



**DIRECTOR OF ENGINEERING REPORT**

**Jul 21, 2021**

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	Scheduled Completion
11/17/20	12/01/20	12/22/20	02/17/21	03/18/21	03/18/21	360 Substantial 390 Final
Submittals Reviewed: 6 complete /1 open						
Requests for Information (RFIs): 5 complete /0 open						
Owner Requests for Proposal/Change Order (RFPCO): 2 complete / 1 open						

**Key Activities:** Contractor has removed all of brick facia on digesters 2 and 3. They are expecting arrival of insulation panels the week of 7/19 and will begin installation once the repair on the cold joint is made on Digester #2. Much of the infrastructure of the digester #3 floating cover is removed. We are investigating whether ballasting blocks can be repurposed/reused during new lid assembly.

**Issues:** Cold Joint investigation is complete on dig #2 and areas for repair have been identified on dig #3.

Contractor is to begin removal of cracked and loose coatings inside dig 2 the week of 7/19.

**Changes:**

1. WCD 01: Additional Pump Down of Digester Contents: Contract documents required SDD to bring digester liquid elevation down to 593.0. Digester 3 quit pumping down at 595.33 and Digester #2 at 595.8. Contractor was put on time and material for the additional pumping required. \$ (TBD)
2. There are several locations inside digesters 2 and 3 that the coating has cracked/blistered. This is outside the scope of the contract and any work on it will be an extra. \$ T&M
3. Digester cold joint repair. District issued T&M directive to remove damaged concrete, prepare the leaking concrete seam, and install Xypex patch along the cold joint in the concrete walls. \$ 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/J Edenburn - CDI			
Engineer: Clark Dietz Engineers, Inc						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
12/02/20	01/05/21	02/03/21	03/24/21	04/07/21	04/07/21	360 Substantial 390 Final
Submittals Reviewed: 30 received / 30 completed / 9 Rejected						
Requests for Information (RFIs): 1 submitted/1 completed						
Owner Requests for Proposal/Change Order (RFPCO): 1 Issued/1 Completed						
Change Orders: 1 completed						

**Key Activities:** Site work has begun. Anticipate the connection of temporary power week of 07/19.

**Issues:** There is still no approved schedule for this project and there is some risk that contractor is falling far enough behind that schedule will not be met by substantial completion date.

Investigation of the abandonment method of one of the abandoned forcemains in front of the existing station is scheduled to take place next week. This will require a requested short-term shutdown of ADM flow past the station. Schedule has already been coordinated for 07/21/21.

1. **Changes:** NONE PENDING

**20-01 South Shores Sewer Rehab:**

SCOPE: CIPP lining of approximately 17,700 LF of sewer, tie-in connections and approximately 700 vertical feet of cementitious manhole restoration.						
Contractor: SAK Construction			Engineer: Farnsworth Group, Inc			
Advertise	Pre-bid	Bid Open	Intent Award Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
12/15/20	02/02/21	03/02/21	03/17/21 05/26/21	06/21/21	06/15/21	270 Substantial 300 Final
Submittals Reviewed:						
Requests for Information (RFIs):						
Owner Requests for Proposal/Change Order (RFPCO):						

**Key Activities:** Contractor began cleaning operations West of US Rte 51. This will be the first area of lining work performed.

**20-15 Hatch Replacement:**

SCOPE: The Sanitary District has a working hatch replacement asset management plan. This project includes various hatch replacements needed to implement that plan.						
Contractor: Burdick Plumbing and Heating			Engineer: SDD			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
11/20/20	12/03/20	02/04/21	02/17/21	03/11/21	03/xx/21	140 days
Submittals Reviewed:						
Requests for Information (RFIs): 1 submitted / 1 completed.						
Owner Requests for Proposal/Change Order (RFPCO):						

**Key Activities:** No change. Contractor is waiting for the arrival of material to begin installation.

**20-19 Wyckles Facility Sludge Inlet Repairs:**

SCOPE: Scope of work includes the removal of existing lagoon chutes that have collapsed and reinstalling chutes incorporating a shotcrete blanket to bridge the void left by removing the chute below the discharge.						
Contractor: Christy Foltz				Engineer: SDD		
Advertise	Pre-Bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
01/22/21	03/04/21	04/15/21	04/22/21	05/03/21	05/13/21	90 days
Submittals Reviewed: 5 submitted / 0 outstanding. Requests for Information (RFIs): 0 submitted Owner Requests for Proposal/Change Order (RFPCO): 0 requested						

**Key Activities:** All but one of the sludge inlets is complete. Rain postponed the final shotcrete installation. We are expecting it to be completed the week of 07/19.

