Can this piping be moved so that the foundation does not align on the top edge of the proposed piping?

R24: The piping location can be field adjusted as determined by the Contractor and Engineer. The requirement for the temporary shoring and bracing in response for Q23 in this Addendum still applies.

Q25. Drawings 05DM01, 05DM02 and 05DM01 identify the new layout of 54" BLW,MFL & CFL lines. This operation includes demolition of existing 54" DIP and installation of new 54" DIP underneath the existing bridge carrying the 48" transfer line. The new 54" line is located 10' below and on the edge of the existing pier foundation of the bridge structure. The excavation for installation of the new 54" line will significantly undermine the existing pier foundation and due to the location of the new 54" pipe we believe there is not enough room to properly protect the existing pier. Please confirm the contractor should include temporary shoring for the entire bridge structure during the excavation for pipe demo and installation or provide plan to protect existing bridge structure.

R25: See response to Q23 in this Addendum.

Q26. Drawing Sheet 02M27, Detail R, provides the vent cover for tank dome which is sized for a 50" vent. Please delete and replace with the attached detail for a 25" vent.

R26: Detail R on Drawing 02M27 is replaced with the REVISED Detail R included in this Addendum.

Q27. Please confirm that escalation cost on the MSS provided equipment is the Owner's responsibility.

R27. The County anticipates award of this IFBC, to include the assignment of the MSS agreement, on April 23, 2019 at which time the awarded Contractor shall begin coordination with the MSS to identify delivery schedules and issue a Notice to Commence Fabrication. If the Contractor issues the Notice to Commence fabrication on or before June 30, 2019, then the County will pay for the escalation costs on the MSS provided equipment out of the Contract Contingency. If the Contractor issues the Notice to Commence Fabrication after June 30, 2019, then the Contractor shall be responsible for the escalation costs on the MSS provided equipment.

Q28. Please confirm that the General Contractor will not be held accountable if the MSS equipment does not meet the specified performance, and that the contract duration will be adjusted for any delays resulting from meeting the specified performance.

R28: The General Contractor will be held accountable if MSS equipment does not meet the specified performance for the initial performance testing, and the contract duration will NOT be adjusted for any delays resulting from MSS not meeting the specified performance for the initial performance testing. Please refer to Article 3.02 from Specification 01\_00\_03 in the membrane system procurement documents shown in Volume 3- Appendix B for actions to be taken if the MSS fails the initial performance testing.

Q29. Please confirm that the GC is not responsible for any delays resulting from delayed MSS equipment deliveries, and that the contract duration will be adjusted to compensate for the delayed days.

R29: The General Contractor WILL be responsible to keep the MSS on schedule for delivery of the MSS equipment, and the contract duration WILLNOT be adjusted for any delays resulting from delayed MSS equipment deliveries. There are liquidated damages in the MSS Agreement to account for this situation.

Q30. Is the Owner responsible for delays in the schedule due and contract time resulting from the actual project bidding dates that are not within the contractors control?

R30: See response to Q27 of this Addendum.

Q31. Will the owner take ownership and maintenance of the required spare parts as they arrive to the site, if not, please advise on the timeframe period that the contractor has to maintain and service these in adequate facilities.

R31: Yes, the owner will take ownership and maintenance of spare parts as they arrive to the site.

Q32. The MSS supplier offered optional additives in their best and final proposal to the owner, please clarify what options were accepted by the owner.

R32: The County accepted all the 'additives' in the BAFO, which included the partial siphon option that is included in the design.

Q33. Reference Specification 40-05-31.01 Plastic Piping and Tubing: This specification includes a pipe schedule that is in conflict with the new pipe schedule provided with Addendum 6. Which will apply to this project?

R33: Please reference pipe schedule provided in Addendum 6 for this project.

Q34. Reference 05M01, 05DM02, and Record Drawing S-26 from Addendum 5: It appears that the proposed 54" combined MFL and CFL Pipe (that runs west to east) will be positioned partially below one of the footings that support the elevated walkway. Is it allowable to shift this pipeline to the south, enough to install shoring between the footing and the pipe?

R34: See response to Q24 in this Addendum.

Q35. Please confirm the minimum \$10,000 in spare parts (consisting of 1 of each instrument and control devices) I&C section 2.04, subsection A on page 40 90 00-7, only applies to the MSS supplier.

