

AGENDA – Engineering and Construction Committee

Thursday, February 20, 2025 5:45 PM

Committee Members

- J. Fennell, Chair
- D. Bouckaert
- D. Novotny
- F. Saverino
- J. Zay

- I. Roll Call
- II. Approval of the January 16, 2025, Engineering & Construction Committee Minutes

RECOMMENDED MOTION: To approve the Minutes of the January 16, 2025, Engineering & Construction Committee Meeting of the DuPage Water Commission.

- III. Report of Status of Operations and Construction
- IV. Resolution R-14-25: A Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Electrical Contract QRE-10/24 (WAO No. 001 Volt Electric, Inc. Estimated Expense of \$3,900, and WAO No. 002 Homestead Electrical Contracting, Inc. Estimated Expense of \$4,300)
- V. Resolution R-17-25: A Resolution Approving Task Order No. 06 with Burns & McDonnell Engineering Co., Inc. (Hydraulic Model Development and Calibration Estimated Expense of \$120,000)

RECOMMENDED MOTION: To recommend approval of Items 2 through 3 of the Engineering and Construction Committee Report section of the Commission meeting agenda.

- VI. Other Business
- VII. Adjournment

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Minutes of a Meeting of the

ENGINEERING & CONSTRUCTION COMMITTEE

DuPage Water Commission 600 E. Butterfield Road, Elmhurst, Illinois

January 16, 2025

Chairman Fennell called the meeting to order at 6:00 P.M.

Committee members in attendance: D. Bouckaert, J. Fennell, D. Novotny and J. Zay

Committee members absent: F. Saverino

Also in attendance: D. Cuvalo, J. Loster and M. Weed

Commissioner Bouckaert moved to approve the Minutes of the November 21, 2024, Engineering & Construction Committee Meeting of the DuPage Water Commission. Motion seconded by Commissioner Novotny and unanimously approved by a Voice Vote.

Engineering Manager Loster provided a report of the ongoing Operations and Maintenance activities as listed in the Report of Status of Operations and Board Action Items and provided a report on the Status of Capital Construction, Capital Engineering and other Improvement Projects.

Engineering Manager Loster advised the Committee of recent and ongoing maintenance items including the rebuilding of the reservoir influent and effluent surge relief valves in December as well as High Lift Pump No. 3 recently experiencing start-up issues. Additionally, he indicated that planning for the High Lift Pump Isolation Valve Replacement Project is underway, with the work planned for early February. Regarding R-6-25, Engineering Manager Loster indicated that the resolution would allow the General Manager to purchase material and services from WEG Electric Machinery asneeded, in order to maintain the high lift pump motors, at a cost not to exceed \$100,000.

Engineering Manager Loster also updated the Committee regarding the City of Chicago's transition from a blended phosphate treatment to an orthophosphate treatment. He indicated that Staff continues to share information with customer communities and monitor specified water quality parameters to ensure there are no issues with the water that the Commission is pumping out. He also noted that the transition is expected to continue through late spring.

Regarding the ongoing discussions with the City of Chicago regarding Lexington, Engineering Manager Loster advised the Committee that there are no substantive updates to share. He stated that staff continues to await progress updates from the City regarding the SCADA View Node, which remains in a state of failure, as well as the vibration analysis equipment which continues to require replacement.

With respect to the Alternate Water Source Project, Engineering Manager Loster noted that staff will be reaching out to the Village of Northbrook in the near future to discuss permitting for some planned tree clearing and debris removal on the site. He stated that the work is planned for the middle of winter once the ground is substantially frozen, in order to minimize impacts to the site.

Engineering Manager Loster noted that Pipeline and Remote Facilities Staff continue to inspect and maintain remote facilities and are currently working with DeLasCasas to perform testing and maintenance at designated feeder main and meter station locations.

Regarding R-9-25, Engineering Manager Loster advised the Committee that this action appears on the agenda to approve Work Authorization Order No. 30 to QR contractor Rossi Contractors to address maintenance work that is needed at various locations throughout the Commission's distribution network in the amount of \$123,000, which includes a 10% contingency.

Engineering Manager Loster also noted that the work identified in resolution R-10-25, also with Rossi Contractors, is necessary to establish existing site conditions in preparation for future efforts related to cathodic protection improvements. He stated that the contract is in the amount of \$91,200, which includes a 20% contingency, noting that the increased contingency is due to a higher risk of potential field changes needed, only to be utilized as deemed necessary by Staff.

Regarding R-12-25, Engineering Manager Loster advised the Committee that this action appears on the agenda to authorize the General Manager to purchase custom manhole frames and lids in the amount of \$48,867, in order to replenish the Commission's stockpile which is used to replace broken or aging frames and lids as opportunities arise.

Engineering Manager Loster reported on the progress of the SCADA Replacement Project, stating that the work continues to progress with all campus control panels having been replaced and current efforts currently focused on the factory acceptance testing for remote telemetry units at meter station locations. He also noted that inspection and maintenance of all remote site antenna systems is currently underway and that Staff has also completed upgrades to the access control security system at the pump station facility.

Regarding R-4-25, Engineering Manager Loster advised the Committee that this action appears on the agenda to approve the purchase and installation of ten additional security cameras from Schneider Electric to address gaps in current coverage of the pump station campus. He indicated that the cost of the project is \$128,000.

Moving on to engineering and capital improvement work, Engineering Manager Loster stated that the ongoing cathodic protection project on the TW-2 pipeline has been closed out for the year. Additionally, he noted that of the eight sites completed, a small portion of work remained at one site due to permitting issues which will be resolved over the winter and the remaining work completed in spring. He also advised that staff continue to work with AECOM on the design of a joint metering and pressure adjusting station for the Village of Lombard's fifth connection point which will likely to be completed in spring, with construction to follow at Lombard's discretion.

Regarding the WaterLink Project, Engineering Manager Loster stated that the phase II effort continues and is just over 60% complete with nearly all field work having been finalized, save for a few locations at the delivery sites. He advised the Committee that plans have been developed to the 90% stage with permit submittals scheduled over the next few weeks. Engineering Manager Loster also shared that the corrosion control study continues to progress and is nearing the point that will mark the change from the acclimation phase to the transition phase, wherein water from Chicago will be circulated through the harvested piping to simulate the conditions when the WaterLink Project is completed. He noted that the overall study is anticipated to continue through November of this year.

With regard to property acquisition on the WaterLink Project, Engineering Manager Loster stated that associated efforts have begun and noted that there will likely be a total of 100-150 easements needed on the project. He stated that Staff plans to bring the action items to the Board in batches starting in February or March and will need to do so in two phases, the first of which will seek general authority to negotiate and the second will be to authorize approval to make the designated offer.

Regarding R-11-25, Engineering Manager Loster advised the Committee that this action appears on the agenda to approve a contract with Burns & McDonnell to provide construction engineering services on the Book Road bid package as well as to complete the initiation phase of the Program Manager role on the WaterLink Project. He noted that additional 12-month duration contracts would be brought forward for additional approval to more specifically identify the needs within the Program Manager role and that those components currently on the agenda are in the amount of \$3,613,698.

