

ADVERTISEMENT FOR BIDS

PART 1 - GENERAL

1.1 RECEIPT OF BIDS

- A. Sealed proposals will be received by the Village of Roselle for the project entitled “Jerry A. Botterman STP Aerobic Digester and Belt Filter Press Upgrades” until 10:00 AM on October 24, 2017 at The Office of Public Works, located at 474 Congress Circle North, Roselle, IL 60172. The sealed bids will be publicly opened and read aloud immediately afterwards in the Office of Public Works, located at 474 Congress Circle, Roselle, IL 60172, on the same date. Sealed bids shall be addressed to the Village of Roselle, Purchasing Agent’s Office, 474 Congress Circle, Roselle, IL 60172 and shall be labeled “Botterman Digesters and Belt Filter Press Upgrades”.
- B. The procurement will be subject to regulations contained in the Davis-Bacon Act (40 USC 276a through 276a-5) as defined by the United States Department of Labor, the Employment of Illinois Workers on Public Works Act (30 ILCS 570) and DBE Policy per 40 CFR Part 33, as amended. This procurement may also subject to the loan recipient’s policy regarding the increased use of disadvantaged business enterprises. This policy requires all bidders to undertake specified affirmative efforts at least sixteen (16) days prior to bid opening. The policy is contained in the specifications. Bidders are also required to comply with the President’s Executive Order No. 11246, as amended. The requirements for bidders and contractors under this order are explained in 41 CFR 60-4. In addition, this procurement is subject to the “Use of American Iron and Steel” requirements as contained in Section 436 (a) – (f) of the Consolidated Appropriations Act, 2014.

1.2 GENERAL WORK DESCRIPTION

NOTE: The work should be completed in such a way that the plant operations are minimally impacted – except for short periods of time (less than 24 hours) – the ability to waste sludge to digesters and operate the belt filter press should be provided at all times.

A. Digester Basin Work

1. Excavation

a. Excavate as needed based on drawings and work to be done. Excavation will include:

- 1) The area for new basins, with the external dimensions of 49’-8” x 49’-8”. Total footprint of basins, including footing is approximately 52’-2” x 52’-2”. Current ground elevation is approximately 782’ to 783’. The top of the 2’-6” slab/footing is 770.00’ to 770.75’. The sump for the new basin has a top of slab elevation of 768.25’
- 2) Approximately 40 linear feet of 8” ductile iron pipe for the interconnections between Digester Basins # 1, #2 and #3.
- 3) Approximately 50 linear feet of 8” ductile iron pipe for the drain/telescoping valve decant on Digester #1 to Manhole #14.
- 4) Approximately 23 linear feet of 6” ductile iron pipe for the recycle line (S/TWAS) from Digester #1 to the sludge thickener.

- 5) Approximately 17 linear feet of 6" ductile iron pipe for the drain line (DSL) to connect to the existing 6" DSL line from Digesters #2 and #3.
 - 6) Approximately 11 linear feet of 6" ductile iron pipe for the Digester Feed line (TWAS) from the existing 6" TWAS line for Digesters #2 and #3.
 - 7) Approximately 27 linear feet of 12" Schedule 10 304SS air piping from the new blowers to new Digester #1.
 - 8) Replacement 10" Schedule 10 304SS air piping to replace existing 10" ductile iron pipe for Digesters #2 and #3.
 - 9) Approximately 40 linear feet of 2" pipe for non-potable water to a new yard hydrant to be located near the new digester.
 - 10) Excavation for electrical duct banks from the sludge handling building to the new digester.
- b. Remove existing sidewalks as shown in drawings.
2. One (1) New Digester Basin (#1)
 - a. Form and Pour concrete slab and walls, including wall pipes as specified and shown in the drawings. Basin will have internal dimensions of 46' x 46' with a top of wall elevation of 788.00'.
 - b. Form and Pour new sidewalks and walkways as shown.
 - c. Install sidewalk hand rails as shown.
 - d. Install diffusers into basin
 - e. Install one (1) Dissolved Oxygen (D.O.) / Temperature probe, one (1) pH / Oxidation Reduction Potential (O.R.P) probe and one (1) Controller.
 - f. Install three (3) 6" plug valves and 304 SS extensions, three (3) 8" plug valves and 304SS extensions, one (1) 8" telescoping valve and one (1) 12" butterfly valve and extension for air line.
 - g. Install aluminum flat cover.
 - h. Install new 8" drain line from Digester #1 to Manhole #14.
 - i. Install new 6" DSL line to existing 6" DSL line.
 - j. Install new 6" TWAS line to existing 6" TWAS line.
 - k. Install new 2" NPW line from existing NPW to new yard hydrant to be located near new digester.
 3. Install two (2) new blowers
 - a. Remove existing floor as shown on drawings.
 - b. Pour isolation blocks and new floor as shown in drawings.
 - c. Epoxy coat floors per specifications.
 - d. Install two (2) new blowers in blower room. The back of the blowers and/or the existing doors and door frame on west side of room may need to be removed in order to accomplish this.
 - e. Core and install link seals for two (2) 8" 304 SS inlet air lines as shown.

