



DIRECTOR OF ENGINEERING REPORT

December 21, 2022

District Engineering manages projects, consultants, contractors, and equipment suppliers. Consultant reports and Project Managers reports are included in this section along with details regarding the status of the associated study, design, or construction projects.

ACTIVE PROJECTS

20-07 Digester Complex Improvements:

SCOPE: The Digester #3 floating cover and the face brick on all four digester tanks is being replaced.						
Contractor: Christy-Foltz			R.E. Inspector: SDD/W Gray - Donohue			
Engineer: Donohue and Associates						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion
11/17/20	12/01/20	12/22/20	02/17/21	03/18/21	03/18/21	9/22/2022 Substantial 10/22/22 Final
Submittals Reviewed: 9 complete /0 open						
Requests for Information (RFIs): 7 complete /0 open						
Owner Requests for Proposal/Change Order (RFPCO): 11 complete / 3 open						

Key Activities: Welding on the new cover/holder in ongoing. The intermediate support ring welding is 75% complete. No new construction issues.

Issues: Substantial completion date was Thursday 9/22/22; the last progress schedule indicates the contractor expects to be substantially complete on 3/1/23.

Pending Changes:

- WCD 01 and WCD 02: Additional Pump Down of Digester Contents: Contract documents required SDD to bring digester liquid elevation down to 593.0 and digesters have been turned over to contractor at various liquid elevations due to pump down issues. Contractor was put on time and material for the additional pumping required.
Digester 1 – 594.50; Digester 2 - 595.80; Digester 3 – 595.33; Digester 4 – 593.00
\$ 7,584.94 -CO#4
\$ 31,668.00
- Unit Cost Adjustment for Replacing manway hatch on Digester #1
\$ 28,776.00 -CO#4
- Digester #1 cold joint repairs. District issued Field Order to remove damaged concrete, prepare the leaking concrete seam, and install Xypex patch along the cold joint in the concrete walls. Work is being performed on a T&M basis.
\$ 29,166.94 -CO#4
- Delamination of coatings on Digester #3 will be addressed as contractor completes the installation of the cover. Contractor was directed to perform the work on a T&M basis.
\$ T&M

20-01 Lake Shore Drive PS Replacement:

SCOPE: The lift station is being reconfigured with submersible pumps.						
Contractor: Christy-Foltz			R.E. Inspector: SDD/ C. Larimore- CDI			
Engineer: Clark Dietz Engineers, Inc						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
12/02/20	01/05/21	02/03/21	03/24/21	04/07/21	04/07/21	4/2/22 Substantial 5/2/22 Final

Key Activities: Staff is expecting final Operations and Maintenance submittals to arrive by 12/16/22.

Issues: We received a second request for substantial and agreed on substantial completion date of September 28, 2022. Final project paperwork is complete. We are working through the final completion date and final pay application request.



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December 21, 2022

Pending Changes:

1. Additional fencing added because of requested grading modifications and fence corner relocations \$ 9,028.00
2. Additional OT hours caused by West Plant discharges. TBD \$25K-Est.
3. Set-offs due to liquidated damages

20ENG15 Water Tower Painting Project:

SCOPE: Power Wash, Surface preparation and overcoat of plant water tower. Included is a power wash of t wet interior for inspection, installation of the SDD logo on the tower and power wash of the gas sphere in front of the digester complex.						
Contractor: Neumann Company Contractors				Original Contract Price: \$197,200		
Engineer: Donohue and Associates						
R.E. Inspector: SDD						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
08/03/22	08/17/22	09/07/22	09/21/22	11/10/22	xx/xx/23	360 days-Substantial

Key Activities: Bonds and Insurances were approved this last period and Notice to Proceed was issued. Staff expects the contractor to begin work late spring 2023.

NON-CONSTRUCTION ACTIVITY

ADMINISTRATIVE OFFICE MASTER PLANNING:

There are currently Staff issued the Request for Qualifications (RFQ) for Architectural and Engineering Design Firms to submit on designing a new ‘Wastewater Reclamation Office Complex’ (name to be determined later) this last period. The issue RFQ responses are due back to SDD January 11, 2023.