Regarding R-13-25, Engineering Manager Loster indicated that this action appears on the agenda to authorize the General Manager to purchase three valves to accommodate the WaterLink connection to the existing Commission distribution network. He stated that the connection needs to be made during a low-flow time of year and, due to excessive lead time, Staff believes it prudent to obtain the valves prior to awarding the construction contract in order to ensure that the valves are on hand to accommodate the ideal connection schedule. Engineering Manager Loster noted that the cost for these three valves is \$176,126.

With regard to resolution R-7-25, Engineering Manager Loster advised the Committee that this action appears on the agenda to approve a contract with Classen, White and Associates to perform survey work at 13 meter station locations in order to supplement the Commission's hydraulic model where pipeline elevations were noted to have been inaccurate. He stated that this work would entail the establishment of benchmarks at these locations, tied to the appropriate datums, and the re-surveying of associated pipeline elevations for inclusion in the hydraulic model at a cost of \$34,019.

Chairman Fennell inquired with the Committee if there were any further questions regarding the action items. Hearing none, <u>Commissioner Bouckaert moved to recommend approval of items 2 through 9 of the Engineering and Construction Committee portion of the Commission Agenda (Items IV through XI on the Engineering and Construction Committee Agenda).</u> Seconded by Commissioner Novotny and unanimously approved by a Voice Vote.

Commissioner Fennell asked the Committee if any other business or other items to be discussed. Hearing none, and with no other items coming before the Committee, <u>Commissioner Bouckaert moved to adjourn the meeting at 6:20 P.M.</u> Seconded by Commissioner Novotny and unanimously approved by a Voice Vote.

BOARD/MINUTES/ENGINEERING/2025/ENG250116.doc



MEMORANDUM

To: Paul May – General Manager

From: Chris Bostick – Manager of Water Operations

Jeff Loster – Manager of Engineering

Mike Weed – Operations & Instrumentation Supervisor Dariusz Panaszek – Pipeline & Remote Facilities Supervisor

Denis Cuvalo – Systems Engineer and Information Technology Supervisor

Date: 2/13/2025

Subject: Status of Operations, Engineering and Construction

Operations Overview

The Commission's sales for January 2025 were a total of 2.10 billion gallons. This represents an average daily demand of 67.8 million gallons per day (MGD), which is lower than the January 2024 average day demand of 68.9 MGD. The maximum day demand was 78.6 MGD recorded on January 22, 2025, which is higher than the January 2024 maximum day demand of 76.7 MGD. The minimum day flow was 60.9 MGD.

The recorded total precipitation for January 2025 was 1.14 inches compared to 3.46 inches for January 2024. The level of Lake Michigan for January 2025 is 578.02 (Feet International Great Lakes Datum (IGLD) 1985) compared to 578.80 (Feet IGLD 1985) for January 2024.

<u>DuPage Operations & Instrumentation Maintenance and Construction Overview</u>

High Lift Pump Motor No. 3 is experiencing start-up issues. DWC staff are working with qualified large motor service personnel to determine the root cause of the start-up issue. The motor is being scheduled for removal and inspection at a contractor's facility.

High Lift Pump Isolation Valve replacement project is tentatively scheduled for March, but may be deferred depending upon the schedule for the Pump #3 repair.

Resolution No. R-14-25 appears on the agenda requesting approval and ratification of Quick Response Electrical Contract QRE-10/24 Work Authorization Orders No. 001 to Volt Electric Inc. and Work Authorization Order No. 002 to Homestead Electrical Contracting Inc. for emergency and non-emergency response for electrical services at the DuPage Pumping Station in response to the power system issues that occurred on January 21st. The work was completed prior to board approval and was not reasonably foreseeable at the time of need.

DuPage Water Commission

600 E. Butterfield Road, Elmhurst, IL 60126-4642 | (630) 834-0100

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City of Chicago Water Treatment Modifications

The City of Chicago's transition from their current blended phosphate to phosphoric acid is ongoing to optimize the control of lead and copper release through household plumbing. Staff continue to share updated information with all DWC customers as it is received from the City.

DWC staff continues monitoring certain water quality parameters to follow the progress during the City's transition of the treatment technique. The expanded monitoring program will continue through late spring 2025.

Lexington Operations and Maintenance Overview

No Change: Investigations continue, and additional proposals are being sought for the installation of vibration analysis instrumentation; proposals will be brought forth for Board consideration in the future.

No Change: Commission staff have informed Chicago DWM staff that the Lexington SCADA node is once again in failure mode. Chicago DWM reports that they will continue to troubleshoot their SCADA system deficiencies to identify the root cause of the ongoing issues.

Alternate Water Source

No Change: Staff will continue to engage the Village of Northbrook regarding tree removal permitting as necessary and contractors to perform tree removal and site cleanup of fly-dumped materials.

Pipeline & Remote Facilities Maintenance Overview

Pipeline and Remote Facilities staff continue to inspect Remote Facilities and perform preventative maintenance and corrective work as needed.

Pipeline staff are performing an annual valve exercising program.

Pipeline staff and DeLasCasas CP, LLC are performing testing and maintenance on the galvanic cathodic protection systems on selected feeder mains and meter station piping.

SCADA & Information Technology Overview

The SCADA Replacement Project (Contract PSD-9/21) is ongoing. The DWC campus control panel replacement has been completed with final site acceptance testing and open items work being completed. The Factory Acceptance Test (FAT) for the remote site control panels including Lexington, Tank Sites, Meters Stations, and ROV's has been completed. Commission and Concentric staff have started communication stress testing in the field and will begin replacing RTU panels at the remote sites starting at the end of February. The inspection and maintenance of all remote site antenna systems is underway and roughly 80% complete. Replacement of the fiber network for the DWC campus is anticipated to begin this Spring following the completion of all control and network upgrades with the addition of a new duct bank to complete a ring topology for the new fiber network.

Engineering & Capital Improvement Program Overview

Design of a Joint Facility (Metering Station and Pressure Adjusting Station) at Lombard's fifth connection point remains ongoing. A technical review workshop was recently held with the design team and Lombard staff, with design to be completed in 2025 with construction to follow.

R-17-25 also appears on the agenda seeking approval of Task Order No. 06 with Burns and McDonnell (BMcD) to perform additional hydraulic modeling and model calibration for the Commission.

WaterLink Communities (Montgomery/Oswego/Yorkville)

The Phase II engineering effort remains ongoing and is approximately 70% complete. Development of 90% plans has been completed, with numerous permit submittals having been made in recent weeks. This effort includes a recent submittal to ComEd to initiate their technical and real estate review processes, which is anticipated to take up to five months to complete. Coordination with these permitting agencies and the WaterLink Communities will remain ongoing throughout the permit review duration to make sure any design changes are quickly and accurately represented to all impacted parties.

