



DIRECTOR OF ENGINEERING REPORT

Jun 17, 2020

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

SEWER CLEANING Project:

SCOPE: This year’s cleaning contract includes approximately 12,000 LF of various sized sewer segments.						
Contractor: TBD Engineer: SDD						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
xx/x/20	xx/xx/20	xx/xx/20	xx/xx/20	xx/xx/20	xx/xx/20	120 days xx/xx/20
Submittals Reviewed: Requests for Information (RFIs): Owner Requests for Proposal/Change Order (RFPCO):						

- **Key Activities:** Bids were formally rejected last period. Revision of scope is complete and advertising/rebid documents are being prepared.

WYCKLES UPGRADES Project:

SCOPE: This project addresses the replacement of valves and appurtenances at 6 sludge inlets to the lagoons at the Wyckles facility along with site grading to address stormwater runoff on the NW corner of the westernmost lagoon.						
Contractor: The BURDICK COMPANY Engineer: SDD						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
08/23/19	08/27/18	09/13/18	09/18/19	01/06/20	12/20/20	60 days 03/06/20
Submittals Reviewed: 2 shop drawings submitted /2 complete Requests for Information (RFIs): 1 received /1 answered Owner Requests for Proposal/Change Order (RFPCO): 0 issued /0 outstanding						

- **Key Activities:** NO CHANGE FROM LAST MEETING. Waiting for contractor to submit final change order paperwork.

- **Future Change Items:**

1-01 FO-01 – Install an additional 3” yard hydrant on East Lagoon Ramp. (T&M) + TBD

NON-CONSTRUCTION ACTIVITY

Primary Sludge Line Replacement: The replacement of approximately 400 LF of 8” ductile iron primary sludge force main. The invert of the pipe eroded away and needs replaced. A mandatory pre-quote meeting was held on 05/14/20. Quotes were received and Burdick was the low price. District staff negotiated removal of approximately 80 LF of open cut PVC pipe installation. The negotiations

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resulted in an agreed price of \$31,489 with SDD purchasing materials. Material list is being finalized for purchase directly by the District.

South Shores Interceptor Lining: SDD has IEPA approved Facility Plans for this lining work. To participate in revolving loan funding through IEPA, staff is required to submit a "Funding Nomination Form (FNF)" for the work; after which IEPA will priority rank the project for funding. Staff submitted the FNF this month. The access to this interceptor is complex due to the interceptor location (proximity to Lake Decatur and inaccessibility of manholes).

Staff has negotiated a professional services agreement with Farnsworth Group for services related to this project. That agreement is before the board for consideration under old business.

Digester #3 Floating Cover Replacement: Digester #3 has had an ongoing issue with methane/hydrogen sulfide gas accumulation in the attic space. Additionally, the brick facia on the digesters is compromised and brick is bulging and splitting in many sections of the digester walls. Staff has been negotiating with Donohue and Associates a Design, Procurement, and Construction Related Services and has a professional services agreement before the board for consideration this month.

Lake Shore Pump Station Renewal:

Lake Shore pump station was originally built in 1953, modified in 1976, and subsequently modified again in August 2000 when ADM installed a force main to bypass the flow around the pump station. The original design of the pump station was for the 4 shaft driven pumps with the drive motors upstairs and the pumps 2 stories below. Staff has modified the pumps to be dry pit submersible style pumps to improve the reliability of the pumps, however access to the lower level is restricted and the pipe gallery is undersized and is a very difficult environment to perform any maintenance. Access to the wet-well is through a side entry door which requires a confined space entry and houses valves that are difficult to access. This pump station is scheduled for rebuild or rehabilitation.

Staff is in the process of contract negotiations with Clark Dietz Engineers for design and construction related services for this project and hopes to have a professional services agreement for Board consideration under old business

RAS Pump Station Valve Replacement

Final plans have been made for the replacement of the valves in this pump station. Pre-work meeting with the Contractor and their safety officer was completed the week of 06/07/20. Work is scheduled for 06/20/20.

ARC FLASH STUDY

Industrial Technology Group (ITG) from Champaign, IL was awarded a professional services agreement on 01/22/2020 to update the main treatment plant ARC FLASH STUDY. Bodine is performing field measurements and field data gathering.

ADMINISTRATIVE OFFICE MASTER PLANNING:

<<No Update>>: Architectural Expressions (AEX) has provided a third revision of the Phase 2 report this last period. Review is pending on it.

