



February 9, 2017

RE: Rehoboth Beach WWTP CIP Upgrade Phase 1: Filtration Equipment Goods and Special Services

**Addendum #1**

To Bidders:

This Addendum #1 is hereby made part of the Bidding Documents on which the Contract will be based, and is issued to modify, explain and/or correct the original Bidding Documents. Please submit bids and be otherwise governed accordingly. **Receipt of this Addendum must be acknowledged on Page 00400-02 of the Section 00400 Bid Form.**

RESPONSES TO QUESTIONS

**Question 1 (Specification 11380 Article 2.03.1.A)**

If a filter manufacturer has a different standard way of acid cleaning the filter panels other than by incorporating the acid solution in with the backwash piping, is this acceptable? Or does the project require a nipple and valve arrangement in the backwash line to introduce the acid solution to the filter panels while the unit is backwashing?

Response

*The acid cleaning system is removed from scope. See relevant changes to the Contract Documents that follow.*

**Question 2 (Specification 11380 Article 2.05)**

The filter manufacturer is responsible for providing two (2) control panels (1 for each filter). Will these control panels be mounted on a wall in the controls room or is a control panel stand required? If a control panel stand is required, who is to supply, the contractor or filter manufacturer?

Response

*The control panel stand (equipment mounting rack) will be provided by the Contractor.*

**Question 3 (Instruction to Bidders, Article 4.01)**

Please modify the second sentence to be as follows: "A Bidder can be considered the manufacturer of the proposed equipment if its or its affiliates' workforce(s) will be

responsible for 75% or more of all fabrication and assembly required for production of the Goods to be furnished under the Contract Documents."

Response

*No change is required. The intent communicated by the Bidder meets the intent of this Article for this procurement contract.*

**Question 4 (Specification 01640 Article 1.03.B)**

Please insert the following text immediately after the words "set forth in the" and prior to "Contract Documents in every way": "applicable specification section of the"

Response

*No change is required. This procurement contract relates only to the procurement of filtration equipment goods and special services. There are no specification sections that are not applicable to this equipment.*

**Question 5 (Specification 01640 Article 1.03.E)**

Please replace this text with the following: "(manufacturer's name) has examined the applicable Contract Documents and certifies that the equipment, component, or system proposed meets the requirements of and will provide performance at the design criteria specified in the following applicable sections (manufacturer to list sections)".

Response

*It appears that the Bidder is requesting two changes: references to "applicable" components of the Contract Documents instead of the entire Contract Documents; and deletion of certification that the equipment is "suitable for its intended purpose and installation".*

*These changes will not be made: This procurement contract relates only to the procurement of filtration equipment goods and special services, there are no specification sections that are not applicable to this equipment; and, the Bidder needs to certify that the equipment being proposed is suitable for its intended purpose and installation. The Bidder should request any additional information required to make this certification.*

**Question 6 (Specification 11380 Article 1.03.E.3)**

Please provide description of upstream bypass weir, including location, weir length, and weir elevation. This information is required to evaluate and confirm.

Response

*A bypass weir will be set in the filter influent channel at an elevation that will be determined in consideration of the maximum water surface elevation in the influent chambers of the cloth disc filters. Design has not been finalized, but it is intended to provide a 10 foot long wall-mounted bypass trough, that discharges through a new dividing wall to be constructed at the end of the filter influent channel. The cloth disc filter effluent weir shall be set at 10.20 EL. If the successful bidder has a corresponding*

*maximum water surface elevation in the influent chamber of their system of 10.90 EL, the bypass weir will be set an elevation that is 0.2 feet above this elevation, i.e. at 11.10 EL. Maximum water surface elevation when 100% of peak flow is passing over this bypass weir will be 11.60 EL, i.e. 0.7 feet above the maximum water surface elevation in the influent chamber of the cloth disc filter, as noted in the specification. In this event, water surface in the influent chambers of the cloth disc filters would also be 11.60 EL (in accordance with basic hydraulic principles), hence the requirement for the equipment to accommodate a water surface elevation that is 0.7 feet above the maximum water surface elevation associated with 100% of peak flow through the filter.*

**Question 7 (Specification 11380 Article 1.05.A.4)**

Please clarify what the 'non-disc drum-blinding unit' is intended to be. Is this intended to be the apparatus for blinding off openings in the drum (i.e. instances of future disc assembly)? If so, these are not typically wear items.