The acclimation phase of the corrosion control treatment study, performed by the Cornwell Engineering Group, is now complete. Associated reports were submitted to the Illinois Environmental Protection Agency (IEPA) for review/comment in December and were approved. Current efforts have begun to transition the study from analysis of the current water supplies to water from the Jardine Water Purification Plant, which will simulate the final water condition upon completion of the WaterLink Project. This study is required by the IEPA and is expected to be completed by November 2025, though preliminary results indicate that it could be completed much earlier.

Additional efforts related to property (easement) acquisition are also underway, with real estate appraisals to begin in earnest during the month of February. Items related to easement acquisition will likely be brought forward for Board consideration over the next several months. A coordination meeting was recently held on this topic to ensure all parties are in alignment regarding next steps and schedule.

A kick-off for the Phase III effort with Burns & McDonnell (BMcD) to serve as the Program Manager was also recently held, followed by a day-long workshop with the BMcD and Phase II design teams to review and discuss the project design considerations and overall transition between the Phase II and Phase III efforts. Project communication efforts have also begun, with a coordination meeting between the BMcD team and Waterwell, in addition to contact being made with industry organizations and communications staff at the three WaterLink Communities for initial feedback.

Coordination efforts with the LAN and BMcD teams has also been ongoing over the past few weeks with the intention of scheduling a contractor outreach event, currently targeted for early to mid-March. An event such as this will help grow interest in the WaterLink Project within the construction industry and will allow Commission Staff and the Phase II/III engineering teams to gauge levels of interest and solicit feedback from the contractor community regarding the project.

Board Action Items

Resolution R-14-25: A Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Electrical Contract QRE-10/24 (WAO No. 001 – Volt Electric, Inc. – Estimated Expense of \$3,900, and WAO No. 002 – Homestead Electrical Contracting, Inc. – Estimated Expense of \$4,300)

Resolution R-17-25: A Resolution Approving Task Order No. 06 with Burns & McDonnell Engineering Co., Inc. (Hydraulic Model Development and Calibration – Estimated Expense of \$120,000)

Attachments

- 1. DuPage Laboratory Bench Sheets for January 2025
- 2. Water Sales Analysis 01-May-2020 to 31-January-2025
- 3. DuPage Water Commission Chart Sales vs. Historical Average
- 4. DuPage Water Commission Chart Sales vs. Allocation
- 5. WaterLink Status Report

<u>Under separate cover</u>: Summary memorandum regarding power outage event on January 21, 2025.

01-May-92

TO

31-Jan-25

PER DAY AVERAGE

77,857,045

MONTH	SALES TO CUSTOMERS (GALLONS)	PURCHASES FRON CHICAGO (GALLONS)	GALLONS BILLED %	BILLINGS TO CUSTOMERS	BILLINGS FROM CHICAGO	DOCUMENTED COMMISSION WATER USE (2)	DOCUMENTED COMMISSION WATER USE %	TOTAL ACCOUNTED FOR %	DWC OPER. & MAINT. RATE (3)	CHGO RATE
May-21	2,331,364,000	2,401,447,849	97.08%	\$11,586,879.08	\$9,778,695.64	1,625,835	0.07%	97.15%	\$4.97	\$4.072
Jun-21	2,646,312,000	2,727,518,236	97.02%	\$13,152,170.64	\$11,226,465.06	872,815	0.03%	97.05%	\$4.97	\$4.116
Jul-21	2,661,520,000	2,750,318,994	96.77%	\$13,227,754.40	\$11,320,312.98	772,815	0.03%	96.80%	\$4.97	\$4.116
Aug-21	2,736,795,000	2,818,422,046	97.10%	\$13,601,871.15	\$11,600,625.14	458,555	0.02%	97.12%	\$4.97	\$4.116
Sep-21	2,616,212,000	2,698,022,374	96.97%	\$13,002,573.64	\$11,105,060.09	1,237,080	0.05%	97.01%	\$4.97	\$4.116
Oct-21	2,128,141,000	2,179,013,387	97.67%	\$10,576,860.77	\$8,968,819.10	396,147	0.02%	97.68%	\$4.97	\$4.116
Nov-21	1,896,311,000	1,961,815,221	96.66%	\$9,424,665.67	\$8,074,831.45	462,613	0.02%	96.68%	\$4.97	\$4.116
Dec-21	1,950,793,000	2,010,917,641	97.01%	\$9,695,441.21	\$8,276,937.01	382,031	0.02%	97.03%	\$4.97	\$4.116
Jan-22	2,046,043,000	2,110,214,643	96.96%	\$10,168,833.71	\$8,685,674.26	621,078	0.03%	96.99%	\$4.97	\$4.116
Feb-22	1,879,376,000	1,935,513,559	97.10%	\$9,340,498.72	\$7,966,573.81	247,750	0.01%	97.11%	\$4.97	\$4.116
Mar-22	1,990,472,000	2,061,912,643	96.54%	\$9,892,645.84	\$8,486,832.44	459,838	0.02%	96.56%	\$4.97	\$4.116
Apr-22	1,935,992,000	1,981,414,298	97.71%	\$9,621,880.24	\$8,155,501.25	285,652	0.01%	97.72%	\$4.97	\$4.116
May-22	2,276,513,000	2,344,221,635	97.11%	\$11,792,337.34	\$9,648,816.25	5,698,667	0.24%	97.35%	\$5.18	\$4.116
Jun-22	2,682,480,000	2,772,533,130	96.75%	\$13,895,246.40	\$11,982,888.19	690,925	0.02%	96.78%	\$5.18	\$4.322
Jul-22	2,804,661,000	2,892,532,635	96.96%	\$14,528,143.98	\$12,501,526.05	883,858	0.03%	96.99%	\$5.18	\$4.322
Aug-22	2,688,224,000	2,772,533,130	96.96%	\$13,925,000.32	\$11,982,888.19	906,806	0.03%	96.99%	\$5.18	\$4.322
Sep-22	2,415,535,000	2,474,643,822	97.61%	\$12,512,471.30	\$10,695,410.60	1,021,063	0.04%	97.65%	\$5.18	\$4.322
Oct-22	2,153,410,000	2,220,050,683	97.00%	\$11,154,663.80	\$9,595,059.05	2,891,786	0.13%	97.13%	\$5.18	\$4.322
Nov-22	1,919,552,000	1,979,550,491	96.97%	\$9,943,279.36	\$8,555,617.22	1,008,092	0.05%	97.02%	\$5.18 ¢5.40	\$4.322
Dec-22 Jan-23	2,071,113,000	2,123,449,660	97.54% 97.79%	\$10,728,365.34	\$9,177,549.43	552,389	0.03% 0.02%	97.56% 97.81%	\$5.18 \$5.18	\$4.322 \$4.322
Feb-23	2,014,750,000 1,835,597,000	2,060,255,805 1,883,158,917	97.79%	\$10,436,405.00 \$9,508,392.46	\$8,904,425.59 \$8,139,012.84	337,423 529,206	0.02%	97.81%	\$5.18 \$5.18	\$4.322 \$4.322
Mar-23	1,971,974,000	2,026,257,691	97.47%	\$10,214,825.32	\$8,757,453.41	306,690	0.03%	97.34%	\$5.18	\$4.322
Apr-23	1,962,197,000	2,010,451,747	97.60%	\$10,164,180.46	\$8,689,172.45	349,596	0.02%	97.62%	\$5.18	\$4.322
May-23	2,474,377,000	2,540,440,833	97.40%	\$13,336,892.03	\$10,979,785.28	684,441	0.03%	97.43%	\$5.39	\$4.322
Jun-23	2,971,436,000	3,043,540,086	97.63%	\$16,016,040.04	\$13,814,628.45	678,930	0.02%	97.65%	\$5.39	\$4.539
Jul-23	2,567,425,000	2,639,887,376	97.26%	\$13,838,420.75	\$11,982,448.80	1,047,600	0.04%	97.29%	\$5.39	\$4.539
Aug-23	2,708,945,000	2,773,069,509	97.69%	\$14,601,213.55	\$12,586,962.50	832,992	0.03%	97.72%	\$5.39	\$4.539
Sep-23	2,406,858,000	2,471,708,096	97.38%	\$12,972,964.62	\$11,219,083.05	753,904	0.03%	97.41%	\$5.39	\$4.539
Oct-23	2,071,291,000	2,116,545,770	97.86%	\$11,164,258.49	\$9,607,001.25	1,034,131	0.05%	97.91%	\$5.39	\$4.539
Nov-23	1,902,725,000	1,957,768,374	97.19%	\$10,255,687.75	\$8,886,310.65	809,342	0.04%	97.23%	\$5.39	\$4.539
Dec-23	1,972,754,000	2,031,158,416	97.12%	\$10,633,144.06	\$9,219,428.05	2,329,064	0.11%	97.24%	\$5.39	\$4.539
Jan-24	2,058,390,000	2,131,445,175	96.57%	\$11,094,722.10	\$9,674,663.60	730,427	0.03%	96.61%	\$5.39	\$4.539
Feb-24	1,868,175,000	1,916,869,806	97.46%	\$10,069,463.25	\$8,700,672.05	268,834	0.01%	97.47%	\$5.39	\$4.539
Mar-24	1,927,795,000	1,971,770,225	97.77%	\$10,390,815.05	\$8,949,831.10	340,529	0.02%	97.79%	\$5.39	\$4.539
Apr-24	1,951,120,000	1,992,959,991	97.90%	\$10,516,536.80	\$9,046,045.40	426,636	0.02%	97.92%	\$5.39	\$4.539
May-24	2,285,252,000	2,331,031,384	98.04%	\$12,751,706.16	\$10,580,551.45	964,148	0.04%	98.08%	\$5.58	\$4.539
Jun-24	2,558,136,000	2,613,555,125	97.88%	\$14,274,398.88	\$12,265,414.20	669,121	0.03%	97.91%	\$5.58	\$4.693
Jul-24	2,577,734,000	2,637,750,416	97.72%	\$14,383,755.72	\$12,378,962.70	5,976,667	0.23%	97.95%	\$5.58	\$4.693
Aug-24	2,723,982,000	2,791,119,391	97.59%	\$15,199,819.56	\$13,098,723.30	5,570,100	0.20%	97.79%	\$5.58	\$4.693
Sep-24	2,607,811,000	2,668,243,213	97.74%	\$14,551,585.38	\$12,522,065.40	887,220	0.03%	97.77%	\$5.58	\$4.693
Oct-24	2,256,800,000	2,311,304,709	97.64%	\$12,592,944.00	\$10,846,953.00	715,430	0.03%	97.67%	\$5.58	\$4.693
Nov-24	1,872,414,000	1,918,174,238	97.61%	\$10,448,070.12	\$9,001,956.60	517,416	0.03%	97.64%	\$5.58	\$4.693
Dec-24 Jan-25	2,003,025,000 2,084,797,000	2,053,944,598 2,142,229,363	97.52% 97.32%	\$11,176,879.50 \$11,633,167.26	\$9,639,162.00 \$10,053,482.40	465,013 295,500	0.02% 0.01%	97.54% 97.33%	\$5.58 \$5.58	\$4.693 \$4.693
TOTALS (1)	931,481,689,798	958,216,392,084	97.21%	\$2,404,293,325.34	\$2,120,485,868.45	887,569,585	0.09%	97.30%	\$2.58	\$2.213