**Changes:**

1. Field Order was issued to contractor to relocate drain lines that were found to be installed at an elevation lower than the plans. The work was done on a T&M basis. \$ (TBD)

**20-13 Grit Drying Bed Upgrades:**

SCOPE: Scope of work includes the removal of existing concrete structure and installation of a 50'x60' grit drying structure with bin blocks and site drainage upgrades.						
Contractor: Christy Foltz				Engineer: SDD		
Advertise	Pre-Bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
03/10/21	03/24/21	04/15/21	04/22/21	05/03/21	05/13/21	90 days
Submittals Reviewed: 5 submitted / 0 outstanding. Requests for Information (RFIs): 0 submitted Owner Requests for Proposal/Change Order (RFPCO): 0 requested						

**Key Activities:** Contractor began placement and compaction of the drying bed base this last period. Expect the operation to be completed by the last week of August. The precast panels are scheduled to arrive on site the second week of August.

**20-08 Roof Rehabilitation Project:**

SCOPE: Each year the SDD Asset Management Program plans for rehabilitation on roofing systems on the district facilities. Of the 16 roofs inspected, 10 require attention. The scope includes replacement of existing roofing system of Bldg. 871 (well house) at Wyckles Facility. The balance of the 9 roofs is for application of coatings on buildings 870 & 872 (Wyckles Facility), 860 (St. Louis Bridge Pump Station), 584 (Oakland Avenue C.S.O. Facility), 526 (7th Ward C.S.O.), 502 (McKinley Avenue C.S.O.), and 557, 559, 561 (Lincoln Park C.S.O.).						
Contractor: TBD				Engineer: SDD		
Advertise	Pre-Bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
03/30/21	04/13/21	05/11/21	06/16/21	xx/xx/21	xx/xx/21	120 days

**Key Activities:** Top Quality Roofing Company, has been issued the Notice of Award. This work was bid as installation only, and the district will supply the materials. *There is a Motion before the board for authorizing the procurement of the materials for this project.*



**NON-CONSTRUCTION ACTIVITY**

**PLANNING: PHOSPHORUS REMOVAL**

Staff issued the request for qualifications (RFQ) for firms qualified and interested in performing Program Manager (PM) services to the Sanitary District of Decatur for Phosphorous Removal Planning, Design Criteria generation, Design Administration, Watershed management and general NPDES Permit compliance items related to milestones for meeting permit target dates.

The following firms received copies of the RFQ.

- Jacobs Engineering, Texas
- AECOM
- Tetra Tech, Pasadena CA
- HDR, Omaha NE
- WSP USA, New York NY
- Burns & McDonnell, Kansas City MO
- Stantec, Irvine CA
- HNTB Cos, Kansas City MO
- Black and Veatch, Overland Park KS
- Greeley and Hansen, Chicago IL
- Strand Associates, Madison WI

The schedule published in the RFQ follows the following timeline:

PRE-SUBMITTAL CONFERENCE	<del>06/08/21</del>	Completed 6/15
RFQ'S DUE	<del>07/16/21</del>	Completed 7/16
REVIEW SUBMITTED RFQ'S	07/19 thru 07/30	
SCHEDULE/ COMPLETE PROPOSAL INTERVIEWS	08/09 thru 08/20	
MAKE SELECTION	08/24/21	
AWARD CONTRACT	10/20/21	

RFQ submittals were received as scheduled copies are being distributed to staff and trustees.