Phase 3 (\$10,000) of this facility assessment will follow trustee review of Ph 2 and concurrence to proceed. Phase 3 is to perform a pre-design level study ranging from modifications and upgrades to



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the existing facilities to the possibility of a new facility, based on the space needs that were identified in Phase 2. The study includes a high-level cost opinion that provides context for the findings from Phase 1 and 2. A review of the existing lab space as a standalone structure is also included in Phase 3.

UPCOMING PROJECTS:

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

North Stormwater Drainage: <<No Update>> Staff began preparing documents this last period for the purpose of bidding work to re-establish drainage on the North side of the treatment plant. Over time, grades have silted in requiring drainage ditches to be regraded to eliminate ponding water inside the treatment plant.

INTERGOVERNMENTAL ACTIVITIES

NONE

PROPOSED BOARD ACTION

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

1. **Professional Services Agreement – Digester #3 Lid Replacement**
2. **Professional Services Agreement – South Shores Interceptor Lining Project**
3. **Professional Services Agreement – Lakeshore Drive Pump Station Renewal**

Further details can be found in respective Summaries of Motion.

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



Industrial Technology Group

Henneman Engineering Inc.

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Monthly Progress Report

May 2020

Project Number 20-9711

Project Name SANITARY DISTRICT OF DECATUR
(SDD) ARC FLASH STUDY

Prime A/E Industrial Technology Group (217)398-6280

SDD
Contact Don Miller (217)433-4046

1. Activities completed and items pending:

- 5/15/20 –Reviewed one line documentation of electrical system provided by Don. Documentation was compared to existing SKM project to note any missing data or discrepancies in the model. There was data found in the one lines not in the SKM model and some data in the SKM model not found in the one lines. This was summarized and prepared for review with Don.
- 5/18/20 –Called Don to discuss differences and missing information discovered between the one line documentation and the SKM model. Also reviewed SDD's COVID-19 policies for onsite contractors and electricians. Confirmed Bodine was not aware of the change in status from no non-essential outside personnel onsite to non-essential outside personal allowed with proper PPE and following SDD's other COVID-19 policies.
- 5/22/20 -Called Tad McCullough to review COVID-19 policies and inquire about how soon Bodine could get back onsite to resume the project. Tad predicted that within the next week Bodine could get someone back onsite for the arc flash data gathering.
- 5/29/20 -As of today ITG has not had confirmation that Bodine is back onsite and has not received any data gathering information from Bodine.

2. Projected Progress Next Month:

- Confirm status of data gathering with Bodine.
- Coordinate onsite visit with Bodine to review data gathering practices and provide feedback on whether data covers all information needed for the model.



Industrial Technology Group

Henneman Engineering Inc.

3. Comparison of Schedule and actual progress:

- The project is behind schedule due to a delay in the start of data gathering due to Covid-19.

4. Decisions or information required:

- None

Report prepared by: Tracy Wilson, Project Manager, ITG / Henneman Engineering, Inc.

Sanitary District of Decatur
501 Dipper Lane * Decatur, Illinois 62522 * 217/422-6931

MEMORANDUM

TO: Don Miller

DATE: June 9, 2020

FR: Roger Dudley

RE: Replacement of Primary Sludge Line

- Scope of work:
Replace exposed sections of ductile iron pipe with 8” C-900 PVC pipe, horizontally directional drill approx. 275’ of 8” C-900 PVC SDR 18 RJ pipe, open cut approx. 425’ of PSL force main and reestablish functionality of the force main. To reduce costs, SDD shall procure the pipe and fittings for this project.
- Quotes package was sent to (9) nine contractors.
- Mandatory pre quote meeting held May 14, 2020 at 10:30 A.M.
- Quotes were opened on May 19, 2020 at 10:00 A.M.
 - Hoerr Construction, Inc.Goodfield, IL..... \$114,000.00
 - Burdick P&H.....Decatur, IL..... \$43,064.00
- SDD removed 80’ of open cut PSL force main from the project and the quote was revised to \$31,489.00. Contract has been executed by both parties.
- Currently awaiting the pipe materials list from the contractor for SDD procurement.

