# SANITARY DISTRICT OF DECATUR, IL

#### **DIRECTOR OF ENGINEERING REPORT**

Nov 15, 2023

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**

# 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. SDD has pre-purchased 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, Inc Original Contract Price: \$169,950.00

Engineer: SDD R.E. Inspector: SDD

Notice to Pre-**Contract Completion** Advertise Pre-bid Bid Open Final Award Proceed Construction Dates 05/30/23 06/15/23 06/21/23 05/10/23 9/21/23 9/21/23 1/29/24

**Key Activities:** Grit removal conveyor arrived in August and is stored at SDD site. The anticipated mid-October delivery of the Grit Classifiers has been postponed to mid-December by the manufacturer. Bodine Electric began work on control upgrades for the new classifiers this period. Staff is waiting for the PLC program to be transmitted from the manufacturer to begin integrating into SDD SCADA system.

We are anticipating some delay in commissioning the new controls for these units. Contractor is required to have a manufacturers technician on site for start-up and manufacturer is indicating that may be after the first of Jan 2024.

#### 21CMP04 Fermentation Reactor Pilot:

SCOPE: The construction of a pilot fermenter system which will include installation of a new primary sludge pump in the existing Primary Clarifier Control Structure (Structure 210) and associated piping; piping modifications downstream of existing waste activated sludge (WAS) pump in the WAS Pump Station (Structure 112); a new compressed air mixing system; a steel frac tank that has been fabricated as a fermenter (Temporary Structure 100) and requires connections to primary sludge, WAS, compressed air mixing system, odorous air treatment system, and Primary Effluent Channel (Structure 022).

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	Notice to Pre- Contract C	Contract Completion
Auvertise	Pre-blu	ый Ореп	rillal Awalu	Proceed	Construction	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:** Procurement of different materials for the Frac Tank are still on track for the pilot project to start January 2024. We are waiting for submittals on several ancillary items.

Staff is coordinating SCADA integration with Farnsworth Group, SDD I&C, and plc programs for the 210, 112, and 009 buildings.

A pre-startup meeting was held this period to begin the laboratory planning of the monitoring / tests pilot demonstration testing scenarios. Planning is ongoing.

#### **DIRECTOR OF ENGINEERING REPORT**



## Nov 15, 2023

# **NON-CONSTRUCTION ACTIVITY**

#### **DESIGN - 22ENG31 ADMINISTRATIVE OFFICE COMPLEX:**

Phase 1 - Schematic Design (10 weeks) is in process and will focus on:

- 1. Confirm programming of interior spaces and adjacencies
- 2. Review public access and site security concerns.
- 3. Conduct a preliminary code analysis.
- 4. Develop conceptual designs for the building layout and site orientation.
- 5. Identify major laboratory equipment.
- 6. Establish building security requirements.
- 7. Develop conceptual HVAC system options.
- 8. Confirm existing electrical utilities and power capacity.
- 9. Review energy efficient design strategies for net zero goals.
- 10. Review available site utilities, including potable water, non-potable water, sanitary, gas, and electric.
- 11. Perform siting evaluation based on existing utility locations, potential roadway improvements, and public access.
- 12. Perform and prepare topographic survey of the proposed site.
- 13. Evaluate drainage and detention requirements.
- 14. Evaluate parking requirements.
- 15. Develop a schematic design level cost opinion.

This last period staff has conducted 2 progress meetings with AEX and Hanson professional services has completed the civil field work. The most recent progress meeting engaged both AEX and Black and Veatch. Staff expects modified adjacencies to be reviewed at the next design progress meeting (11/21). Along with the adjacencies, BV/AEX have been tasked with confirming space requirements for the Laboratory during the upcoming period.

# **DESIGN - 22ENG02 Lost Bridge Force Main Renewal**

The designer is Clark Deitz Engineers (CDI). SKS Engineers has completed the results of the soil borings and provided a summary report to the engineers. Current easements for the existing pumping station and force main were supplied to CDI this period.