R35: Spare part \$15,000 listed in specification 40\_50\_01, page 19, 2.04 is for the Instrumentation and Control Contractor to provide recommended spare parts additional to the other spare parts listed in 40 50 01, 2.03 table and 40 90 00, page 11, spare PLC components parts.

Q36. Control panel section 2.05, subsection F16 on page 40 90 00-12 states redundancy is required for the PLCs. Drawing N002, PLC-9 doesn't not indicate any redundancy. Please confirm PLC-9 doesn't require redundancy.

R36: Redundant PLC is only required if shown on Instrumentation (N – series) drawings. Drawing 00N02 shows one PLC for new PLC-9 panel and no redundancy is required for PLC-9 panel.

Q37. Reference drawings 03E02 and 03E06 which indicates to replace a portion of the existing Square D busduct installation with new busduct. Based on the age and condition of the existing busduct, Square D is recommending the entire length of busduct be replaced. Thus, please advise if the bid is to be based on a full replacement or per the plans as noted.

R37: Replace busduct as per the plans.

Q38. Reference drawing 00E11 which indicates a 4000A busduct connection into the new MCC-3. Square D Motor Control Centers are unavailable with 4000A incoming busduct connections and cable will need to be utilized. It is recommended, in conjunction with the previous RFI question, that cable tap boxes be utilized on each end of the busduct installation.

R38: Utilizing cable connection from new busduct to new MCC is acceptable for transition to MCC connection.

Q39. Please clarify the size of the cables and busduct required for the connection to MCC-3 as voltage drop calculations may allow for smaller amperages to be utilized. The breaker in Switchboard 3/4 and MCC-3 is marked as 2000A trip. The busduct is marked as 4000A. The cables connecting the existing 2000A breaker to the transition box is listed as (8) sets of 600mcm which is rated for 3360Amps.

R39: Provide busduct rating as per the plans. Cables transition to MCC shall match the quantity and size of the existing wires.

Q40. Please provide an I/O list from the MSS supplier that is to be integrated into the SCADA system. R40: Refer to Drawings in Volume 3 Appendix A that show the I/O points for MSS supplied panels (CP-8 panel, RIO-8.1 thru RIO-8.12).

NOTE: Items that are struck through are deleted. Items that are <u>underlined</u> have been added or changed. All other terms and conditions remain as stated in the IFBC.

**End of Addendum** 

INSTRUCTIONS: Receipt of this addendum must be acknowledged as instructed in the solicitation document. Failure to acknowledge receipt of this Addendum may result in the response being deemed non-responsive.
AUTHORIZED FOR RELEASE:

### **BID FORM**

### (Submit in Duplicate)

# LAKE MANATEE WATER TREATMENT PLANT FILTER UPGRADE Bid "A" Based on Completion Time of 730 Calendar Days

PAY ITEM NO.	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
1	GENERAL CONDITIONS	LS	1		
2	SITE WORK	LS	1		
3	SCREENS AND POST-MIX BASIN MODIFICATIONS	LS	1		
4A	UF SYSTEM EQUIPMENT/SPECIAL SERVICES & ANCILLARY EQUIPMENT (BY MSS)	LS	1	\$9,988,647.50	\$9,988,647.50
4B	UF SYSTEM EQUIPMENT & ANCILLARY SERVICES (BY GENERAL CONTRACTOR)	LS	1		
4C	UF SYSTEM ALLOWANCE FOR ADDITIONAL ON-SITE COMMISSIONING (BY MSS)	Day	129	\$1,614.00	\$208,206.00
5	PROCESS PIPING	LS	1		
6	CHEMICAL BUILDING	LS	1		
7	NEUTRALIZATION FACILITY	LS	1		
8	WASTE EQUALIZATION TANK	LS	1		
9	FILTER BAY B BASINS AND BUILDING MODIFICATIONS	LS	1		
10	BLEND CHAMBER MODIFICATIONS	LS	1		
11	ELECTRICAL, INSTRUMENTATION, AND CONTROL WORK	LS	1		
12	RELOCATION/MODIFICATION OF EXISTING FIBER OPTIC CONDUIT AND CABLES (FOR RAW WATER P.S.)	LS	1		
13	PERMIT ALLOWANCE	LS	1	\$20,000.00	\$20,000.00
14	REPLACE TROUGH SUPPORTS	EA	20		
	TOTAL BASE BID "A" - Based on Completion Time of <u>730</u> Calendar Days				
	CONTRACT CONTINGENCY WORK (USED ONLY WITH COUNTY APPROVAL)  5%				
TOTAL OFFER FOR BID "A" with Contract Contingency - Based on Completion Time of <u>730</u> Calendar Days					

