



John M. McDonald Engineering

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January 26, 2017

Robert Bergen  
Montgomery County Sanitary Sewer District #1  
PO Box 246  
Fort Plain, NY 13339

**Re: Montgomery County Sanitary District #1  
WWTP Clarifier Rehabilitation & Leachate Acceptance Modification Project**

Dear Mr. Bergen:

As you know, we completed the Wastewater Treatment Plant Improvements Feasibility Report in July of 2016. The report was developed based on an inspection of plant equipment, which we performed together earlier that year. The conditions of equipment and process units were evaluated and ranked in order of priority to keep the plant in compliance with the SPDES permit. Clarifier rehabilitation was ranked highest, with leachate acceptance modifications not far behind. You recently advised that the County will only be moving forward with these two work items, due to financial constraints. Therefore, we have prepared this scope of work for your consideration, to rehabilitate the four (4) clarifiers at the wastewater treatment plant (WWTP) and make modifications at the digesters to improve the leachate acceptance process.

The wastewater treatment process employs two 32' diameter primary clarifiers and two 32' diameter secondary clarifiers and all four units are original to the plant (except for the drives that were replaced in 2001). All of the clarifiers contain interior steel components consisting of a center column, bridge, center feedwell baffle rake arms, skimmers, scum beach, pipes and effluent trough with baffles and supports. The concrete tanks were constructed with a 2" thick layer of grout on the sloped floor to provide proper clearance of the rake arms. All of the interior metal components need to be media blasted, primed and painted to prevent further corrosion at this time, otherwise replacement would be required in the near future. The deteriorated floor grout needs to be removed and the floors re-grouted. The steel v-notch weir plates on the effluent trough needs to be replaced with fiberglass weir plates for longevity. Several of the skimmer arms and supports have become bent due to winter operation and need to be replaced. A full surface skimmer should be installed, if possible. Finally, the drive units and electrical conduit and wiring to the clarifiers needs to be replaced due to age and deterioration. NYSDEC has noted some of these items in a recent plant inspection report.

We propose the following scope of engineering services for this project:

1. Site Investigation/Scoping

- We will meet with Sewer District representatives and visit the site to review any previous reports, plans and available information on the clarifiers and leachate system, discuss existing conditions, and proposed scope of work.
- We will gather information, take field measurements, perform any necessary analysis or studies, and complete any further field investigation necessary to fully document field conditions, as required for the design, permitting, and construction of the clarifier rehabilitation and leachate improvement project.

2. Preliminary Design

- We will evaluate various alternatives for design of the clarifier rehabilitation using different materials of construction, technologies and products.
- Preliminary plans will be prepared to show the full scope of construction work for review with Sewer District representatives and NYSDEC for conceptual approval.

3. Detailed Design

- Following review and approval by the Sewer District and NYSDEC of the preliminary design plans, we will incorporate any comments or modifications and proceed with the detailed design.
- We will prepare detailed design plans and submit to the Sewer District for review.
- Following receipt of comments, we will incorporate the Sewer District's comments and finalize the detailed design plans.
- We will prepare a complete set of plans and specifications, and bid documents in conformance with all NYSDEC requirements.

4. Bid Phase Services

- Upon receipt of all regulatory agency approvals, and with the concurrence of the Sewer District, we will proceed with providing bid phase services in accordance with State and Federal Requirements, as follows:
  - Furnish electronic project manuals for bidding distribution.
  - Assist Sewer District with Advertisement for Bidding.
  - Distribute bid documents to trade organizations for posting.
  - Distribute bid documents to bidders.
  - Conduct a pre-bid meeting for prospective bidders, including Agenda and Meeting Minutes.
  - Respond to inquiries from prospective bidders and issue addenda.
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  - Tabulate bids.
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- Attend bid opening.
- Tabulate bids.
- Review bids and provide written Recommendation for Award of contract.
- Prepare and distribute contract documents for execution by the Contractor and the County.

5. Construction Phase Services

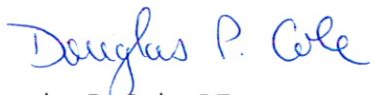
- We will provide complete construction phase services and contract administration, including the following:
  - Attend preconstruction meeting with Sewer District and Contractor.
  - Review and approve shop drawings.
  - Respond to Contractor inquiries and requests for information.
  - Review and approve construction design changes.
  - Review and certify Contractor payment request.
  - Conduct construction meetings as necessary and submit written minutes.
  - Maintain and submit written records of construction activities.
  - Review all required test procedures, witness tests, review and certify all results.
  - Provide certification of completion and release of final payment.
- Inspection
  - Provide the services of one part-time inspector to ensure general compliance with design plans and specifications.
  - Submit written reports of all inspection observations to the Sewer District.

6. Record Drawings

- Submit, in a binder, all approved shop drawings and records of materials used, and inspection reports.
- Submit one complete reproducible set of drawings to the Sewer District, and one complete electronic copy on CD Rom formatted as an Adobe PDF file, or other format required by the Sewer District.

We propose to perform the above tasks for a fee not to exceed \$48,700.00. If you have any questions, please feel free to contact me.

Sincerely,



Douglas P. Cole, PE  
Director of Wastewater Systems - NY Division