



DIRECTOR OF ENGINEERING REPORT

Apr 17, 2024

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

21CMP04 Fermentation Reactor Pilot:

SCOPE: A pilot fermenter system has been installed to determine the best operating parameters for BNR and familiarize staff with operation of a fermenter.						
Contractor: Burdick			Original Contract Price: \$956,796.00			
Engineer: Black and Veatch						
R.E. Inspector: SDD						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
03/24/23	04/04/23	05/09/23	06/21/23	07/31/23	07/24/23	12/21/23 Subst 01/20/24 Final

Key Activities: Frac tank is functioning properly.

Staff issued a change order to the contractor to install an additional valve in underground piping to allow decant water from the South Sludge Lagoons to be pumped to a different location in the P2 channel. This modification will eliminate the need to isolate the frac tank from the shared discharge point when decant is required from the lagoon.

23MNTxx Damon Ave. Pump Station Upgrades

SCOPE: Project involves 1) removal of existing electrical utilities and installation of a dual service switchboard and ATS, a new 1200 AMP CT enclosure and removal and re-installation of two underground conduit duct banks and 2) replacement of the existing #2 pump and installation of a pre-procured Flygt 385 HP, 455A submersible pump. Bypass pumping during the installation process is required until the new pump is commissioned.						
Contractor:			Original Contract Price:			
Engineer: AEX			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value:			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
02/22/24	03/07/24	04/18/24				Sub – 365 days Final – 395 days

Key Activities: Three addenda have been filed. Addendum 3 moved the bid open date to 4/18/24 and modified contract duration to address concerns with availability and lead times for meter bases. Current plan holders include: ConstructConnect, Bodine Electric, Flow Technics Inc, & Stark Excavating inc.

23ENG45 Primary Clarifiers 4 and 6 Procurement

SCOPE: Pre-procure equipment to replace mechanisms in clarifiers #4 and #6.						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
03/12/24	none	05/01/24				



Key Activities: Procurement Bid was advertised on March 12, 2024. Addendum was issued this last period to modify the acceptable manufacturers of the clarifier equipment. Acceptable manufacturers now include Walker Process, Envirex, and Kusters Water.

NON-CONSTRUCTION ACTIVITY

DESIGN - 22ENG31 ADMINISTRATIVE OFFICE COMPLEX:

This last period staff has conducted 6 meetings with AEX including one conference call with the Corps of Engineers to address permitting the construction of the facility inside the levee protected site while still in the 100-year flood plain.

AEX continues coordination with BV on design details for the lab.

Soil borings were completed this last month analysis of the borings has been provided to AEX. There is a seismic analysis also being performed by SKS to determine building classification requirements.

TCI completed geotechnical work for the geothermal system this last month.

AEX will be reviewing the current floor plans and color “ortho” views of the exterior of the building at the trustee meeting.

Schedule:

Develop Contract Documents (ongoing)	
80% Documents	Apr 24
Advertise	May 24
Open Bids, Award and Execute	July 24
Construction Phase	52 weeks

DESIGN - 22ENG02 Lost Bridge Force Main Renewal

The designer is Clark Deitz Engineers (CDI). Construction Permit request was received from IEPA this last period. Project was advertised on April 5th, 2024.

Easements have been drafted and are circulating at the CITY and Decatur Park District for signatures.

Schedule:

Advertise	04/05/24
Prebid	04/15/24
Bid Open Date	05/01/24

UPCOMING PROJECTS:

STUDY – WRRF Groundwater Dewatering Plan Study

Scope: Martha Silks is the Lead Hydrologist for LRE Water, SDD has a long history with her as she has served on teams working with dewatering issues in the plant dating back to the early 2000’s. LRE Water, an engineer out of Lawrence Kansas and staff have agreed on a scope of work anticipating they would bring 3 alternative solutions to address groundwater dewatering issues in this area of the plant.

Staff removed the water level sensor and pressure and barometer transducers that had been installed for data gathering and has returned to LRE for analysis.

Next steps are for LRE to complete modeling the groundwater scenarios for design options.



Schedule:

Task 1 – Data Gathering	Complete
Task 2 - Development of Dewatering System options	Apr-24
Task 3 – Prepare 20-year life cycle costs for the options	May-24

Replacement Dewatering Wells (West Cluster)

Specifications and Plans for replacement dewatering wells around west cluster are being developed. Staff expects these will be advertised before the next trustee meeting.

Quotes are being obtained by Maintenance for the temporary electrical services for the well pumps. Quotes are being obtained for the well pumps that are being installed.

DESIGN – Digester #1 Cover Replacement

Staff is negotiating an agreement with Donohue and Associates for the next digester cover replacement. I expect this will be ready for trustee consideration in May.

DESIGN – Final Clarifier Upgrades Project

<<No Update>> The project includes replacement of 3 isolation gates on the influent channels, painting 2 carbon steel clarifiers, performing maintenance work on the clarifier floors, and repairing 8 isolation gates in the nitrification aeration tanks.