Response

*This is intended to be the apparatus for blinding off openings in the drum. As noted in the minutes distributed following the pre-bid meeting: The disc filter assembly shall be fully populated with discs and sized for the influent flow and solids loading. The manufacturer shall provide drum-blinding units to give the City the ability to blank off some of these disc spaces if they choose to.*

**Question 8 (Specification 11380 Article 2.02.A.4)**

Our standard design is based on 'stainless steel pipe stub ends with loose galvanized flange collars'. Please update the specification to allow for this standard design.

Response

*Provide connections as specified.*

**Question 9 (Specification 11380 Article 2.02.C.4)**

Please replace the text "15 microns" with "20 microns".

Response

*The specification is intended to allow 10 to 15 microns.*

**Question 10 (Specification 11380 Article 2.02.D.4)**

Please replace the text "brass" with "stainless steel". A stainless steel valve is more appropriate for this application.

Response

*It is acceptable to provide a stainless steel ball valve. See relevant changes to the Contract Documents that follow.*

**Question 11 (Specification 11380 Article 2.03.A.1)**

Please update the specification so the Acid Cleaning System is not a required item for the Type A suppliers and will not be considered in the price comparison.

The automated acid cleaning system is not a required item (hundreds of installations are installed without this). It is an added value feature that the Owner may find helpful. However, the current verbiage is actually a cost disadvantage to Type A Suppliers that are able to provide this added value feature.

Response

*The acid cleaning system is removed from scope. See relevant changes to the Contract Documents that follow.*

**Question 12 (Specification 11380 Article 2.05.A.8)**

Per NEC Code there must be a motor disconnect device in sight of the motor (Backwash Pumps, Filter Drum Motors). If local motor disconnects are required, confirm whether they are to be supplied by Filter Supplier or the Contractor.

Response

*The local motor disconnect devices will be provided by the Contractor.*

**Question 13 (Specification 11380 Article 2.05.A.16)**

Please update specifications to allow for one (1) junction box mounted to each Discfilter unit. Please note that typically 480VAC conduit is wired directly to the backwash pump and filter drum motor. Our standard design is to provide a single mounted junction box. The conductance probes, 3 probes internal to the Discfilter unit, are pre-wired to this NEMA 4X Junction Box.

Response

*Provide junction boxes as specified.*

**Question 14 (Specification 11380 Article 2.05.A.18)**

Please allow for a redundant conductivity probe in lieu of redundant float switch. A float switch is not a suitable instrument for this application given that the water level will only rise and fall approximately 2-4", which is not enough variance to activate a float switch.

Response

*It is acceptable to provide a conductivity probe in lieu of the redundant float switch. See relevant changes to the Contract Documents that follow.*

**Question 15 (Specification 11380 Article 3.01.B)**

Filter equipment is typically delivered to the project site on flatbed trailers for off-loading by the contractor. Please confirm whether it is desired for the filters to be delivered to the site within storage containers that are suitable for outdoor storage. If so, please confirm the maximum length of time that the containers will be required to be on site in order for this to be appropriately priced into the proposal.

Response

*The equipment will be stored outdoors until installed by the Construction Contractor. Therefore, the successful bidder is required to deliver the equipment in containers*

*suitable for outdoor storage. The containers shall provide whatever protection is necessary for the equipment. It is anticipated that installation will take place soon after delivery. However, storage time could be 1-3 months or longer depending on any issues encountered in the permitting, bidding, award and mobilization phase of the Construction Contract.*

**Question 16 (Specification 11380 Article 3.01.C)**

Filter suppliers do not typically handle or off-load the equipment at the project site. This is typically performed by the contractor. Please confirm whether this item is to be performed by the contractor or the filter supplier.

Response

*Refer to SC-6.02.C: "Seller shall not be responsible or bear any costs for unloading the Goods from the carrier". Specification 11380 Article 3.01.C relates to delivery, not unloading. The successful bidder shall provide equipment and personnel for handling to prevent soiling and damage during delivery (i.e. transit), the Construction Contractor will be responsible for providing equipment and personnel for unloading the equipment when it arrives at the Point of Destination.*

**Question 17 (Supplementary Conditions Article 4.02.G.4)**

The patent and copyright outlined in section 12.02 is not covered under Aqua-Aerobic Systems' insurance. Please remove "and 12.02;" from the above statement.

Response

*GC-12.02 refers to indemnification of the Buyer and Engineer from claims relating to infringement on a patent or copyright for the Goods furnished under this contract. This condition will not be waived. Bidders should advise the Engineer as soon as possible if they perceive any risk of patent or copyright infringement arising from delivery of the Goods to be furnished under this contract.*

**Question 18 (Specification 11380 Article 1.01)**

The two above statements appear to conflict. Please confirm the intent is for the supplier to provide pre-assembled filters in steel tanks so the contractor may insert them into the existing basin structures, repurposing the concrete structures into filter vaults.