**DESIGN: Fermentation Reactor – Black and Veatch**

Design Kickoff Meeting	<del>03/10/21</del> - Complete
Preliminary Engineering Assessment	<del>05/10/21</del> - Complete
30% Design Submittal/Review	<del>06/21/21</del> - Complete
90% Design Submittal/Review	08/19/21
Final Design Submittal	08/27/21

Staff has completed the 30% design review with B&V. July 29<sup>th</sup> staff will conference with the engineer to review equipment selection and finalize return and waste activated sludge pumping options.

**STUDY: Regionalization Planning – CMT Engineers**

In March 2021 SDD entered into an agreement with Crawford Murphy and Tilly Consulting Engineers (CMT) for investigating regionalization opportunities to the West of the SDD Main Treatment facility; ranging from approximately I-72 to Route 121. Below is the expected timeline for the investigation.

Investigation Kickoff	<del>03/31/21</del> - Complete
Intermediate Opportunity Review	<del>05/20/21</del> - Complete
Final Draft	06/24/21 – Received and under review.

Jul 21, 2021

---

**DESIGN: Decant Upgrades Wyckles Facility – East Lagoon**

Design plan sheets were completed this last period. The upgrades are to improve the decanting operation in the East Lagoon. With the East Lagoon emptied, this is the time to perform such a modification. Staff expects plan sheets to deal with structural and process modifications and that plan sheets complete the week of June 21<sup>st</sup>. Staff is preparing the specifications and expect it to be advertised the week of 07/19.

**STUDY: East Headworks Grit Flow Modeling – Clemson Engineering Hydraulics**

<<No Update>> This effort is to model the flow of grit through the east primary headworks. Dr David Werth of Clemson Engineering is the hydraulic modeling expert that worked with SDD through the effluent pump station flow issues. The district experiences imbalanced grit loading through this structure and with the West Headworks upgrades is desiring to address the imbalanced grit load. This modeling effort is expected to be around \$30,000.

**UPCOMING PROJECTS:**

**Replacement of Sludge Transfer Pump:** <<No Update>> Staff is preparing plans for the procurement and installation of a replacement transfer pump. This pump moves sludge from the main treatment plant to the Wyckles Facility.

**Sodium Bisulfite Tank Replacement:** <<No Update>> Development of project plans to replace the two sodium bisulfite tanks is ongoing.

**Effluent Pump #03 Replacement:** Staff is beginning to prepare project plans to replace the third effluent pump. This is the last of 3 pumps that we are converting to VFDs which replaced the 3 of the 5 original Flygt pumps in the station.

---

**INTERGOVERNMENTAL ACTIVITIES**

The CITYs request to change grade elevations over the interceptor that runs from ADM and transverses south underneath Faries Parkway (FP) remains a point of follow-up. This is part of the CITY's Brush College/FP interchange project. SDD has received a cost estimate of \$100K to replace the affected section(s) of pipe with new pipe that would eliminate the concern of additional overburden. Additional research on the Easement, Supplemental Agreement, and IDOT Utility Relocation reimbursement program is ongoing.

---

**PROPOSED BOARD ACTION**

For the Board's consideration from the Engineering Dept this meeting:

**1. 20-08 Roof Rehabilitation Project – Materials Procurement**

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



# Memorandum

Date: July 6, 2021

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

## 2020-07 Digester Improvements Project

- Weekly job progress meetings are being held every Thursday on site.
- Christy-Foltz has drained and cleaned Digesters #2 and #3. Coating failures have been identified inside both digesters, with the failures in #2 being more prevalent than those inside #3. Donohue has contacted Tnemec to get recommendations for repairing those coatings, and has issued RFPCO #2 for pricing to repair the coatings.
- Christy-Foltz has started dismantling the lid on Digester #3. They have removed and stored the mixer platform and mixer. C-F will cut the lid roofing into pieces to aid in removal. They expect the lid removal to take approx. 3-weeks.
- Christy-Foltz has removed all the brick on Digester #2 and #3. Donohue has approved the Ridgelok shop drawing and the metal panels are in production. Panels expected to be delivered to site July 12. Ridgelok representative will be on site to observe initial installation.
- WesTech has not submitted the digester lid shop drawing yet. WesTech and Ovivo are working through coordination of the mixer shaft length change required by the new lid. Once this is taken care of, shop drawing will be submitted for review.
- After removing bricks, the exterior of both digester walls were observed to have some staining due to leaks at the joint in the wall. C-F is getting pricing to repair those locations with Xypex.
- RFPCO#001 – Brick Recycling was rejected by the District.
- RFPCO #002 – Coating Repair is under review by C-F for pricing.