Final plan drawings have been received.

Plans and Specifications development will commence again once the Dewatering Well drilling work is advertised.

INTERGOVERNMENTAL ACTIVITIES

1. Staff has continued participating in meetings as needed with the CITY and ADM for the “NE quadrant work group” looking at water and wastewater needs in this corridor. The force main routing for the City’s new Brush College pump station has been selected and design is underway while CITY obtains the necessary easements for the force main. Clark Dietz Engineers are working with the City on that design.
2. Work has begun on the Faries Parkway interceptor replacement work being performed by the CITY. Staff has been review project submittals.
3. Don and Kevin both attended a lunch and learn at the CITY this last period to investigate fusible PVC pipe and potential pipe bursting techniques used in the industry. This was hosted by Aegion and Clark Dietz.

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



PROJECT MANAGER REPORT

April 17th, 2024

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

22ENG45 Primary Clarifier #5 Replacement Project:

SCOPE: Removal and replacement of the existing primary clarifier. Work will include the procurement, installation and commissioning of a new circular primary clarifier and appurtenances. Painting of UV light exposed and submerged carbon steel components, and miscellaneous electrical adjustments to facilitate the removals and commissioning of the new process unit.						
Contractor: Plocher			Original Contract Price: \$1,155,600.00			
Engineer: SDD			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value: \$1,155,600.00			
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	Feb 2024 (tentative)	330 days-Substantial 360 days - Final

Key Activities: Plocher Construction has completed installation of all new clarifier hardware. Start up commissioning was performed by Walker Process Equipment and training for SDD maintenance and operations staff was completed on April 3, 2024. The clarifier is now currently in service and inspection and maintenance of pressure relief valves will occur at a later date. Execution of the final pay application is pending completion of final punch list items.

23MNT22 Sidewalk and Stairs Replacement Project

SCOPE: Removal and replacement of the stairs east of the Admin building, handrails and the sidewalks directly attached to them.						
Contractor: Christy-Foltz			Original Contract Price: \$54,178.00			
Engineer: SDD			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value: \$54,178.00			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
09/08/2023	09/14/23	10/05/23	10/18/23	10/31/23	11/23/23	90 days-Substantial 120 days - Final

Key Activities: Christy-Foltz has completed installation of the new handrails and the stairs are available for use. Final payment is pending.



PROJECT MANAGER REPORT

April 17th, 2024

23ENG22 McKinley Interceptor Repair

SCOPE: Removal of approximately 115 ft of failing 48-inch centrifugally cast fiberglass pipe and replacement with PVC pipe. After the repair is made, the entire manhole to manhole gravity sewer segment is to be CIPP lined. Restoration will require slope stabilization with geofabric and rip rap.						
Contractor: SAK			Original Contract Price: \$841,365.00			
Engineer: SDD			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value: \$841,365.00			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
10/26/23	11/02/23	11/22/23	12/21/23	12/28/23	1/23/24	180 days-Substantial 210 days - Final

Key Activities: All couplers and piping supplies have been delivered. Mobilization and construction of bypass pumping equipment began on 4/8/24. Excavation and bypass pumping is anticipated to begin on April 22, 2024. CIPP lining of the repair section is scheduled for the week of May 6.

22ENG44 East Headworks Grit Classifier Replacement

SCOPE: Removal and replacement of the East headworks grit classifiers, grit removal conveyor and all appurtenances necessary to deliver a fully functioning integrated grit washing and removal system. Owner has pre-purchased the grit washers, the removal conveyor, and grit dumpster distribution sweep plate. Contractor will assume responsibility for coordinating receiving, unloading, and staging equipment from the manufacturers.						
Contractor: Christy-Foltz			Original Contract Price: \$165,950.00			
Engineer: SDD			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value: \$165,950.00			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
05/10/23	05/30/23	06/15/23	07/12/23	09/21/23	09/21/23	150 days-Substantial 150 days - Final

Key Activities: The North classifier (001) was commissioned on 4/3/24 and all newly installed equipment is fully operational. The final payment is pending.

23MNT21 Sodium Bisulfite Tuck Pointing

SCOPE: Sodium Bi-sulfite Building tuck pointing project includes tuck pointing and replacing bricks as necessary, replace lintel over the north wall louver, and replacement of caulking and performing concrete repair as necessary.						
Contractor:			Original Contract Price:			
Engineer: SDD			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value:			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
02/20/24	03/12/24	04/04/24	04/18/2024			90 days-Substantial 120 days - Final

Key Activities: Bids from Otto Baum and Berglund Construction were received for the project and opened on April 4. A recommendation for award is presented to the Board.



