



DIRECTOR OF ENGINEERING REPORT

Jun 16, 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: 4 complete /1 open						
Requests for Information (RFIs): 3 complete /1 open						
Owner Requests for Proposal/Change Order (RFPCO): 1 complete / 0 open						

Key Activities: Submittal for Grey embossed aluminum wall insulation was approved this last period. Fabrication is to take about 3 more weeks. All the brick and insulation on digester #2 has been removed. Delays in the shop drawing submittal for the new digester cover were mitigated this month and submittal is being finalized. Contractor schedule reflects the removal of the OVIVO mixer the week of June 12 and beginning demo on existing cover 06/15/21.

Issues: No additional issues

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. Investigation: There are several locations inside digesters 2 and 3 that the coating has cracked/blistered. These sections will need to be repaired. This is outside the scope of the contract and any work on it will be an extra. \$ (TBD)

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: 8 received / 8 completed						
Requests for Information (RFIs):						
Owner Requests for Proposal/Change Order (RFPCO): 1 Issued/1 Completed						
Change Orders: 1 completed						

Key Activities: Contractor has not submitted a final schedule but expect it the week of 06/12/21; both the wet well pumps and MCC delivery schedule has been determined to be late October. Coordination is underway to temporarily relocate power so that construction can begin.

Contractor has placed the construction trailer and is coordinating with Park District to maintain walk path along the lake side of the construction site.

1. **Changes:** NONE

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/xx/21	06/xx/21	270 Substantial 300 Final
Submittals Reviewed: Requests for Information (RFIs): Owner Requests for Proposal/Change Order (RFPCO):						

Key Activities: IEPA SRF loan offer was received this last period and the Notice of Award was provided to the contractor. There is a preconstruction meeting scheduled for 6/15/21. We anticipate issuing the NTP shortly thereafter, once Performance Bond, Payment Bond and Insurance Certificates are received and approved.

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: All submitted hatches have been reviewed and approved. Contractor is waiting for the arrival of material to begin installation.

Changes: NONE

2020 Roads and Site Work Project – DIV A

SCOPE: DIV A - road work is in the immediate area surrounding the vehicle storage building where asphalt is being replaced; along with the oil and chip at the Wyckles facility that was damaged during the valve replacement project.						
Contractor: DIV A – ROADS – Dunn Company				Engineer: SDD		
Advertise	Pre-Bid	Bid Open	Final Award	Notice to Proceed	Pre- Construction	Scheduled Completion
08/19/20	08/27/20	09/10/20	09/23/20	10/12/20	10/07/20	60 days
Submittals Reviewed: 3 shop drawings submitted /3 complete. Requests for Information (RFIs): 2 received /2 answered.						

Key Activities: All work has been completed and accepted. Waiting on final pay application.

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: Removal of damaged concrete is complete. Upper chamber concrete rebuild will be completed this week. Shotcrete subcontractor will be in next week to complete the shotcrete work.

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: 1 submitted / 0 outstanding. Requests for Information (RFIs): 0 submitted Owner Requests for Proposal/Change Order (RFPCO): 0 requested						

Key Activities: Contractor supplied a pre-submittal for the precast panels for this project. They were rejected requesting additional information. Layout of the project site has begun and relocation of a plant benchmark has been completed.

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/xx/21	xx/xx/21	xx/xx/21	120 days

Key Activities: Bids were opened this last period. There were two bidders. Top Quality Roofing Company, is recommended as the lowest responsive responsible bidder. This work was bid as installation only, and the district will supply the materials.



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.

RFQs were sent to firms based on their Engineering News Record ratings, firms experience with program management, and firms experience with the work required within this RFQ. Staff held a virtual pre-submittal review meeting with interested firms on June 15th, 2021.

- 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	06/08/21	Completed 6/15
PROPOSALS DUE	07/16/21	
REVIEW SUBMITTED PROPOSALS	07/19 thru 07/30	
SCHEDULE/ COMPLETE INTERVIEWS	08/09 thru 08/20	
MAKE SELECTION	08/24/21	
AWARD CONTRACT	10/20/21	

RFQ submittals are due on July 16th, 2021. 10 copies of each submittal is requested and will be distributed to Staff and Trustees for review.

DESIGN: Fermentation Reactor – Black and Veatch

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

The Preliminary Engineering Report (PER) has been finalized. From the PER, static models confirmed there are single and two sludge systems that SDD could adopt that can treat the influent phosphorous and nitrogen, confirming the fermenter use will be flexible as final plant configurations result from pilot testing. Maintenance staff has performed additional investigation on the proposed re-used reactor tank to help identify the extent of concrete repairs to plan for in design.

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	03/31/21 - Complete
Intermediate Opportunity Review	05/20/21 - Complete

Final Draft

06/24/21

Options/Alternative review was completed as scheduled this last period, and report is on track for completion in accordance with the schedule.

DESIGN: Decant Upgrades Wyckles Facility – East Lagoon

Staff reviewed 50% design plan sheets with Donohue and Associates 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 21st. All bidding services will be performed internally.