YTD							
Jan-24	21.134.201.000	21.705.563.635	97.37%	113.913.343	97.970.312	\$5.39	\$4
Jan-25	20,969,951,000	21,467,352,437	97.68%	117,012,327	100,387,271	\$5.58	\$4
	(164,250,000)	(238,211,198)		\$3,098,983	\$2,416,959		
	-0.8%	-1.1%		2.7%	2.5%		
Month							
Jan-24	2,058,390,000	2,131,445,175	96.57%	11,094,722	9,674,664	\$5.39	\$4
Jan-25	2,084,797,000	2,142,229,363	97.32%	11,633,167	10,053,482	\$5.58	\$4
	26,407,000	10,784,188		\$538,445	\$378,819		
	1.3%	0.5%		4.9%	3.9%		
Jan>Dec	81.772.000	88.284.765		456,288	414.320		

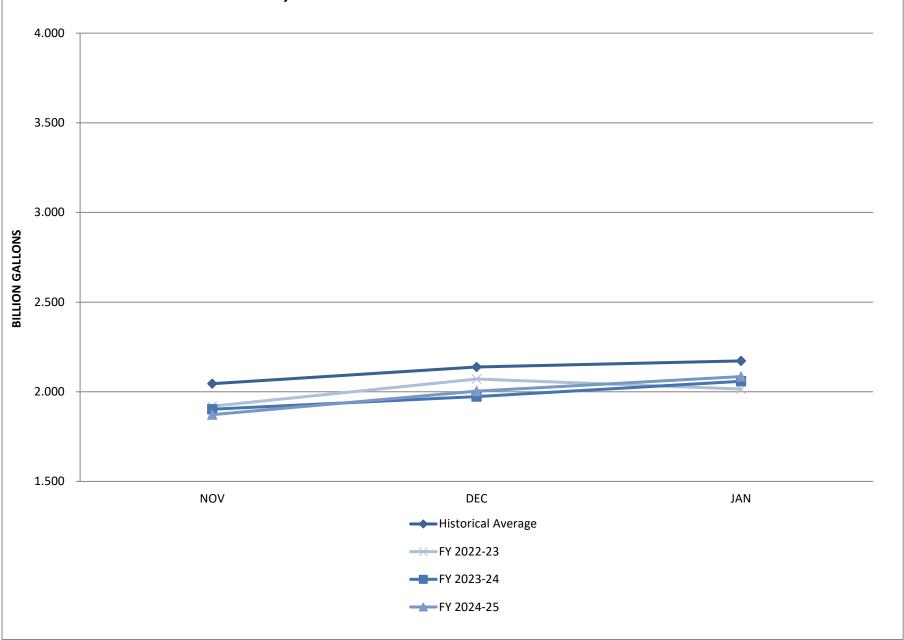
^{(1) -} SINCE MAY 1, 1992 (2) - REPRESENTS DU PAGE PUMP STATION, METER TESTING AND CONSTRUCTION PROJECT USAGE (3) - DOES NOT INCLUDE FIXED COST PAYMENTS