21ENG51 Wet Weather Interceptor Capacity Study – Damon to Treatment Plant

Staff met with the engineers regarding study progress 12/14/22. The model has now been calibrated utilizing 3 different rain events and validated against 2 additional, independent rain events. The SDD has up to 5 different model runs to project capacity available in the agreement with the engineers. We expect feedback from the engineers after the first run (25-yr storm). We are anticipating the completion of this study by the end of January 2023.

21ENG04 Force Main Inspection

Finley Creek FM (16”) (5300 LF of ductile iron pipe) and the 8” Wyckles force main.

Staff expects the finished condition assessment report to be delivered in December 2022.

21ENG30 - East Headworks Grit Flow Modeling – Clemson Engineering Hydraulics

Staff will present a video of the model in action at the trustee meeting. Final report has not been received, however the video shows what is happening in the

The district experiences imbalanced grit loading through the Headworks (structure 201). This project is to build a scale model of flow/grit through structure 201.

UPCOMING PROJECTS:

21ENG42 – Post Anaerobic Digestion (PAD)

<<No Update>> The technical memorandum (TM) confirms the process applicability for future BNR operations and provides the design specifications necessary under the BNR treatment systems. Staff

is reviewing the TM and will offer comments back to BV prior to recommending any action on the content of the memorandum.

22ENG02&10 – Force Main Renewal (Lost Bridge and Country Club)

<<No Update>> After reviewing similar projects submitted by various engineering firms, staff entered negotiations with Clark Dietz Engineers (CDI) out of Champaign. The FM renewals project includes replacement of cast iron segments of the Country Club interceptor and the Lost Bridge 10” interceptor that crosses underneath Lake Decatur. Staff is still working through the agreement language with CDI.

22ENG44 – Grit Classifier and Conveyor Replacement

Staff is waiting for the classifier submittal to arrive from the supplier. The grit conveyor submittal was received and approved this last period. Plan sheets have been reviewed. Bid specifications will be started in December.

Frac Tank Discussions for Nutrient Removal Pilot Study

There is ongoing investigation with IEPA to determine if a construction permit is required to proceed with this pilot. Initial indication is that it is not, but the IEPA permit section has been requested to confirm. A milestone schedule is being developed to outline frac tank pilot test timing.

22ENG08 – Roofing Replacement/Repairs Project

Staff began preparing for the next roofing project this last period. Projected scope is **042 (Wood Shop) Replacement; 044 (Ferrous Pump Room) Replacement; 200 (Emergency Bypass) Replace Shingle roof; 043 Repairs; 059 Caulking Repairs; 077 PM touch up; 112 Vent Pipe left on roof that needs removed, apply protective coating on expansion joint; 113 Touch up repairs; 117 PM Repairs, loose wall flashing; 203 repairs, move to replace in 2024; 217 Misc repairs; 231 touch up repairs, 233 Repair in 2023; 334 Caulking repairs**

INTERGOVERNMENTAL ACTIVITIES

Meeting with the CITY regarding development and design of the Reas Bridge Road (Hubbard Ave) and Brush College pump station.

If there are any questions, please contact me by telephone at 422-6931 ext 216, or by email at DonM@sddcleanwater.org.



PROJECT MANAGER REPORT

December 5th, 2022

District Engineering manages projects, consultants, contractors, and equipment suppliers. Consultant reports and Project Managers reports are included in this section along with details regarding the status of the associated study, design, or construction projects.

ACTIVE PROJECTS

21ADM50 Front Gate, Fence, and Road Repairs:

SCOPE: Replacement of the damaged front gate, plant fencing repairs, and localized cast in place concrete work in the plant are included in this project. There are two Divisions of work to be awarded separately: 1) General/Concrete; and 2) Fence and Gate						
Contractor: Christy-Foltz			Original Contract Price: \$632,047			
Engineer: SDD		R.E. Inspector: SDD				
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
08/11/22	08/30/22	10/04/22	10/26/22	11/16/22	11/15/22	Div 1 – 120 days Div 2 – 150 days

Key Activities: Demolition of existing front gate and exit lane in progress.