Bidder Name:	
Authorized Signature:	

### **BID FORM**

### (Submit in Duplicate)

# LAKE MANATEE WATER TREATMENT PLANT FILTER UPGRADE Bid "B" Based on Completion Time of 910 Calendar Days

PAY ITEM NO.	DESCRIPTION	TOTAL QTY.	UNITS	BID PRICE PER UNIT (\$)	TOTAL BID PRICE (\$)
1	GENERAL CONDITIONS	LS	1		
2	SITE WORK	LS	1		
3	SCREENS AND POST-MIX BASIN MODIFICATIONS	LS	1		
4A	UF SYSTEM EQUIPMENT/SPECIAL SERVICES & ANCILLARY EQUIPMENT (BY MSS)	LS	1	\$9,988,647.50	\$9,988,647.50
4B	UF SYSTEM EQUIPMENT & ANCILLARY SERVICES (BY GENERAL CONTRACTOR)	LS	1		
	UF SYSTEM ALLOWANCE FOR ADDITIONAL ON-SITE COMMISSIONING (BY MSS)	Day	129	\$1,614.00	\$208,206.00
_	PROCESS PIPING	LS	1		
	CHEMICAL BUILDING	LS	1		
7	NEUTRALIZATION FACILITY	LS	1		
	WASTE EQUALIZATION TANK	LS	1		
9	FILTER BAY B BASINS AND BUILDING MODIFICATIONS	LS	1		
10	BLEND CHAMBER MODIFICATIONS	LS	1		
11	ELECTRICAL, INSTRUMENTATION, AND CONTROL WORK	LS	1		
12	RELOCATION/MODIFICATION OF EXISTING FIBER OPTIC CONDUIT AND CABLES (FOR RAW WATER P.S.)	LS	1		
13	PERMIT ALLOWANCE	LS	1	\$20,000.00	\$20,000.00
14	REPLACE TROUGH SUPPORTS	EA	20		
TOTAL BASE BID "B" - Based on Completion Time of 910 Calendar Days					
CONTRACT CONTINGENCY WORK (USED ONLY WITH COUNTY APPROVAL)  5%					
	TOTAL OFFER FOR BID "B" with Contract Contingency - Based on Completion Time of <u>910</u> Calendar Days				

Bidder Name:		

### SECTION REPLACED IN ITS ENTIRETYAD4, AD7

### SECTION 01\_24\_00

### **MEASUREMENT AND PAYMENT**

### PART 1 GENERAL

### 1.01 **SCOPE**

- A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Form section of the Contract Documents. Payment will be made based on the specified items included in the description in this section for each bid item.
- B. All contract prices included in the Bid Form section will be full compensation for all shop drawings, working drawings, labor, materials, tools, equipment, and incidentals necessary to complete the construction as shown on the Drawings and/or as specified in the Contract Documents to be performed under this Contract. Actual quantities of each item bid on a unit price basis will be determined upon completion of the construction in the manner set up for each item in this section of the Specifications. Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this Contract.

### 1.02 ESTIMATED QUANTITIES

A. The quantities shown are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made. The Owner/Engineer does not assume any responsibility for the final quantities, nor shall the Contractor claim misunderstanding because of such estimate of quantities. Final payment will be made only for satisfactorily completed quantity of each item.

### 1.03 WORK OUTSIDE AUTHORIZED LIMITS

A. No payment will be made for work constructed outside the authorized limits of work.

### 1.04 MEASUREMENT STANDARDS

A. Unless otherwise specified for the particular items involved, all measurements of distance shall be taken horizontally or vertically.

### 1.05 AREA MEASUREMENTS

A. In the measurement of items to be paid for based on area of finished work, the lengths, and/or widths to be used in the calculations shall be the final dimensions measured along the surface of the completed work within the neat lines shown or designated.