Response

*No change is required. The purpose is indeed to provide pre-assembled filters in steel tanks so the contractor may insert them into the existing basin structures, repurposing the concrete structures into filter vaults.*

**Question 19 (Specification 11380 Article 1.03.C)**

The named Type B manufacturer's standard maximum design hydraulic loading rate is 6.5 gpm/sf, which has been proven in hundreds of installations world-wide. Please revise as follows:

Maximum Hydraulic loading rate on the filter cloth: 5 gpm per square foot of effective submerged media surface at a flow of 3.6 MGD per Type A unit or 6.5 gpm per square foot of effective submerged media surface at a flow of 3.6 MGD per Type B unit.

Response

*The equipment shall meet the specified performance criteria.*

**Question 20 (Specification 11380 Article 1.03.F)**

The named Type B manufacturer's backwash system includes two pumps, operating concurrently, to produce a total flow rate of 260 gpm. Please revise the specification to allow this

Response

*The higher backwash waste flow is acceptable. See relevant changes to the Contract Documents that follow.*

**Question 21 (Specification 11380 Article 1.05.A.2)**

Backwash shoes on the named Type B filter are made from non-wearing materials and do not require replacement throughout the life of the unit. Please remove this requirement.

Response

*Spare parts requirements for Type B units modified. See relevant changes to the Contract Documents that follow.*

**Question 22 (Specification 11380 Article 1.05.A.4)**

Please confirm the intended use of these components.

Response

*As noted in the minutes distributed following the pre-bid meeting: The disc filter assembly shall be fully populated with discs and sized for the influent flow and solids loading. The manufacturer shall provide drum-blinding units to give the City the ability to blank off some of these disc spaces if they choose to.*

**Question 23 (Specification 11380 Article 1.07)**

In order to ensure that the selected system has proven itself capable of processing the expected solids concentrations on a continuous basis, please add the following as Section 11380.1.07:

**1.07 VENDOR QUALIFICATION AND EXPERIENCE**

- A. Within their bid package each equipment manufacturer shall include an installation list, with references, including a minimum of 15 installations which have been operating for a minimum of 5 years under similar conditions. Each installation included in this list must be accompanied by a minimum of 12 consecutive months of operating data.

Response

*This Article will not be added. The named manufacturers are considered to have sufficient experience.*

**Question 24 (Specification 11380 Article 2.02.A.4)**

Please revise to read: Flange connections to be furnished with AISI 304 stainless steel pump and slip-on or weld-neck type flanges.

Response

*Provide connections as specified.*

**Question 25 (Specification 11380 Article 2.02.B.2)**

Please revise to read: If required by the filter design, Lubrication of the center drum shall have appurtenances to allow lubrication to be completed from outside of the unit and without draining of the unit.

Response

*Appurtenances for lubrication are only required if the component required lubrication. See relevant changes to the Contract Documents that follow.*

**Question 26 (Specification 11380 Article 2.02.C.5)**

Please revise to read: For Type A units, the replacement of filter media must be possible from outside the filter tank.

Response

*It is noted that Type B units cannot comply with this requirement. See relevant changes to the Contract Documents that follow.*

**Question 27 (Specification 11380 Article 2.02.D.1)**

The standard design for the named Type B filter system does not include a mounting structure for the backwash pump connected to the tank. The backwash pumps are floor-mounted next to the filter. Please remove this requirement.

Response

*It is noted that Type B units do not include a mounting structure for the backwash pump connected to the tank. See relevant changes to the Contract Documents that follow.*

**Question 28 (Specification 11380 Article 2.02.E.3.d.1)**

Should the Type B filter's hydraulic loading rate, as clarified above, remain at not greater than 5 gpm/sf at 3.6 MGD, please revise this statement to allow up to 6 disks per pump.

Response

*This is acceptable provided that any one pump is not connected to filter discs in two different cloth disc filters. See relevant changes to the Contract Documents that follow.*

## CHANGES TO BIDDING DOCUMENTS

1. Section 01640, Article 1.08 Operations and Maintenance Manuals: DELETE Article 1.08.A.4 in its entirety and replace with:
  - “4. Prior to final payment, provide the final operation and maintenance manual in electronic format. The final operation and maintenance manual shall include all required operation and maintenance information consolidated into one manual. The final operation and maintenance manual shall include testing and startup results where applicable.”
  
