

**TUSCARAWAS COUNTY COMMISSIONERS
TUSCARAWAS COUNTY, OHIO**

CONTRACT 2 – WILKSHIRE HILLS WATER SYSTEM IMPROVEMENTS

ADDENDUM #2

FEBRUARY 24, 2023

THRASHER PROJECT #101-010-01120

TO WHOM IT MAY CONCERN:

The following are clarifications and responses to questions posed by contractors for the above-referenced project.

1. SPECIFICATIONS

1. Specification 012000 Price and Payment Procedures
REPLACE PAGES 6-7

Page 6 of Bid Item #4 – Pressure Reducing Valve Vault

a. Scope of Work

1)

a) **2** pressure reducing valves installed and one spare

No changes to page 7, just included it if printed double-sided.

2. Specification 409300 Process Control Descriptions
REPLACE PAGES 11-14.

Page 11, Section 3.2 – Process Control Descriptions – WTP

B. Vertical Pressure Filter System

2. Backwash Pump

a. Control

1) Control of the backwash pump **may be operated in automatic or** by manual operation.

Page 12, Section 3.2 – Process Control Descriptions – WTP

B. Vertical Pressure Filter System

3. Chemical Dosing Pump

b. Interlocks

1) Backwash Water Supply Tank Level **Pressure**
Transducer

Page 13, Section 3.2 – Process Control Descriptions – WTP

C. Settling Tank

1. Telescoping Valve Electric Actuator

d. Alarm Summary

1) High Water Alarm

**a) Connect filter control panel so filters do not
run. Tie into existing SCADA system.**

There were no changes to page 14 except that when text was added to pages 11-13, it pushed some of the text from page 13 to page 14.

2. QUESTIONS AND RESPONSES

QUESTION 1

Do you have a Rep or Salesperson from Layne Christensen who you worked with on pressure filters? Want to confirm extent of their piping.

RESPONSE

Bob Curley, Business Development Manager, Office (513) 424-7287

QUESTION 2

Is there a pipe schedule that indicates what buried lines are to be restrained?

RESPONSE

No, we do not have a pipe schedule for restraints.

QUESTION 3

Are there any other Valve Manufacturers that have been approved to bid?

RESPONSE

Please see specification section 400553 Process Valves and Appurtenances. Muller or approved equal.

QUESTION 4

For the C900 pipe do you have a DR or pressure rating?

RESPONSE

The Pipes should be pressure rated at 150 psi.

QUESTION 5

Can you clarify bid items 3 thru 9? Do these items pertain to Meter Sites #1 & #2? Bid Item 3 Scope of Work per specification 012000 Price and Payment Procedures appears to contain some of the items listed as individual bid items.

RESPONSE

Item 3 is pertaining to the flow meter pits #1 and #2

Item 4 is pertaining to the flow meters pits #1 and #2

Item 5 is all water line connections at the water plant and the two meter sites

Item 6 is pertaining to the flow meters pits #1 and #2

Item 7 is pertaining to the flow meters pits #1 and #2

Item 8 is pertaining to the flow meters pits #1 and #2

Item 9 is pertaining to the flow meters pits #1 and #2

If you have any questions or comments, please feel free to contact me at your earliest convenience. As a reminder, bids will be received until 9:45 a.m. on Wednesday, March 8, 2023, at the Office of the Clerk of the Board of the Tuscarawas County Commissioners located at 125 E High Ave, New Philadelphia, OH 44663. Good luck to everyone, and thank you for your interest in the project.

Sincerely,

THE THRASHER GROUP, INC.



Steve Hamit, PE
Project Manager

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flow meter vault (as shown on Contract Drawings), including but not limited to:

- a) 2 pressure reducing valves installed and one spare
- b) piping,
- c) concrete structure,
- d) lifting lugs, access hatch, hand rungs, manhole steps as shown on the drawings,
- e) survey control,
- f) consumables,
- g) furnishing, installing and maintaining temporary utilities, including lighting, ventilation, and gas monitoring,
- h) furnishing, installation, operation and maintenance of dewatering equipment,
- i) all other work required to excavate, support, maintain, in accordance with the Contract Documents.
- j) Providing training to OWNER personnel on the operation of the flow meters.

b. Measurement and Payment

- 1) The CONTRACTOR shall be paid at the LUMP SUM price for this Bid Item. Partial payments of the lump sum price bid will be made based upon the approved Schedule of Values for work completed in accordance with the Contract Documents.