### 1.06 LUMP SUM ITEMS

A. Where payment for items is shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum items. Lump sum contracts shall be complete, tested and fully operable prior to request for final payment. Contractor may be required to provide a breakdown of the lump sum totals.

### **BID ITEM NO 1- GENERAL CONDITIONS**

Measurement and payment for this Bid Item shall include full compensation for the required 100 percent (100%) Performance Bond, 100 Percent (100%) Payment Bond, all required insurance for the project, the Contractor's mobilization and demobilization costs, and all required costs associated with staging, bypass pumping, and construction phasing as shown in the Bid Form. The costs for mobilization shall include preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for the establishment of temporary offices (for contractor and owner), buildings, safety equipment, first aid supplies, sanitary and other facilities, as required by the contract documents.

Payment for mobilization shall not exceed 5 percent (5%) of the total Contract cost unless the Contractor can prove to the Owner that his actual mobilization cost exceeds 5 percent (5%). Partial Payments for this Bid Item will be made in accordance with the following schedule:

Percent of Original Contract Amount	Percent Allowable Payment of Mobilization/Demobilization Bid Item Price
5	25
10	35
25	45
50	50
75	75
100	100

### **BID ITEM NO 2 – SITEWORK**

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid to complete civil sitework. Civil sitework cost shall include all labor, materials, and equipment necessary to provide site work including but limited to: clearing, grubbing, stripping, grading, compaction, stormwater system modifications, paving, sidewalks, site restoration, sodding, landscaping, demolition of existing stormwater structures, sidewalks, or roadway, relocation of existing water mains, and construction of 12-inch backwash return piping (to the waste equalization tank) and neutralization waste piping (to the waste equalization tank). Demolition cost for shall include all costs associated with removal and disposal including, but not limited to, demolish existing structures, pavement, piping, gates, equipment, valves, and other items all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner. Demolition of electrical systems, instrumentation and control systems shall be included in Bid Item No. 11.

Measurement for periodic payments of this lump sum price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

### **BID ITEM NO. 3 - SCREENS AND POST-MIX BASIN MODIFICATIONS**

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid to modify the Post-Mix Basins; and all other labor, materials and equipment necessary for a complete and fully operable system, including, but not limited to: structural modifications, grating and supports, basin and channel covers piping and appurtenances, new caustic soda feed piping, mixers, membrane pre-screens, gates, electrical, instrumentation and controls, instrument calibration, testing and start-up, O&M documents, and record drawings, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner

Measurement for periodic payments of this lump sum price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

# BID ITEM NO. 4A – UF SYSTEM EQUIPMENT/SPECIAL SERVICES & ANCILLARY EQUIPMENT (BY MSS)

Payment for the pre-negotiated UF system equipment and services (as shown in the Agreement and change order(s) provided as part of this project between Manatee County and the membrane system supplier, which are included in Volume 3 - Appendix B of these Contract Documents) will be made at the lump sum price named in the Bid Form. Contractor's cost to coordinate procurement, delivery, storage, and installation shall be included under Bid Item 4B – UF System Equipment & Ancillary Services (by General Contractor)

Measurement for periodic payments of this lump sum price bid item will be in accordance with the approved Schedule of Values and subject to the completion of the Work Schedule B items described in Volume 3 - Appendix B (see Volume II - Technical Specifications, Section 01 00 01) to be supplied by the Contractor in accordance with the Contract Documents.

# BID ITEM NO. 4B – UF SYSTEM EQUIPMENT & ANCILLARY SERVICES (BY GENERAL CONTRACTOR)

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid to coordinate procurement, deliver, store, and install the UF system equipment and services described in Bid Item 4A (and as shown in the Agreement and change order(s) provided as part of this project between Manatee County and membrane system supplier, which are included in Volume 3 - Appendix B of these Contract Documents). This also includes the General Contractor (GC) supplied scope for ancillary equipment, installation, and membrane system reassignment as described in these Contract Documents. Price shall include all labor, materials, and equipment necessary for a complete and fully operable system, all as shown on the Contract Documents, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this lump sum price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

# BID ITEM NO. 4C – UF SYSTEM ALLOWANCE FOR ADDITIONAL ON-SITE COMMISSIONING (BY MSS)

Payment for the pre-negotiated UF system allowance for additional on-site commissioning (as shown in the Agreement and/or change order(s) provided as part of this project between Manatee County and the membrane system supplier, which are included in Volume 3 - Appendix B of these Contract Documents) will be made at the unit rate with the not-to-exceed price shown in the Bid Form, as needed and authorized by the County and the Engineer. Contractor's cost to coordinate shall be included under Bid Item 4B – UF System Equipment & Ancillary Services (by General Contractor).