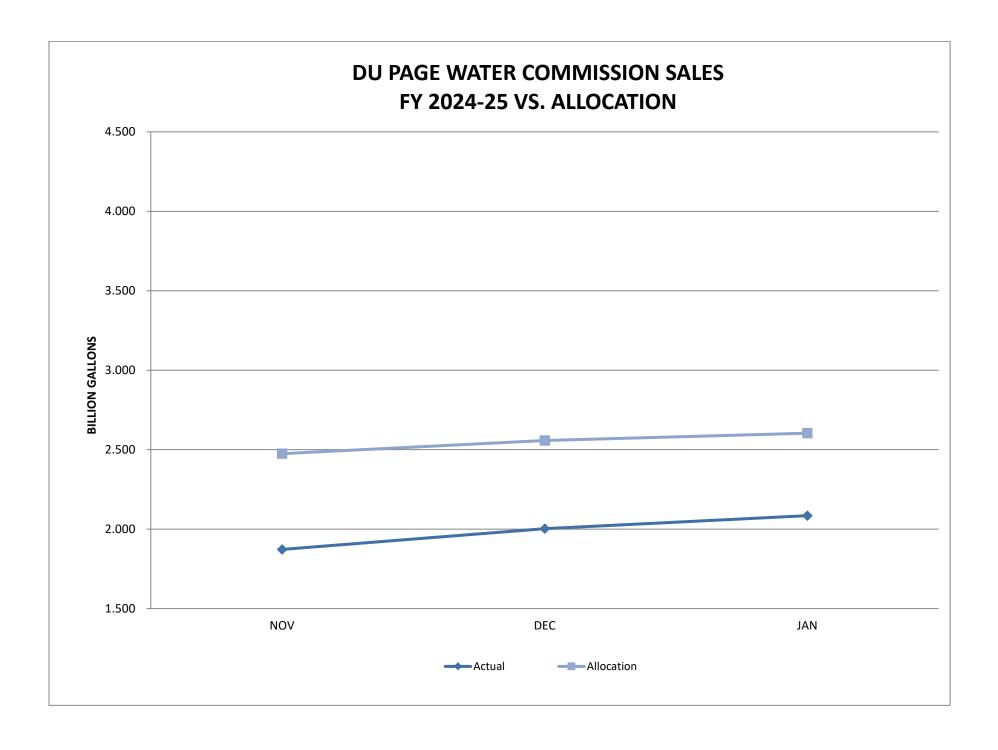
DUPAGE WATER COMMISSION PWS FACILITY ID# - IL435400 MONTHLY OPERATIONS REPORT DUPAGE WATER COMMISSION LABORATORY BENCH SHEET RESULTS JANUARY 2025

	LEXING	LEXINGTON P.S. SUPPLY	лРРLY		מ	DUPAGE P.S. DISCHARGE	.S. DISCH	HARGE			ANALYST
DATE	FREE CI2 (mg/L)	TURBIDITY (ntu)	O-PO4 (mg/L)	FREE CI2 (mg/L)	TURBIDITY (ntu)	TEMP (°F)	Hd	Fluoride (mg/L)	O-PO4 (mg/L)	P.A.C. (LBS/MG)	.TNI
-	1.39	0.08	1.01	1.31	0.12	51	7.2	0.7	0.92	0	ð
2	1.31	60.0	0.95	1.27	0.10	53	7.2	9.0	1.04	0	KD
3	1.37	0.10	1.04	1.30	0.11	52	7.2	0.7	1.10	0	KD
4	1.36	0.08	0.92	1.30	0.11	53	7.3	0.8	1.00	0	RC
5	1.32	0.09	0.98	1.21	0.12	52	7.3	0.8	0.91	0	RC
9	1.39	0.07	06.0	1.15	0.12	52	7.2	0.7	1.03	0	KD
7	1.37	0.08	0.94	1.33	0.10	20	7.3	0.7	1.00	0	KD
8	1.36	0.08	0.94	1.26	0.11	51	7.2	0.7	0.98	0	RC
6	1.48	0.08	1.08	1.25	0.10	51	7.2	0.8	96.0	0	RC
10	1.26	0.08	1.15	1.31	60.0	20	7.3	0.7	1.09	0	RC
11	1.48	0.04	1.25	1.25	0.10	20	7.2	0.8	1.11	0	RC
12	1.32	0.09	1.38	1.10	0.12	51	7.3	0.8	1.22	0	RC
13	1.33	0.07	1.41	1.38	0.12	20	7.3	0.8	1.27	0	RC
14		0.08	1.19	1.22	0.11	49	7.3	0.8	1.29	0	RC
15		60.0	1.26	1.30	0.10	47	7.3	0.8	1.16	0	AM
16		0.09	1.29	1.30	0.10	48	7.2	0.8	1.21	0	AM
17	1.31	0.10	1.28	1.28	0.11	48	7.1	0.8	1.19	0	AM
18	1.35	80.08	1.33	1.38	0.12	20	7.1	0.7	1.23	0	Sſ
19	1.28	0.09	1.36	1.13	0.14	49	7.1	0.8	1.28	0	AM
20		0.08	1.27	1.11	0.11	49	7.0	0.8	1.19	0	AM
21		0.10	1.29	1.13	0.11	48	7.0	0.8	1.26	0	AM
22	1.39	0.08	1.30	1.40	0.10	20	7.0	0.8	1.35	0	SC
23		0.02	1.35	1.48	60.0	49	7.0	0.8	1.35	0	SC
24		90.0	1.65	1.39	60.0	20	7.1	0.8	1.66	0	Sſ
25	1.45	0.08	1.41	1.41	0.08	49	7.1	0.8	1.29	0	AM
26	1.40	0.07	1.36	1.40	60.0	48	7.1	0.8	1.27	0	AM
27	1.36	90.0	1.36	1.41	0.11	20	7.0	0.7	1.17	0	SC
28	1.35	0.07	1.37	1.42	0.10	20	7.0	0.8	1.26	0	SC
29	1.40	0.07	1.30	1.39	0.11	25	7.0	0.7	1.34	0	SC
30	1.37	0.08	1.28	1.40	0.10	20	7.1	0.8	1.27	0	AM
	1.36	0.08	1.37	1.30	60.0	49	7.1	0.9	1.33	0	AM
AVG.	1.36	0.08	1.22	1.30	0.11	20	7.2	0.8	1.18	0	
MAX.	1.48	0.10	1.65	1.48	0.14	53	7.3	0.9	1.66	0	
ż	1.26	0.04	0.90	1.10	0.08	47	7.0	9.0	0.91	0	