Schedule:		
Geotech report and boring contractor coordination	<del>Nov 23</del>	
Alternatives evaluation and survey	Dec 23	
ROW reviews	Dec 23	
60% Design	Dec 23	
90% Design	Mar 24	
Advertise	Apr 24	
Targeted Award Date	May 24	

# STUDY - Collection System Master Plan - Resiliency Evaluation

This scope of work is focusing on the NE Quadrant of Decatur. Staff has been notified this month that the engineer from Clark Dietz working on this effort has left CDI. We are working with CDI on the transition of a different engineer stepping into the lead role.

Schedule:	
Develop Master Plan Outline	Oct 23



#### **DIRECTOR OF ENGINEERING REPORT**

## Nov 15, 2023

Develop sewer system gravity capacities report	Oct 23
Develop maps of sewer system condition assessment	SDD-
Develop pumping station capacity reports	Nov 23
Develop "higher risk" capacity bottleneck report	Nov 23
Incorporate previous master plans into report	Dec 23
Incorporate discussion on ADM Service Partners	Dec 23
Prepare final report	Dec 23

## **UPCOMING PROJECTS:**

## **DESIGN – Damon Avenue Pump Station Upgrades Project**

The project includes installation of a new electrical service at the pump station and the installation of a new 385HP pump. The newer pump is providing full redundancy to the largest capacity pump currently installed in the pump station. The pump being replaced is one of two 60HP Flygt pumps. After the work is complete, there will be two 60hp pumps and one 35hp, with a backup 60hp stored on site.

The electrical work is to install an owner procured dual service switch board and automatic transfer switch and a contractor supplied 1200-amp CT enclosure.

# **DESIGN – Final Clarifier Upgrades Project**

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. Technical specification development will commence again once the Damon Project is advertised.

## **INTERGOVERNMENTAL ACTIVITIES**

Staff has continued participating in meetings with the CITY and ADM for the "NE quadrant work group" looking at water and wastewater needs in this corridor.

From the SDD perspective, the work reviewed was the location of the pump station, a short section of feeder gravity sewer, and the force main routing to and around the Damon PS. The CITY presented their work on water supply development.

Plans for bidding the relocation of the SDD 18" sewer South of Faries Parkway (tree clearing has begun) were received for review this week.

If there are questions, please contact me at 422-6931 ext 216, or by email at <a href="DonM@sddcleanwater.org">DonM@sddcleanwater.org</a>.

# SANITARY DISTRICT OF DECATUR, IL

#### PROJECT MANAGER REPORT

# November 6<sup>th</sup>, 2023

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

				1 //			
	Advertise	Pre-bid	Bid Open	Final Award	Notice to Pre- Contract C		Contract Completion
	Auvertise	Pre-blu	ый Ореп	Filial Awalu	Proceed	Construction	Dates
	00/16/22	09/27/22	11/01/22	11/17/22	11/30/22	Feb 2024	330 days-Substantial
	09/16/22	09/2//22	11/01/22	11/1//22	11/30/22	(tentative)	360 days - Final

**Key Activities:** << NO CHANGE>>

# 23ENGXX 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: Chirsty-Foltz Original Contract Price: \$54,178.00 Engineer: SDD Sum of Change Orders: \$0 R.E. Inspector: SDD Total Value: \$54,178.00 Notice to Pre-Contract Advertise Pre-bid Bid Open Final Award Proceed **Completion Dates** Construction 90 days-Substantial 09/08/2023 09/14/2023 10/05/2023 10/18/23 10/31/23 11/13/23 120 days - Final

**Key Activities:** Project kickoff meeting is scheduled for Monday Nov 13<sup>th</sup>.

## 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: TBD Original Contract Price: \$TBD Engineer: SDD Sum of Change Orders: \$0 R.E. Inspector: SDD Total Value: \$TBD

Advertise	Pre-bid	Bid Open	Final Award	Notice to	Pre-	nstruction Dates
Auvertise	PTE-DIG	ви Ореп	Filiai Awai u	Proceed	Construction	Dates
10/26/23	11/02/23	11/22/23	12/20/23	TBD	TBD	180 days-Substantial 210 days - Final

**Key Activities:** Pre-bid was held as scheduled on 11/02/23. No addendums have been issued and bid open is scheduled for 11/22/23.