### **BID ITEM NO. 5 - PROCESS PIPING**

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid for air scour piping, hot water piping, CIP piping, backwash supply piping, membrane filtrate piping to permeate storage tank, permeate piping, compressed air piping, membrane feed water piping, chemical transfer and feed piping, new backwash waste piping, tank refill piping in the Chemical Building, drain piping, utility/plant water piping including, but not limited to: pipe, fittings, backflow prevention devices, pipe supports, heat tracing, insulation, installation of MSS supplied valves and appurtenances, trenching and excavation, rock removal, dewatering, bedding, backfill and compaction, relocation of existing piping, connection to existing piping or structures, and all other labor, materials and equipment necessary for a complete and fully operable system, including testing and start-up, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this lump sum price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

### **BID ITEM NO 6 - CHEMICAL BUILDING**

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid to construct the Chemical Building including but not limited to structural, architectural, HVAC, underground storage tank, coatings, fire sprinkler system, excavation (including rock), dewatering, testing and start-up, O&M documents, and record drawings all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Payment for equipment, piping, and electrical, instrumentation and controls associated with the Chemical Building shall be included in Bid Items 4, 5, and 11.

Measurement for periodic payments of this lump sum price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

#### **BID ITEM NO 7 – NEUTRALIZATION FACILITY**

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid to construct the Neutralization Facility including, but not limited to: structural slab and canopy, testing and start-up, O&M documents and record drawings, and all other labor, materials and equipment necessary for a complete and fully

operable system, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Payment for equipment, piping, and electrical, instrumentation and controls associated with the Neutralization Facility shall be included in Bid Items 4, 5, and 11.

Measurement for periodic payments of this lump sum price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

### **BID ITEM NO 8 – WASTE EQUALIZATION TANK**

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid to construct the Waste Equalization Facility including, but not limited to: structural, storage tank, manhole and associated overflow piping, coatings, piping, pipe support systems, valves, manhole, connection to existing lift station, testing and start-up, O&M documents and record drawings, and all other labor, materials and equipment necessary for a complete and fully operable system, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Payment for equipment, piping, and electrical, instrumentation and controls associated with the Waste Equalization Tank shall be included in Bid Items 4, 5, and 11.

Measurement for periodic payments of this lump sum price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

### BID ITEM NO. 9 - FILTER BAY B BASINS AND BUILDING MODIFICATIONS

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid to modify the existing Filter Building and all other labor, materials and equipment necessary for a complete and fully operable system, including but not limited to: modifications as required to accommodate the new Membrane Filtration System, structural modifications, removal and disposal of existing media, work associated with removal (flushing) and disposal of glycerin, grating and supports, demolition work associated with removal of existing process piping in the Filter Building and yard, architectural, filter basin and channel covers, packaged sump pump station, HVAC systems, overhead crane, coatings, testing and start-up, O&M documents, and record drawings, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this lump sum price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

#### BID ITEM NO 10 - BLEND CHAMBER MODIFICATIONS

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid to modify the Blend Chamber and all other labor, materials and equipment necessary for a complete and fully operable system, including but not limited to: ductile iron pipe and fittings, valves, excavation (including rock), dewatering, bedding,

and backfill, piping connections to existing facilities, and all other labor, materials and equipment necessary for a complete and fully operable system, including testing and start-up, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner.