Mike Weed, Operations Supervisor Illinois ROINC # 186860234











LAN PROJECT #: 128-10031-001

PROJECT: DuPage Water Commission WaterLink Extension Phase II

REPORT DATE: February 10, 2025

MEETING DATE: February 20, 2025

I. Progress through February 10, 2025

A. Field data collection and surveying.

- Supplemental topography completed along Hill Rd to accommodate revised Montgomery #1 Delivery site
 configuration, Additional topographic survey underway at proposed chlorination building / future pump
 station site, to be completed by February 21.
- Final cadastral surveying work complete.
 - a) All 13 additional sections authorized in Phase 1 complete. Site surveying for 3 of the 7 delivery sites has been completed, with remainder coming from WaterLink municipal engineers.
 - b) Site topo at Oswego East HS began Aug 6 and is complete. High school engineer provided existing utility map at site.
 - c) Existing structure rim/invert data collection 100% complete. Total of approximately 1,050 structures located with rim/inverts surveyed.
- 3. Processing of collected Aerial LIDAR data is complete.
 - a) 100% of original scope complete. Overall width of data processing increased to facilitate design drawing set-up and minimize future re-work. Increased width processing complete.
 - SAM delivered additional processed data along Wolf's Crossing Rd and Douglas Rd for modified FW1 Segment 1 & 2 route to REL on August 26th.
 - c) Due to ComEd alignment changes west of Ogden Falls Blvd., additional topo processing was completed by SAM LLC. Processed data was received last week.
- 4. Subsurface Utility Locates
 - a) All remaining SUE field activities completed in mid-December.
- 5. Utility Potholing Locates
 - a) Over 440 potholes completed along ComEd corridors and are now 100% complete.











6. Geotechnical

a) Total of 185 borings (90%) completed to date in Phase 2 through January 31. S2 geotechnical report delivered last week; borings logs and report for S3 expected in next two weeks.

7. Cathodic Protection

- a) Soil resistivity testing along project routes complete for cathodic protection design.
- b) Draft final report provided for TW-6 S1, remaining report(s) in progress.
- B. Data Collection (as-builts, GIS, design drawings).
 - 1. WaterLink Delivery Point proposed site layouts.
 - 2. Design team has set initial priority parcels to move to the plat preparation stage.
- C. Ongoing Coordination with ComEd.
 - 1. Drawings submitted to ComEd 1/23/25 to initiate legal and real estate appraisal process.
 - 2. Subsequent ComEd design reviews and coordination will be performed during Phase II design as part of legal and appraisal process.

D. Land Acquisition

- 1. 222 of 232 Titles Received
- 2. 160 total parcels for easement preparation
- 3. Easement legal descriptions & exhibits
 - a) 79 total prepared to date (50%)
- 4. Intro letter to property owners developed and finalized. Appraisals to begin in earnest this month. Verified that WIFIA will accept IDOT method rather than Yellow Book.
- E. Contract TW-6 Section 1 (Book Rd) in progress.
 - 1. Water transmission main plan and profile design ongoing.
 - Proposed connection design at Book Road & 75th Street. Comments received 2/10/25 from DuPage DOT are under review likely to meet with them again to clarify multiple updates since Aug '23 meeting.
 - 3. Remote operated valves to be placed along existing 48-inch transmission main.
 - 4. Roadway plans and traffic control plans have been prepared.
 - 5. In-field route review for valve locations completed to confirm actual conditions.
 - 6. 90% Submittal Drawings submitted to DWC 12/13/24.
 - 7. IEPA construction permit application submitted 1/3/25.











- 8. Permit applications with USACE, IDNR, DuPage County Stormwater, City of Naperville, and Wheatland Township submitted.
- 9. Design changes to address 90% comments are underway, including depth of cover and structure modifications.
- F. Contract TW-6 Section 2 & 3 in progress.
 - 1. Water transmission main plan and profile design ongoing.
 - 2. Alignment revision into Aurora 95th Street ROW was reviewed with the City and will not be pursued. 90% design will remain in ComEd ROW.
 - 3. Realignment on 248th Avenue to accommodate two-way traffic during construction is complete.
 - 4. In-field route review for valve locations completed to confirm actual conditions.
 - 5. Tunnel locations reviewed based on DWC comments one tunnel removed and one tunnel shortened on TW-6 Section 2.
 - 6. Drawings submitted to ComEd 1/23/25 to initiate legal and real estate appraisal process.
 - 7. Permit applications / design submittals are being prepared for various agencies, including IDOT and railroads.
- G. Contract FW-1 Section 1 & 2 in progress.
 - 1. Water transmission main plan and profile design ongoing.
 - 2. 90% Submittal Drawings submitted to DWC 12/13/24. Comments received 2/3/25 from Kendall County Hwy. Dept. are under review and will be addressed.
- H. Contract FW-1 Section 3 in progress.
 - 1. Water transmission main plan and profile design ongoing.
 - 2. 90% Submittal Drawings Submitted to DWC 12/22/24.
 - 3. Ongoing coordination with IDOT District 3 on IL Route 71 project overlap.
 - 4. Permit application to IDOT District 3 will request several variances with regards to pipe alignment proximity to ROW line and drainage ditches. Permit application is being prepared.
- Contract FW-1 Section 4 in progress.
 - 1. Water transmission main plan and profile design ongoing.











- 2. 90% Submittal Drawings submitted to DWC 12/13/24.
- J. Contract MS-22 Meter Stations in progress.
 - 1. Meter station piping and building layouts ongoing.
 - 2. Architectural and structural design for the buildings is ongoing.
 - 3. Piping modifications to address DWC pipe trench removal in progress.
 - 4. WaterLink feedback received on architectural treatments and site layout modifications.

II. Scope Changes - Phase II (to date)

- A. Design of Additional Architectural Treatments for WaterLink Meter Stations.
 - 1. Fee: Pending (to be submitted to DWC for review/approval).

III. Financials

- A. Total Phase II Contract: \$19,956,942
 - 1. Fee Expended through January 31, 2024:
 - a) Total: \$14,148,748 (70.9%)
 - 1) Basic Services: \$9,459,989 (47.4%)
 - 2) Additional Services: \$4,668,761 (23.5%)

IV. Completed Workshops, Meetings and Visits (January – February)

- A. Monthly Progress Meeting w/ DWC January 16, 2025
- B. ComEd Submittal Coordination Meeting January 21, 2025
- C. Design Review Workshop with DWC and Burns & McDonnell February 3, 2025
- D. Project Standard Details Review Meeting February 6, 2025

V. Upcoming Tasks & Meetings

- A. ComEd Coordination Meetings Various.
- B. Phase II geotechnical field work (ongoing).
- C. Field data collection for cathodic protection design (ongoing).
- D. Permit submittals to various review agencies.
- E. Easement Acquisition Workshop February 13, 2025.