Sanitary District of Decatur
501 Dipper Lane * Decatur, Illinois 62522 * 217/422-6931

MEMORANDUM

TO: Don Miller

DATE: June 9, 2020

FR: Roger Dudley

RE: RAS Pump Station Valve Replacement – Bldg. 259

- Quotes were opened on February 14, 2020 @ 1:30 PM.
 - E.L. Pruitt.....Decatur, IL.....\$10,820.00
 - Petersburg.....Springfield, IL.....\$14,836.00
 - Burdick P&H.....Decatur, IL..... \$12,326.00
- Insurance Certificate has been submitted and approved.
- E.L. Pruitt foreman has visited the project site.
- Project is scheduled to begin June 16, 2020, weather dependent.

Sanitary District of Decatur
501 Dipper Lane * Decatur, Illinois 62522 * 217/422-6931

MEMORANDUM

TO: Don Miller

DATE: June 9, 2020

FR: Roger Dudley

RE: Clarifier #1 Concrete Repair

- Contractor – GRS General Contractors
- Contract amount - \$23,120.00
- Scope of work:
 - Repair deteriorated concrete & seal vertical cracking along the outside wall of the clarifier launderer.
- Vector Construction (subcontractor) has completed sealing the vertical cracks.
- GRS has completed the wall repair and submitted required paperwork for closeout.
- Concrete 28-day break – 5022 psi. 4500 psi required.
- Project is 100% complete.

SANITARY DISTRICT OF DECATUR

501 Dipper Lane Decatur, IL (217) 422-6931

MEMORANDUM

TO: Kent Newton

FROM: J. D. Malone

DATE: 6/11/2020

SUBJECT: Maintenance Monthly Activity Report for May 2020

Overall

We have been working through the challenges presented by balancing required maintenance activities and social distancing during the Covid-19 pandemic. The maintenance group continues to work with split crews with one crew working in the plant and the other crew working from home. We are bringing in some employees during their work from home week to help with completion of multiple long-term projects around the plant. When employees are brought in, we keep them separated from the in-plant crew as much as possible. Break and lunch times are staggered with disinfection of the areas performed between break periods.

I solicited quotes from multiple vendors for a replacement service vehicle for our town crew. A request for consideration with a recommendation of approval will be presented at the board meeting. The lowest quote received was from Bob Ridings Fleet Sales. Quotes were solicited from Bob Brady Dodge / Ram, Miles Chevrolet, Morrow Brothers Ford, and Landmark Ford of Springfield. Only Bob Brady Dodge / Ram and Bob Ridings submitted quotes prior to the opening deadline. The quotes were opened during a Zoom meeting that all vendors were invited to. A quote tabulation sheet is included below for your review.

Work Orders Completed, Total of 668

50 Corrective

1 Improvement / New

584 PM

4 Process

1 Project

5 Safety

0 Training / Meeting

0 Asset Management

23 Proactive Work / Issues found during a PM

SANITARY DISTRICT OF DECATUR

501 Dipper Lane Decatur, IL (217) 422-6931

MEMORANDUM

Project: Replacement F450 / Equivalent Cab&Chassis			Date	5/29/2020
			Time	10:00AM
Contractor Name	Exceptions	Quote Amount	Alt. Quote Amount	Total
Bob Ridings Fleet Sales	n/a	\$36,657.00	\$45,147.00	\$36,657.00
Bob Brady Auto Group	Diesel Quoted Only	n/a	\$48,685.00	\$48,685.00
Morrow Brothers Ford	Quote received after deadline			
Landmark Ford	No Quote Received.			
Miles Chevrolet	No Quote Received.			

I&C Monthly Activity

The in-house installation of the 043 building MCC should be completed by the end of June 2020. This project had been delayed due to the splitting of the crews and limited manpower. This MCC will serve as our training center for Allen Bradley Smart MCC equipment. We plan on replacing three additional motor control centers during this fiscal year.

Mechanical Maintenance Monthly Activity

The auto-strainers for the chlorine analyzer sample supply are working well and have required very little maintenance. The installation of these has saved the operators time by them not needing cleaned multiple times per shift.

The rotation program for our Laborer's in-training has been put on hold due to the staffing changes for our Covid-19 response. When we get back to normal staffing levels the program will resume.

To allow for clarifier maintenance to be performed we have made sure that all groundwater pumps near the nitrification clarifiers are operational. Multiple new pumps were installed and electrical disconnects were permanently installed for the well casings from the project to repair the floor in clarifier #9. We have also worked with operations to keep all the spray wash pumps functional on the nitrification clarifiers. These pumps keep the weir troughs free of algae accumulation.