24ENGXX Sewer Televising and Rating

SCOPE: Request for Proposals submitted to televise and rate conditions for the Northeast Interceptor, Pershing Rd. Bypass, Route 51 Bypass, Old Main Interceptor, New Main Interceptor, and Eastside Interceptor.						
Contractor:			Original Contract Price:			
Engineer: SDD			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value:			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
02/29/2024	03/14/2024	03/28/2024				

Key Activities: Proposals were received from TeleScan Inc, Hoerr Construction, & National Power Rodding. All bids exceeded the amount budgeted for the current fiscal year. Engineering will negotiate the proposal with TeleScan Inc to amend the unit price or scope of work to fit budgetary constraints. A final proposal will be presented to the Board at the May meeting.

Future projects are being investigated and bid packages being produced.

1. 2024 Roads Contract
 - a. Specifications and Plans

Engineering Support for Outside Maintenance Group Projects

1. Old Main
 - a. Subsidence identified in the Old Main line north of Lincoln Park. Specifications and plans were delivered to the Outside Maintenance group to complete repairs.
2. New Main
 - a. Multiple joints in the box structure lid are broken out near Lake Tokorozawa. Specifications and repair guidance were provided to the Outside Maintenance group to restore the broken joints.
3. McKinley Trestle
 - a. Erosion at the trestle base and subsidence identified on the north side of Spring Creek, west of Monroe St. Specifications and plans were delivered to the Outside Maintenance group to complete repairs and prevent damage to the line.
4. NorthEast Interceptor
 - a. Developing plans to redirect surface drainage from over the interceptor to Spring Creek.

Sanitary District of Decatur
CONTRACTOR PROPOSAL - BID TABULATION

Project: **Sodium Bisulfite Building Tuck Pointing**
 Bid Date: **4/4/2024**
 Bid Time: **10:00am**

Item #	Pay Item	QTY	UOM	Engineers Estimate		OTTO BAUM		BERGLUND Construction	
				Unit Price	Total	Unit Price	Total	Unit Price	Total
1	Misc. contingencies	1	LS	\$ 5,000	\$ 5,000	\$ 5,000.00	\$ 5,000	\$ 5,000.00	\$ 5,000
2	Tuck Pointing	2832	L.F.	\$ 18	\$ 49,560	\$ 14.00	\$ 39,648	\$ 8.75	\$ 24,780
3	Caulking Replacement	1012	L.F.	\$ 18	\$ 18,216	\$ 14.00	\$ 14,168	\$ 19.00	\$ 19,228
4	Brick Replacement	50	E.A.	\$ 100	\$ 5,000	\$ 43.00	\$ 2,150	\$ 150.00	\$ 7,500
5	Lintel Replacement	1	LS	\$ 3,000	\$ 3,000	\$ 2,934.00	\$ 2,934	\$ 2,492.00	\$ 2,492
6				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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19				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL BID AS READ:				\$ 80,776.00					
				TOTAL BID AS CORRECTED:		\$ 63,900.00		\$ 59,000.00	



April 10, 2024

Mr. Don Miller, P.E.
Sanitary District of Decatur
501 S. Dipper Lane
Decatur, IL 62522

Re: Monthly Progress Update
CD Project No. D0540050
**Lost Bridge Force Main
Invoice No. 9 (440640)**

Dear Mr. Miller:

This letter summarizes Clark Dietz's work for the Sanitary District of Decatur that was performed from February 24 through March 29, 2024.

Work Completed this Month

- Held regular internal progress meetings.
- Submitted IEPA Construction Permit.
- Submitted 90% Drawings and Specs to District.
- Finalized project technical and contract specifications.
- Finalized surge analysis for the new forcemain and submitted Preliminary Engineering Report.
- Coordinated easements with District, City, and Park District.
- QAQC review meeting with the District.
- Internal QAQC review and document finalization.

Work Anticipated for Next Month

- Advertise project for bidding.
- Hold a pre-bid meeting with Contractors.
- Prepare addendums, as necessary.
- Survey subconsultant invoice.

Schedule

We have revised the project schedule based on the current progress. The following shows the anticipated design and bidding schedule.

- April 3 – Advertise Project
- May 1 – Open Bids
- May 8 – Bid Recommendation
- May 15 – Board Approval
- June 1 – Notice to Proceed

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



April 10, 2024

Mr. Don Miller, P.E.
Sanitary District of Decatur
501 S. Dipper Lane
Decatur, IL 62522

Re: Monthly Progress Update
CD Project No. D0540060
Northeast Sewer Master Plan
Invoice No. 9 (440642)

Dear Mr. Miller:

This letter summarizes Clark Dietz's work for the Sanitary District of Decatur that was performed from February 24 through March 29, 2024.

Work Completed this Month

- Finalized the revised draft Master Plan.
- Submitted the revised draft Master Plan to District.

Work Anticipated for Next Month

- Meet with District to discuss Master Plan Draft.
- Finalize the Master Plan, as necessary.

Schedule

We anticipate finalizing this report by the end of March 2024.

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