- F. Oswego Coordination Meeting February 14, 2024
- G. Final Design Submittal for TW-6 Section 1 February 28, 2025.
- H. Design Coordination Meeting with DuPage DOT re: 75th/Book Rd connection TBD
- I. Contractor Outreach Event TBD (March 7 or March 14 targeted)

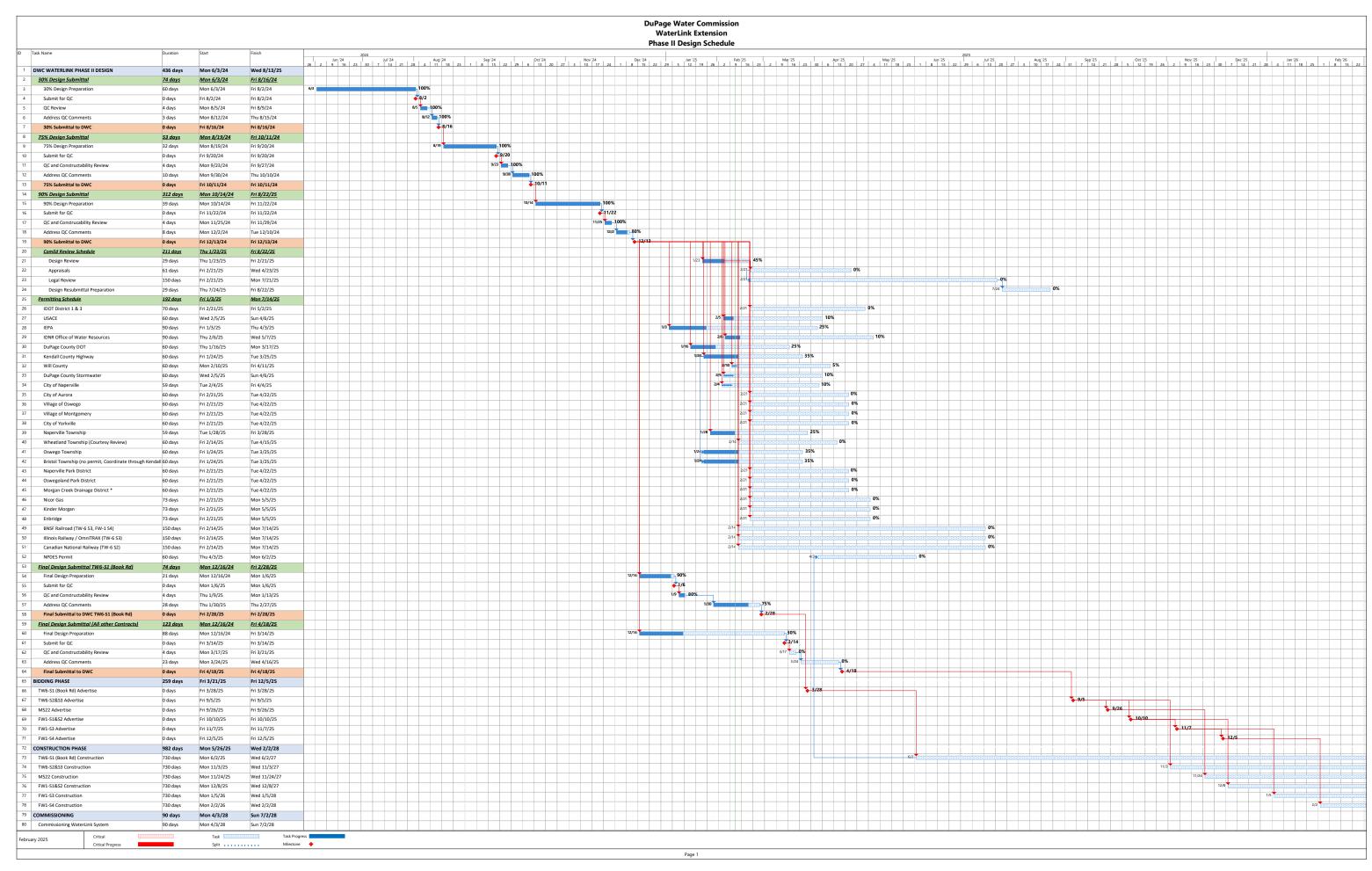






Cash Flow/Invoicing Forecast - Phase II Services DuPage Water Commission WaterLink Extension February 2025

	Activity through April 26, 2024	Activity through May 31, 2024	Activity through June 30, 2024	Activity through July 31, 2024	Activity through August 31, 2024	Activity through September 30, 2024	Activity through October 31, 2024	Activity through November 30, 2024	Activity through December 31, 2024	Activity through January 31, 2025	Planned	Planned	Planned	Planned	Planned	Planned	Planned	Planned
Description	May 2024	June 2024	July 2024	August 2024	September 2024	October 2024	November 2024	December 2024	January 2025	February 2025	March 2025	April 2025	May 2025	June 2025	July 2025	August 2025	September 2025	October 2025
Basic Services	\$ 625,960	\$ 876,344	\$ 980,607	\$ 1,011,525	\$ 994,029	\$ 992,826	\$ 999,176	\$ 1,118,039	\$ 1,116,725	\$ 745,163	\$ 636,799	\$ 511,607	\$ 386,415	\$ 386,415	\$ 386,415	\$ 375,576	\$ 250,384	\$ 125,192
Additional Services	\$ 545,788	\$ 1,126,706	\$ 586,700	\$ 561,317	\$ 594,996	\$ 64,786	\$ 149,871	\$ 438,251	\$ 350,121	\$ 269,867	\$ 548,836	\$ 561,002	\$ 449,708	\$ 417,732	\$ 417,732	\$ 199,333	\$ 155,000	\$ -
MONTHLY SUBTOTAL	\$ 1,171,748	\$ 2,003,050	\$ 1,567,307	\$ 1,572,842	\$ 1,589,025	\$ 1,057,612	\$ 1,149,047	\$ 1,556,290	\$ 1,466,846	\$ 1,015,030	\$ 1,185,635	\$ 1,072,609	\$ 836,123	\$ 804,147	\$ 804,147	\$ 574,909	\$ 405,384	\$ 125,192
SUBTOTAL	SUBTOTAL \$6,314,947				\$5,35	1,974	\$8,290,021											
IGA ESCROW DEPOSITS		\$7,76	54,000			\$5,53	2,000		\$6,660,942									
														TOTAL PHASE II C	ONTRACT	\$		19,956,942





Resolution #: R-14-25 Account: 01-60-656000

Approvals: Author / Manager / Finance / Admin

MW RCB CAP PDM

REQUEST FOR BOARD ACTION

Date: 2/13/2025

Description: A Resolution Approving and Ratifying Certain Work Authorization

Orders Under Quick Response Electrical Contract QRE-10/24

Agenda Section: Engineering & Construction

Originating Department: Operations & Instrumentation

The Commission entered into certain agreements dated February 15, 2024, with McWilliams Electric Co. Inc., Volt Electric Inc., and Homestead Electrical Contracting, Inc. for quick response electrical work as needed through the issuance of Work Authorization Orders. Resolution No. R-14-25 would ratify the following Work Authorization Orders under the Quick Response Electrical Contracts.