5. BID ITEM NO. 5 – CONNECT TO EX. WATER LINE

a. Scope of Work

- 1) The lump sum price bid for Bid Item 5 - Connect to Ex. Water Line is for all costs associated with the connection to existing water lines (as shown on Contract Drawings), including but not limited to:
 - a) location, excavation, and exposure of existing water line,
 - b) all equipment and material required for the connection to the existing water line,
 - c) consumables,
 - d) all other work required to connect to existing water line pipe in the Contract Documents.

b. Measurement and Payment

- 1) The CONTRACTOR shall be paid at the LUMP SUM price for this Bid Item. Partial payments of the lump sum price bid will be made based upon the approved Schedule of Values for work completed in accordance with the Contract Documents.

6. BID ITEM NO. 6 – 6" PVC, C-900

a. Scope of Work

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- 1) The price bid for Bid Item 6 - 6" PVC, C-900 is for all costs associated with the installations of 6" PVC, C-900 water line. This work shall include, but limited to the following; excavation, backfill material, compaction, material, and any other items as required for the construction, complete in place. Complete the work as specified and as directed by the OWNER.
 - b. Measurement and Payment
 - 1) The CONTRACTOR shall be paid for horizontal length as field measured and work accepted by the OWNER.
7. BID ITEM NO. 7 – 8" PVC, C-900
- a. Scope of Work
 - 1) The price bid for Bid Item 7 - 8" PVC, C-900 is for all costs associated with the installations of 8" PVC, C-900 water line. This work shall include, but limited to the following; excavation, backfill material, compaction, material, and any other items as required for the construction, complete in place. Complete the work as specified and as directed by the OWNER.
 - b. Measurement and Payment
 - 1) The CONTRACTOR shall be paid for horizontal length as field measured and work accepted by the OWNER.
8. BID ITEM NO. 8 – 6" Gate Valve and Valve Box
- a. Scope of Work
 - 1) The price bid for Bid Item 8 - 6" Gate Valve and Valve Box is for all costs associated with the installations of the gate valve and valve box. This work shall include, but limited to the following; excavation, backfill material, compaction, material, and any other items as required for the construction, complete in place. Complete the work as specified and as directed by the OWNER.
 - b. Measurement and Payment
 - 1) The CONTRACTOR shall be paid for each as field constructed and work accepted by the OWNER.
9. BID ITEM NO. 9 – 8" Gate Valve and Valve Box
- a. Scope of Work
 - 1) The price bid for Bid Item 9 - 8" Gate Valve and Valve Box is for all costs associated with the installations of the gate valve and valve box. This work

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- e) Once the filter that shall be backwashed and the valves are closed, the backwash water inlet and outlet valves shall be opened.
- f) The backwash pump and chemical dosing pump shall be initiated to begin the backwash cycle. The SCADA system shall time the duration of the backwash cycle. With the completion of the backwash cycle, the backwash pump and chemical dosing pump shall be stopped and the backwash inlet and outlet valves shall close. Isolating the filter with the completion of the backwash cycle.

2. Backwash Pump

a. Control

- 1) Control of the backwash pump **may be operated in automatic or** by manual operation. The actuator Local-Off-Remote and Close - Open selector switches are use as follows.
- 2) In Local, the Operator can manually turn the backwash pump on and off. This shall be accomplished using an Start-Stop selector switch whereby the following occurs:
 - a) Start – Momentary switch whereby the pump turns on only while the operator physically activates the switch. When the Operator releases the switch the pump stops.
 - b) Stop – Momentary switch whereby the pump turns off only while the switch is in the Stop position.
- 3) In Off, the pump shall not operate shall not operate.
- 4) In Remote, the backwash pump will be controlled through the SCADA system as outlined below:
 - a) The backwash pump shall be started with the backwash cycle. After the SCADA system closes valves to isolate the vertical pressure filter to be backwashed and open backwash lines to the filter, the backwash pump shall be initiated.
 - b) Once the backwash cycle is completed, the backwash pump will be turned the Off position.