Measurement for periodic payments of this lump sum price bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

### BID ITEM NO 11 – ELECTRICAL, INSTRUMENTATION, AND CONTROL WORK

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid for the Electrical, Instrumentation, and Control work including, but not limited to: new conduit and wiring; control panels, MCC (motor control center) installation and modifications new electrical distribution equipment, variable frequency drives, lighting, manhole, re-routing of fiber optic cable, installation of new medium voltage feeders, installation of MSS supplied instrumentation, Contractor supplied instrumentation, analyzers, demolition of existing medium voltage feeders and old variable frequency drives and associated cables/equipment and all other materials and equipment necessary for a complete and fully operable system, including testing and start-up, O&M documents, and record drawings, all as shown on the Contract Drawings and/or called for in the Contract Specifications, ready for approval by the Engineer and acceptance by the Owner. This Bid Item shall also represent full compensation for providing additional PLC input module and related hardware in existing SCADA PLC, plus services for SCADA software configurations and modifications of graphic displays at the existing SCADA command center, including submittals of custom shop drawings for additions to existing SCADA PLC equipment and additional software services for SCADA computers and graphics, in accordance with scope of work on the Technical Documents. This item includes submittal of detail shop drawings for additions to SCADA network, instrument calibrations, startup and testing services, training and providing complete documentation in digital format.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

## BID ITEM NO 12 – RELOCATION/MODIFICATION OF EXISTING FIBER OPTIC CONDUIT AND CABLES (FOR RAW WATER PUMP STATIONS)

Payment for all work included under this Bid Item shall represent full compensation in accordance with the lump sum price bid for relocation/modification of existing fiber optic conduit and cables between Filter Buildings B and C for the Raw Water Pump Stations. This cost shall include all necessary temporary patch panels, fusion splicing, new conduits and fittings, new fiber optic cables, supports, labor, testing, etc. for a complete and functional fiber optic system in place. Based on the requirements of upfront construction sequence and implementation timing requirements, this bid item will be included in both "Lake Manatee WTP Filter Upgrade" project and "Lake Manatee WTP SCADA Upgrade" project due to the approximately concurrent bidding schedules for these two projects. Depending on which of the above two construction projects is first mobilized and this work is ultimately performed in, the corresponding contractor for the other project shall accordingly credit the associated lump sum cost back to the Owner. Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

### **BID ITEM NO 13 - PERMITS**

The County has established an allowance of \$20,000 for costs associated with Manatee County Building Department permit fees required for construction of the Work shown in the Contract Documents. The Contractor shall submit copies of all official receipts for documentation of payment. The final cost of the permits either above or below the Contract Price for the allowance will be adjusted by Change Order. AD4

### **BID ITEM NO 14 - REPLACE TROUGH SUPPORTS**

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per each existing concrete trough support replaced at Filter Bay B with new steel trough support per the Contract Drawings (Drawing 03S02 and Detail 26/Drawing 03S11), and as listed on the Bid Form. Payment shall represent full compensation for all labor, material, and equipment, including demolition and restoration (per Section 01\_35\_21) and disposal of material, to complete this Bid Item. AD7

#### 1.07 UNIT PRICE ITEM

- A. Separate payment will be made for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the work shall be considered to be included in the scope of the appropriate listed work items.
- B. No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work. Final payments shall not be requested by the Contractor or made by the Owner until as-built (record) drawings have been submitted and approved by the Engineer.
  - 1. Shop Drawings, Working Drawings.
  - 2. Clearing, grubbing, and grading except as hereinafter specified.
  - 3. Trench excavation, including necessary pavement removal and rock removal, except as otherwise specified.
  - 4. Dewatering and disposal of surplus water.
  - 5. Structural fill, backfill, and grading.
  - 6. Replacement of unpaved roadways, and shrubbery plots.
  - 7. Cleanup and miscellaneous work.
  - 8. Foundation and borrow materials, except as hereinafter specified.
  - 9. Testing and placing system in operation.
  - 10. Any material and equipment required to be installed and utilized for the tests.
  - 11. Pipe, structures, pavement replacement, asphalt and shell driveways, and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
  - 12. Maintaining the existing quality of service during construction.
  - 13. Maintaining or detouring of traffic.
  - 14. Appurtenant work as required for a complete and operable system.
  - 15. Seeding and hydromulching.
  - 16. As-built Record Drawings.

### PART 2 PRODUCTS

Not Used.

### PART 3 EXECUTION

Not Used.

**END OF SECTION** 

AD4 Addendum No. 4 - February 4, 2019 AD7 Addendum No. 7 - February 26, 2019