Updated: 7-6-2021	Open	Closed	Total
Submittals	1	5	6
RFI	1	4	5
Change Order Request	1	1	2
Change Orders	0	0	0

June 28, 2021

Sanitary District of Decatur  
501 Dipper Lane  
Decatur, IL 62522

Attn: Don Miller, Director of Engineering

Re: 20-06 South Shores Rehab  
Project Status Report

Dear Don:

We are pleased to provide the following project status summary for the current project that Farnsworth Group is currently working on for the District. Our most recent monthly invoice for work on this current project is attached for your consideration.

**1. 20-06 South Shores Sewer Rehab (L17-5456):**

- A. Bidding and Contracts – the District received bids on 3/4/21 and the Notice of Intent to Award was issued on 3/17/21 to the apparent low bidder, SAK Construction, LLC.
- B. IEPA State Revolving Loan – the District received the executed loan agreement for this project on 5/26/21.
- C. Construction Contracts – The Construction Contract has been fully executed with SAK, after receipt of their bonds and insurance. A Pre-Construction Meeting was conducted on 6/15/21 and SAK submitted their estimated project schedule. The initial cleaning is anticipated to start later this week, dependent upon weather conditions.
- D. As of this Project Invoice #8 (Invoice No. 226081), we have billed \$102,785.75 to date on this project which is 49% of the total estimated fee of \$207,800.

If you have any questions or need any additional information regarding the status of this project, please feel free to contact me any time. Thanks.

Sincerely,

FARNSWORTH GROUP, INC.

Kevin N. Hannel, PE  
Engineering Manager



July 10, 2021

Mr. Donald Miller  
Sanitary District of Decatur  
501 S. Dipper Lane  
Decatur, IL 62522

Re: Lakeshore Drive Lift Station Replacement Project  
SDD Project No. 20-01  
Clark Dietz Project No. D0540030  
Monthly Progress Update

Dear Mr. Miller:

This letter summarizes the work of the Lakeshore Drive Lift Station construction project for June 2021. This month their major activities included coordinating utility relocations, reshaping the creek, and preparing submittals.

- Submittals: Christy-Foltz has sent 30 submittals, seven were reviewed and returned in June. Nine submittals have been rejected. When scoping the project Clark Dietz assumed a total of 40 submittal reviews.
- RFIs: Christy-Foltz has sent one RFI, none were reviewed in June.
- RFPs and Change Orders: We have sent one RFP for the elimination of the 20-inch forcemain, which resulted in Change Order 1.
- Pay Application: Christy-Foltz has sent one pay application.
- Meetings: Clark Dietz attended three construction progress meetings in June, preparing an agenda and minutes for each. Clark Dietz's scope assumed monthly meetings.
- Schedule: Christy-Foltz has submitted two proposed construction schedules. Both have been rejected for lack of detail and unrealistic task dates. Their most recent schedule showed completion in March 2022, which is within the contract dates; however, that schedule incorrectly assumed all shop drawings were approved. We believe there is some risk that the contract schedule will not be met based on the current status of outstanding and rejected shop drawings and the pace of work to date.

Significant contract dates are summarized as follows:

- February 3, 2021 – Bids Received
- March 17, 2021 – Effective Date of Agreement with Christy Foltz
- April 7, 2021 – Notice to Proceed issued to Christy Foltz
- April 2, 2022 – Substantial Completion
- May 2, 2022 – Final Completion

In July, we anticipate receiving and reviewing additional shop drawings, coordinating with the contractor regarding their schedule, and attending and preparing agendas and minutes for progress meetings.

Please call me at 217-373-8933 if you have any questions.

Very Truly Yours,  
Clark Dietz, Inc.

Andrea W. Bretl, P.E.  
Project Manager