SANITARY DISTRICT OF DECATUR

501 Dipper Lane Decatur, IL (217) 422-6931

MEMORANDUM

We have received resumes to fill the groundskeeper position and will begin the interview process 6/16/2020. Our summer help staff, outside facilities crew, and laborers have done well keeping up with the grounds to this point.

M.I.S. Department Monthly Update

- Network Administration, Helpdesk, Troubleshooting and Repair
 - Ongoing network administration.

Mimecast Email Security

Email Volume Vs Rejected Mail

From 1 May 2020 To 31 May 2020

Total Email Count : 10205 Total Rejection Count : 3380

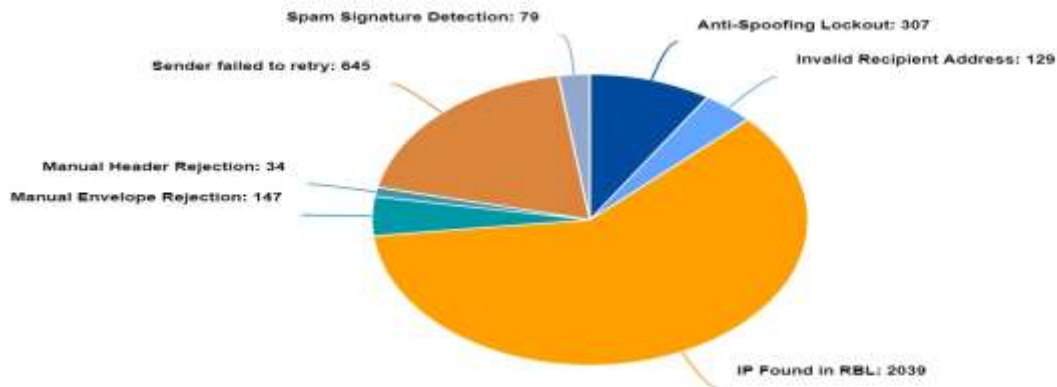


SANITARY DISTRICT OF DECATUR

501 Dipper Lane Decatur, IL (217) 422-6931

MEMORANDUM

Rejection Overview
 From 1 May 2020 To 31 May 2020
 Total Rejection Count: 3380



Email Statistics Report

From June - 2019 To May - 2020

Month-Year	Total Inbound email	Rejections (includes viruses & spam)	Legit Inbound Email	% Rejections	Total Outbound email	Total Internal email
June - 2019	4,898	2,421	2,477	49.43 %	1,081	3,214
July - 2019	8,068	4,514	3,554	55.95 %	1,325	4,865
Aug - 2019	9,209	5,540	3,669	60.16 %	1,352	4,952
Sep - 2019	19,087	15,377	3,710	80.56 %	1,214	4,273
Oct - 2019	17,123	13,201	3,922	77.10 %	1,212	5,319
Nov - 2019	8,292	5,050	3,242	60.90 %	1,158	4,563
Dec - 2019	7,676	4,476	3,200	58.31 %	906	5,465
Jan - 2020	6,604	3,281	3,323	49.68 %	1,207	5,632
Feb - 2020	8,553	4,772	3,781	55.79 %	1,382	5,089
Mar - 2020	8,176	3,422	4,754	41.85 %	1,849	6,204
Apr - 2020	7,971	3,984	3,987	49.98 %	1,295	6,787
May - 2020	7,250	3,380	3,870	46.62 %	862	5,473
Total	112,907	69,418	43,489		14,843	61,836
Mean	9,408.92	5,784.83	3,624.08	57.19 %	1,236.92	5,153.00

SANITARY DISTRICT OF DECATUR

501 Dipper Lane Decatur, IL (217) 422-6931

MEMORANDUM

Vipre Endpoint Security



Systems Integrator Monthly Update

- Working on creating a new SOP for the East Headworks (review for control changes)
- Chlorine disinfection issues with new equipment
- Auditing the SCADA map for all 52 PLC's in plant
- Creating reports in Win 911 for quick access from mobile phones
- Added logic to all outside pump stations with new Compact Logix PLC's for number of pumps that can run at one time
- Researching Win 911 Interactive for eventual upgrade due to end of life for Mobile 911

If you have any questions or would like additional information about the maintenance department and our activities, feel free to contact me.

Thank you,

James Malone, CPMM

Phone: (217) 422-6931 (x-226)