STUDY: East Headworks Grit Flow Modeling – Clemson Engineering Hydraulics

Staff anticipates finalizing the scope of work with Clemson Engineering Hydraulics the week of June 21st, 2021. 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

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



Memorandum

Date: June 4, 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 will issue an RFPCO to Christy-Foltz to complete the coating repair.
- Christy-Foltz is planning to start dismantling the lid on Digester #3 and expects to have the lid removed in 3-weeks.
- Christy-Foltz has removed all the brick on Digester #2. Donohue has approved the Ridgelok shop drawing and the metal panels are in production. Ridgelok is sending a representative to the site to train Christy-Foltz's people on how to install the panels.
- Donohue has received the weights and loading of the new Ovivo mixer and has given that information to Christy-Foltz. This information was needed by WesTech to complete the new digester lid shop drawing.
- RFPCO#001 - Brick Recycling was rejected by the District.

Updated: 6-4-2021	Open	Closed	Total
Shop Drawings	1	4	5
RFI	1	3	4
Change Order Request	0	1	1
Change Orders	0	0	0



June 4, 2021

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

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

Dear Mr. Miller:

To date, the significant dates of the Lakeshore Drive Lift Station Replacement construction project are as follows:

- February 3, 2021 – Bids Received
- March 17, 2021 – Notice of Award issued to Christy Foltz
- March 17, 2021 – Effective Date of Agreement with Christy Foltz
- April 7, 2021 – Notice to Proceed issued to Christy Foltz
- April 7, 2021 – Pre-construction Meeting

Completion dates of the contract are:

- April 2, 2022 – Substantial Completion
- May 2, 2022 – Final Completion

Clark Dietz' work in May was primarily reviewing shop drawings. We have not received the contractor's official construction schedule yet but have reminded them that it is due.

In June, we anticipate receiving and reviewing additional shop drawings, coordinating with the contractor as they submit 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

June 4, 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.

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 Notice of Award was recently issued, after receipt of the IEPA SRF loan agreement, on 5/26/21 and the Pre-Construction Meeting is scheduled for 6/15/21. The Contractor is in the process of obtaining bonds, insurance and preparation of the project schedule.

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

Sanitary District of Decatur
CONTRACTOR PROPOSAL - BID TABULATION

Project: **2020 ROOFING PROJECT**
 Bid Date: **5/11/2021**
 Bid Time: **10:00am**

Item #	Pay Item	QTY	UOM	Engineers Estimate		TOP QUALITY ROOFING		HENSON ROBINSON ROOFING	
				Unit Price	Total	Unit Price	Total	Unit Price	Total
1	Bldg # 526 - 20 Yr Fluid Applied Roof Restoration System	1	LS	\$ 7,659	\$ 7,659	\$ 5,760	\$ 5,760	\$ 4,350	\$ 4,350
2	Bldg # 561 - 20 Yr Fluid Applied Roof Restoration System	1	LS	\$ 20,109	\$ 20,109	\$ 5,800	\$ 5,800	\$ 11,379	\$ 11,379
3	Bldg # 559 - 20 Yr Fluid Applied Roof Restoration System	1	LS	\$ 16,098	\$ 16,098	\$ 4,970	\$ 4,970	\$ 9,101	\$ 9,101
4	Bldg # 557 - 20 Yr Fluid Applied Roof Restoration System	1	LS	\$ 19,037	\$ 19,037	\$ 5,800	\$ 5,800	\$ 10,402	\$ 10,402
5	Bldg # 502 - 20 Yr Fluid Applied Roof Restoration System	1	LS	\$ 11,837	\$ 11,837	\$ 7,920	\$ 7,920	\$ 5,981	\$ 5,981
6	Bldg # 860 - 20 Yr Fluid Applied Roof Restoration System	1	LS	\$ 24,370	\$ 24,370	\$ 8,640	\$ 8,640	\$ 13,396	\$ 13,396
7	Bldg # 584 - 20 Yr Fluid Applied Roof Restoration System	1	LS	\$ 2,089	\$ 2,089	\$ 3,960	\$ 3,960	\$ 1,387	\$ 1,387
8	Bldg # 870 - 20 Yr Fluid Applied Roof Restoration System	1	LS	\$ 13,606	\$ 13,606	\$ 7,920	\$ 7,920	\$ 8,069	\$ 8,069
9	Bldg # 872 - 20 Yr Fluid Applied Roof Restoration System	1	LS	\$ 18,215	\$ 18,215	\$ 14,400	\$ 14,400	\$ 14,216	\$ 14,216
10	Bldg # 871 - 30 Yr Roof Replacement System	1	LS	\$ 4,188	\$ 4,188	\$ 9,510	\$ 9,510	\$ 20,855	\$ 20,855
11	Misc. Contingencies	1	LS	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Total Project Estimate Including Material Expense: \$ 142,208.00									
TOTAL BID AS READ (Installation Only):						\$ 79,680.00	\$ 104,134.92		
TOTAL BID AS CORRECTED (Installation Only):						\$ 79,680.00	\$ 104,134.92		
Material Expense (Only - SDD Supplied):						\$ 95,084.63	\$ 95,084.63		
Total Projected As-Bid Project Expense:						\$ 174,764.63	\$ 199,219.55		
Budgeted Amount for both years (2020 and 2021): \$ 187,000.00									
Overall Cost per SF (9782 sf): \$ 14.5377						\$ 17.8659	\$ 20.3659		