22ENG45 Primary Clarifier #5 Replacement Project:

SCOPE: Power Wash, Surface preparation and overcoat of plant water tower. Included is a power wash of t wet interior for inspection, installation of the SDD logo on the tower and power wash of the gas sphere in front of the digester complex.						
Contractor: Plocher			R.E. Inspector: SDD			
Engineer: SDD						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
09/16/22	09/27/22	11/01/22	11/17/22	11/30/22	xx/xx/xx	330 days-Substantial 360 days - Final

Key Activities: Initial field measurements taken on 11/28/2022.

21ENG40 Replacement of Sludge Transfer Pump:

SCOPE: Remove and replace the existing Abel Sludge Transfer Pump (south) at the end of its useful life.						
Contractor: Burdick Plumbing and Heating			Engineer: SDD			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
09/21/22	10/11/22	11/03/22	11/17/22	xx/xx/22	xx/xx/xx	180 days-Substantial 210 days - Final
Submittals Reviewed: 1 received / 0 completed / 0 Rejected						

Key Activities: Contractor received “Notice of Award” and will provide required documents (bond/insurance/etc.) for obtaining “Notice to Proceed”.

20ENG18 – Sodium Bi-Sulfite Building

Knock out wall demo is complete. Tank removal and replacement will occur from 12/12-12/16. New replacement wall will be constructed and completed 12/19-12/22.

NOTE: Scope was modified to reflect only removal of existing panel and install a new removable insulated frame. Christy-Foltz is performing the removal and fabrication of the new frame and panels. All block replacement, caulking and tuckpointing repairs have been eliminated.



Memorandum

Date: December 5, 2022
To: Donald B. Miller, P.E., Director of Engineering
From: Will Gray, P.E., Donohue & Associates
Re: **Project Status Report**
2020-07 Digester Improvements Project
Donohue Project No. 13782

Project Progress Items

- An updated project schedule was received from C-F on 10-25-2022. This schedule shows the project being substantially complete by March 1, 2023. The contractual substantial completion date is Sept. 22, 2022.
- Christy-Foltz continues welding the intermediate support ring, structural “Tees”, and side walls of the digester lid superstructure. SDD is using a certified weld inspector (CWI) to inspect the completed welds. C-F is approximately 75% complete with intermediate support ring welding.
- Once superstructure side walls are welded, C-F will start to fly in ballast blocks for storage on the digester floor. They will then set the ballast blocks in their designated location within the lid. This is expected to take approx. 3 weeks to complete.

Updated: 12-5-2022	Open	Closed	Total
Submittals	0	10	10
RFI	0	8	8
Change Order Request	0	15	15
Change Orders	0	4	4

CHANGE ORDER LOG

- Change Order #1 has been executed, \$42,549.39.
- Change Order #2 has been executed, \$46,173.89.
- Change Order #3 has been executed, \$442,219.00. Add 193 days to contract.
- Change Order #4 is being prepared.



December 1, 2022

Don Miller, PE
Director of Engineering
Sanitary District of Decatur
501 South Dipper Lane
Decatur, IL 62522

RE: Status Report #7
Sewer System Capacity Evaluation – Damon Avenue to Treatment Plant

Dear Mr. Miller:

In November 2022, Burns & McDonnell Engineering Co., Inc. performed the following work for the subject project:

- Continued model development and performed dry weather flow and wet weather flow calibrations
- Performed QA/QC on dry weather and wet weather model flow calibrations
- Began preparations for calibration workshop with the Sanitary District of Decatur

We appreciate the opportunity to serve the Sanitary District of Decatur. If you have any questions regarding this status report, please feel free to contact us.

Sincerely,

Paul St. Aubyn, PE
Project Manager