- f. Core and install link seal for one (1) 12" 304 SS discharge air line as shown.
 - g. Remove blind flange from existing 10" air line.
 - h. Plumb inlet, discharge and connection between new 12" and existing 10" air lines as shown. Including, two (2) 8" and four (4) 12" butterfly valves.
 - i. Install two (2) inlet air filters and weather hoods.
 - j. Insulate interior air piping per specifications.
 - k. Paint interior air piping to match existing.
 - l. Provide electrical and control upgrades as required for the two (2) new blowers. Note that the base bid blowers include starters as part of the package.
 - 1) The mechanical timers within the existing MCC will be removed and the timers will be programmed into the PLC.
 - 2) The new breakers and tub for the blowers and the blower fans will be installed in the MCC in the locations vacated by the timers.
4. Work in sludge thickener tank
- a. Isolate thickening tank
 - b. Drain and clean thickening tank.
 - c. Core one (1) 6" opening in north wall of sludge thickening tank for S/TWAS piping
 - d. Install link seal for 6" ductile iron pipe.
 - e. Core two (2) openings for valve stem extensions
 - f. Install one (1) 6" plug valve and 304 SS valve extension for S/TWAS line.
 - g. Remove one (1) existing 8" 90° elbow from decant lines in thickening tank.
 - h. Install one (1) 8" Tee and one (1) 8" plug valve with 304 SS extension.
5. Two (2) Existing Digester Basins (#2 and #3)
- a. To be completed once new digester basin is operational.
 - b. Isolate existing basins.
 - c. Drain and clean both existing basins
 - d. Interconnect in internal shared wall between Digesters #2 and #3
 - 1) Core one (1) opening through shared walled as shown on drawings.
 - 2) Install link seal for 8" ductile iron pipe.
 - 3) Install one (1) 8" plug valve and 304 SS valve extension.
 - e. Interconnect between Digester #1, #2 and #3 – North walls of basins
 - 1) Core one (1) opening through the north wall of each digester basin #1 and #2 as shown on the drawings.
 - 2) Install link seal at each location for 8" ductile iron pipe
 - 3) Install one (1) 8" plug valve and 304 SS valve extension at each location.

- 4) Connect 8" ductile iron pipes between Digesters #1, #2 and #3 as shown on the drawings.
- f. Replace existing 10" ductile iron air line from external of the digester basins to the outside of blower building, as shown on the drawing, with 304 SS Schedule 10 pipe.
- g. Form and pour replacement concrete sidewalk and steps as shown.

B. Belt Filter Press Work

- 1. Installation of Belt Filter Press Containment Curb
 - a. Form and pour 8" high concrete containment curb as shown on the drawings.
 - b. Form and pour concrete belt filter press support pedestal as shown on the drawings.
 - c. Grout slope into belt filter press containment area as should in the drawings.
- 2. Install new Belt Filter Press onto pedestals.
 - a. Press can be brought into building using contractor's best methods. The options include, but aren't limited to:
 - 1) Coming in through the garage on the east side of the building, which may require the removal of the existing door frame.
 - 2) Removing the knock-out portion of the south wall in line with where this press will go. This may require the removal of the conveyor and some existing HVAC equipment.
- 3. Drain lines
 - a. Remove existing 6" and 3" drain piping to extents shown on drawings.
 - b. Core opening and provide link seal for 6" main belt press drain in middle of containment area
 - c. Install new 3", 6" and 8" PVC drain lines as shown on drawings.
 - d. Paint PVC Drain lines to match existing.
- 4. Belt Filter Press Feed Line
 - a. Core opening and provide link seal for 6" belt filter press feed as shown on drawings.
 - b. Remove existing 6" ductile iron pipe in basement as shown on drawings.
 - c. Install new 6" ductile iron pipe as shown on drawings, including three (3) 6" plug valves with chain wheel operators, one 6" plug valve with handwheel operator, one (1) 4" flow meter and one (1) polymer injection ring.
 - d. Paint new piping to match existing
- 5. Non-Potable Water Feed Line
 - a. Core opening and provide link seal for belt filter press non-potable water feed line.
 - b. Existing pumps will be used. The new belt filter press includes a booster pump that shall be sized to make up the pressure different between what the existing pumps can provide and what the new belt filter press requires.
 - c. Add tee to existing line
 - d. Add valve to new line