2. Section 01640, Article 1.08 Operations and Maintenance Manuals: DELETE Articles 1.08.C.1, 1.08.C.2, 1.08.C.3, 1.08.C.4, 1.08.C.5, and 1.08.C.6 in their entirety and replace with:
  - “1. All Shop Drawings included in the final operation and maintenance shall be those previously submitted for review and approval and shall include the Engineer’s review comment sheet.
  2. Electronic manual files shall be submitted in Adobe Acrobat Reader (.PDF) format. Any CDs and covers furnished by the Seller shall be labelled with the Project name, Supplier, equipment identification, and Specification section. CDs shall be provided in individual hard plastic cases.”
  
3. Section 11380, Article 1.03 Performance Requirements: DELETE Article 1.03.F in its entirety and replace with:
  - “F. Backwash waste flow from each cloth disc filter shall be no greater 401-952-5731 (M) nancyd88@ comcast.net260 gpm.”
  
4. Section 11380, Article 1.05 Spare Parts: DELETE Article 1.05.A.2 in its entirety and replace with:
  - “2. 1 backwash/solids waste valve and actuator (Type B Units).”
  
5. Section 11380, Article 2.02.B Center Drum: DELETE Article 2.02.B.2 in its entirety and replace with:
  - “2. If the center drum requires lubrication, the center drum shall have appurtenances to allow lubrication to be completed from outside of the unit and without draining of the unit.”
  
6. Section 11380, Article 2.02.C Disc Assembly: DELETE Article 2.02.C.5 in its entirety and replace with:



- “5. The replacement of filter media must be possible from outside the filter tank (Type A units only).”
7. Section 11380, Article 2.02.D Support Frame with Enclosed Tank and Cover: DELETE Article 2.02.D.1 in its entirety and replace with:
- “1. The support frame and tank shall be one piece, welded, structural 304 stainless steel. Onto the support frame shall be welded 304 stainless steel mounting structures for all appurtenances, including the back-wash pump (Type A units only), drive gear box, trough end supports and center drum bearings. Tank thickness shall be a minimum of 1/8” thickness. Carbon steel construction shall not be accepted.”
8. Section 11380, Article 2.02.D Support Frame with Enclosed Tank and Cover: DELETE Article 2.02.D.4 in its entirety and replace with:
- “4. The tank shall be furnished with a manually operated, brass or stainless steel, ball-type, drain valve designed to allow complete tank drainage. Each unit shall also be furnished with fittings as necessary to drain the center drum, influent chambers and effluent chambers into the tank.”
8. Section 11380, Article 2.02.E Backwash Cleaning System: DELETE Article 2.02.E.3.d.1 in its entirety and replace with:
- “1. The backwash/waste pumps shall be Gorman Rupp model 12B20-B, externally mounted centrifugal pumps. Backwashing shall be initiated by tank water level, timer, or manually through the operator interface. Operator shall have the ability to specify backwash time interval elapses through the operator interface. Seller shall furnish at least one backwash/waste pump for every six (6) filter discs. No more than six (6) filter discs may be connected to any one backwash/waste pump. A backwash/waste pump may not be connected to filter discs in two different cloth disc filters.”
9. Section 11380, Article 2.03 Accessories: DELETE Articles 2.03.1 and 2.03.1.a in their entirety and replace with:
- “NOT USED”
10. Section 11380, Article 2.05 Controls: DELETE Article 2.05.A.18 in its entirety and replace with:
- “18. The system supplier shall furnish and install a high level float switch or a conductivity probe as a back-up to the primary level system provided to control the system. The float switch or conductivity probe shall be wired to terminal blocks in the appropriate junction box(s) specified in this Section.

When float switch or conductivity probe is activated on a high level, the backwash pump shall run continuously until the level goes down and float switch or conductivity probe deactivates. Furnish and install a relay in the control panel to facilitate wiring of the high level alarm signal from the float switch or conductivity probe to the plant PLC without the use of the disc filter PLC. Provide a timer as required to prevent the backwash pump from cycling at a frequency that is more than that the pump manufacturer allows.”

11. Section 11380, Article 2.05 Controls: DELETE Article 2.05.A.19.d.8 in its entirety and replace with:

“8. Backup high water level alarm.”

12. Section 11380, Article 2.06 Fabrication Requirements: ADD Article 2.06.F:

“F. Isolate dissimilar metals with dielectric using stainless steel fasteners.”

Sincerely,



Sharon Lynn  
City Manager