3. Chemical Dosing Pump

a. Control

- 1) Control of the chemical dosing pump shall be by manual operation. The actuator Local-Off-Remote and Close - Open selector switches are use as follows.
- 2) In Local, the Operator can manually turn Start and Stop the chemical dosing pump from the SCADA. This shall be accomplished using an Start-Stop selector switch whereby the following occurs:
 - a) Start – Momentary switch whereby the pump turns on only while the operator physically activates the switch. When the Operator releases the switch the pump stops.

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- b) Stop – Momentary switch whereby the pump turns off only while the switch is in the Stop position.
- 3) In Off, the pump shall not operate shall not operate.
- 4) In Remote, the backwash pump will be controlled through the SCADA system as outlined below:
 - a) The chemical dosing pump shall be started with the backwash cycle. After the SCADA system closes valves to isolate the vertical pressure filter to be backwashed and open backwash lines to the filter, the backwash pump shall be initiated. With the start of the backwash pump, the chemical dosing pump will initiate.
 - b) Once the backwash cycle is completed, the chemical dosing pump will be turned the Off position.

b. Interlocks

- 1) Backwash Water Supply Tank Level **Pressure** Transducer
- 2) Pressure Filter Skid Pressure Transducers
- 3) Backwash Water Pump

c. Alarm Summary

- 1) Backwash Water Supply Tank Low Water Alarm
- 2) Backwash Water Pump Fault
- 3) Valve Failure to Open/Close

d. SCADA Monitoring

- 1) Display Remote-Stop-Local Mode
- 2) Display Gate Position
- 3) Pressure Filter Pressure Reading (Inlet/Outlet)
- 4) Backwash Water Pump Running
- 5) Dosing Pump Running
- 6) Backwash Water Supply Tank

C. Settling Tank

1. Telescoping Valve Electric Actuator

a. Description

- 1) The electric actuator shall raise and lower the telescoping valve based on water surface elevation and water quality within the settling tank. The electric actuator will lower to decant water off the surface of the settling tank. HMI and control panel shall be mounted at settling tank.

b. Control

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- 1) Control of the telescoping valve shall be by manual operation. The gate actuator Local-Off-Remote and Close-Open selector switches are use as follows.
 - 2) In Local, the Operator can manually raise/lower the telescoping valve as desired at the actuator. This shall be accomplished using an Close-Open selector switch whereby the following occurs:
 - a) Open – Momentary switch whereby the telescoping valve lowers to open the valve only while the operator physically activates the switch. When the Operator releases the switch the telescoping valve stops all movement.
 - b) Close – Momentary switch whereby the telescoping valve raises to close the valve only while the operator physically activates the switch. When the Operator releases the switch the telescoping valve stops all movement.
 - 3) In Off, the telescoping valve motor operator shall not operate.
 - 4) In Remote, the actuator will be controlled through the SCADA panel as outlined below:
 - a) The telescoping valve shall be positioned at full open when the settling tank when water is flowing into the settling tank.
 - b) The SCADA panel shall monitor the water surface elevation and the position of the telescoping valve. Raising (closing) the telescoping valve as the water surface elevation increases in the settling tank.
 - c) The TSS probe will continuously monitor the TSS in the settling tank. Once a field programable lower limit is achieved, the electric actuator shall lower, opening the telescoping valve.
 - d) If the TSS probe detects higher TSS over the lower limit, the electric actuator shall be turned off until the lower limit is met.
 - e) The speed of the electric actuator shall be field adjustable in the SCADA, slowing the rate of decant out of the settling tank.
- c. Interlocks
- 1) Level Transducer
 - 2) TSS/Turbidity Probe
- d. Alarm Summary
- 1) High Water Alarm
 - a) **Connect filter control panel so filters do not run. Tie into existing SCADA system.**
- e. SCADA Monitoring
- 1) Display Valve Position
 - 2) Display Valve Running Direction
 - 3) Display Water Elevation
 - 4) Display TSS Concentration

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- f. SCADA Monitoring
 - 1) Water Elevation
 - 2) TSS Concentration

END OF SECTION 409300