- e. Insulate piping to match existing
- f. Paint new piping to match existing
- 6. Provide electrical and control wiring for the new belt filter press as required. This will include improvements to the existing MCC and Control System, as well as additional programming around the control of the belt filter press feed pumps and non-potable water booster pumps.
 - a. Belt filter press control panel will be mounted on the south wall of the control room in the belt filter press building.
 - b. The new breaker for the control panel will be mounted in an existing, spare tub in the existing MCC.
- 7. Epoxy paint floors per specifications
- 8. Install metal grating on new containment curbs as shown in the drawings.
- 9. Polymer Feed System Work
 - a. Install new polymer feed system on west wall of belt filter press room.
 - b. The existing polymer system will remain in use for the existing belt filter press.
 - c. New polymer feed system will supply polymer to the new belt filter press.
 - d. New polymer will pull polymer from existing polymer storage tank. Plumb line from polymer storage tank to new polymer feed system.
 - e. Tap and plumb non-potable water from the feed line that goes to the existing polymer unit to the new one. Provide isolation valves on each run.
 - f. Plumb polymer solution lines from polymer feed unit to injection ring of new belt filter press.
- 10. Extension of Existing Odor Removal Ducts
 - a. Extend existing ceiling ducts in belt filter press room as shown on the drawings.

1.3 DOCUMENT INSPECTION AND PROCUREMENTS

- A. The Contract Documents may be inspected and purchased at the following locations.
 - 1. Trotter and Associates, Inc.
40W201 Wasco Rd. Suite D
St. Charles, Illinois 60175
630/587-0470
- B. Payment for Contract Documents is non-refundable and shall be payable to Trotter and Associates, Inc. in the form of cash, certified check or money order. No partial sets of specifications or drawings will be issued. The non-refundable cost for plans and specifications is \$200.00. Addenda will be issued only to plan holders.

1.4 BONDS

- A. Each bid shall be accompanied by a bid bond, bank draft, cashier's check or certified check payable to the order of the Village of Roselle, Illinois in an amount not less than ten (10) percent of the amount of the bid, as a guaranty that the bidder will execute the contract, if it is awarded, in conformity with the bid form.

- B. The successful bidder will be required to furnish Performance and Payment Bonds on forms provided in the Specifications and Contract Documents, each in an amount equal to 100 percent of the contract sum.

1.5 MANDATORY PRE-BID CONFERENCE

- A. Mandatory Pre-Bid Conference will be held:
 - 1. On September 21, 2017 at 10:00 AM at the Botterman STP, located at 1351 Central Avenue, Roselle, IL 60172.
- B. Bidders/Contractors not attending the Pre-Bid Conference shall have their bids rejected.

1.6 WAGE RATES

- A. The contractor shall pay prevailing wages in accordance with the Davis-Bacon Act (40 USC 276a through 276a-5) as defined by the U.S. Department of Labor, Local Ordinance and the Illinois Department of Labor Prevailing Wages for DuPage County, whichever is greater.
- B. Rates can be obtained online at www.wdol.gov and www.state.il.us/Agency/idol/.

1.7 REJECTION OF BIDS

- A. Per the IEPA's Procedures for Issuing Loans from the Water Pollution Control Revolving Fund Part 365.620, Section b, the Village of Roselle may reserve the right to reject any and/or all bids if it has documented sound business reasons.

1.8 AWARD OF BID

- A. Final award of bid shall be contingent on the Village of Roselle receiving financing from the Water Pollution Control Loan Program as administered by the Illinois Environmental Protection Agency. Per the IEPA's Procedures for Issuing Loans from the Water Pollution Control Revolving Fund Part 365.620, Section b, unless all bids are rejected, award shall be made to the low, responsive, responsible bidder after the bid evaluation has been submitted to the IEPA and written notice of IEPA approval has been received by the Village of Roselle.

Village of Roselle, Illinois
Jeffrey D. O'Dell
Village Administrator