Work Authorization Order No. 001 This work authorization is for Volt Electric, Inc. for emergency and non-emergency response for services at the DuPage Pumping Station.

Work Authorization Order No. 002 This work authorization is for Homestead Electrical Contracting, Inc. for emergency and non-emergency response for services at the DuPage Pumping Station.

Volt Electric and Homestead Electrical Contracting were mobilized under emergency response to assist staff with 5KV electrical switchgear troubleshooting and manual switchgear operation during a power loss event at the DuPage Pumping Station on January 21, 2025, and under non-emergency response to assist staff with 5KV electrical switchgear remediation services on January 27, 2025. Volt Electric was also mobilized under non-emergency response to de-terminate and re-terminate the 5KV motor leads on High Lift Pump #3 to allow for third-party motor testing on January 27 and January 31, 2025.

Work Authorization Order 001 and Work Authorization Order 002 were not reasonably foreseeable at the time of need and were issued under an emergency response and during a time-sensitive repair.

Approval of Resolution R-14-25 would approve Work Authorization Order No. 001 to Volt Electric for an estimated cost of \$3,900.00 and Work Authorization Order No. 002 to Homestead Electrical Contracting for an estimated cost of \$4,300.00.

Recommended Motion:

Add the motion here

DUPAGE WATER COMMISSION

RESOLUTION NO. R-14-25

A RESOLUTION APPROVING AND RATIFYING CERTAIN WORK AUTHORIZATION ORDERS UNDER QUICK RESPONSE ELECTRICAL CONTRACT QRE-10/24

WHEREAS, the Commission was formed and exists pursuant to the Water Commission Act of 1985, 70 ILCS 3720/0.01 et seq., and Division 135 of Article 11 of the Illinois Municipal Code, 65 ILCS 5/11-135-1 et seq., for the purpose of securing an adequate source and supply of water for its customers; and

WHEREAS, the DuPage Water Commission (the "Commission") entered into certain agreements dated February 15, 2024, with McWilliams Electric Co. Inc., Volt Electric Inc., and Homestead Electrical Contracting, Inc. for quick response electrical work related to the Commission's Waterworks System (said agreements being hereinafter collectively referred to as "Contract QRE-10/24"); and

WHEREAS, Contract QRE-10/24 is designed to allow the Commission to direct one or more or all of the quick response electrical contractors to perform emergency electrical work, including without limitation electrical work that the Commission is unable to perform through its own personnel and with its own equipment, as needed through the issuance of Work Authorization Orders;

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the DuPage Water Commission as follows:

<u>SECTION ONE</u>: The foregoing recitals are by this reference incorporated herein and made a part hereof as findings of the Board of Commissioners of the DuPage Water Commission.

SECTION TWO: The Work Authorization Orders attached hereto and by this reference incorporated herein and made a part hereof as Exhibit 1 and Exhibit 2 shall be and hereby are approved and, if already issued, ratified because the Board of Commissioners of the DuPage Water Commission has determined, based upon the representations of staff, that the circumstances said to necessitate the Work Authorization Orders were not reasonably foreseeable at the time the contracts were signed, the Work Authorization Orders are germane to the original contracts as signed, and/or the Work Authorization Orders are in the best interest of the DuPage Water Commission and authorized by law.

SECTION THREE: This Resolution shall be in full force and effect from and after its adoption.

	Aye	Nay	Absent	Abstain
Bouckaert, D.				
Cuzzone, N.				
Fennell, J.				
VACANT				
Novotny, D.				
Pruyn, J.				
Romano, K.				
Rush, K.				
Russo, D.				
Saverino, F.				
Suess, P.				
/an Vooren, D.				
Zay, J.				
ADOPTED TI	HIS DAY	OF		, 2025.
		 Jame	es F. Zay, Cha	airman
		34111	, ciic	

ATTEST:

Danna Mundall, Clerk Board/Resolutions/2024/R-14-25.docx

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EXHIBIT 1

WORK AUTHORIZATION ORDER

SHEET 1 OF 2

CONTRACT QRE-10/24: QUICK RESPONSE ELECTRICAL CONTRACT

PROJECT: QRE-10.001

LOCATION:

DuPage Pump Station

CONTRACTOR:

Volt Electric

DESCRIPTION OF WORK:

On 1/21/25, Contractor assisted staff under emergency response and non-emergency response with 5KV electrical switchgear troubleshooting, manual switchgear operation, power restoration, determination, and re-termination of motor leads on a single large motor.

REASON FOR WORK:

Item 1: Emergency Response:

a. The DuPage Pump Station lost all site power, and all the switchgear was locked out.

Item 2: Non-Emergency Response:

- b. Assist staff with 5KV electrical switchgear power restoration at the DuPage Pump Station.
- c. De-terminate & re-terminate 5KV motor leads on Pump #3 for third-party motor testing

MINIMUM RESPONSE TIME:

Item 1: Emergency Response:

a. Less than 2 hours

Item 2: Non-Emergency Response:

- b. Greater than 2 hours
- c. De-terminate and re-terminate 5KV motor leads on Pump #3 for third-party motor testing.

COMM WORK:		JIPMENT AN	ND SUPPI	LIES TO BE INCORPORATED INTO THE
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THE WO	ORK ORDERED PURSUANT TO THIS \	WORK AUTI	HORIZATI	ON ORDER (REASON FOR WORK ITEN
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			DuPAGE	WATER COMMISSION
		Ву:		
		:	Signature	e of Authorized Representative
		DATE: _		
CONTR	ACTOR RECEIPT ACKNOWLEDGED	AND DESIGN	NATION (OF SAFETY REPRESENTATIVE:
Ву:		Safety	Rep:	
	Signature of Authorized			Name and 24-Hr Phone No.
	Representative			
DATE:				

EXHIBIT 2

WORK AUTHORIZATION ORDER

SHEET 1 OF 2

CONTRACT QRE-10/24: QUICK RESPONSE ELECTRICAL CONTRACT

PROJECT: QRE-10.002

LOCATION:

DuPage Pump Station

CONTRACTOR:

Homestead Electrical Contracting

DESCRIPTION OF WORK:

Assisted staff under emergency response and non-emergency response with 5KV electrical switchgear troubleshooting, manual switchgear operation, and power restoration.

REASON FOR WORK:

Item 1: Emergency Response:

a. The DuPage Pump Station lost all site power, and all the switchgear was locked out.

Item 2: Non-Emergency Response:

b. Assist staff with 5KV electrical switchgear power restoration at the DuPage Pump Station.

MINIMUM RESPONSE TIME:

Item 1: Emergency Response:

a. Less than 2 hours

Item 2: Non-Emergency Response:

b. Greater than 2 hours

COMIV WORK		QUIPMENT A	AND SUPPLIES TO BE INCORPORATED INTO THE
THE W 1):	ORK ORDERED PURSUANT TO THIS	S WORK AUT	THORIZATION ORDER (REASON FOR WORK ITEM
	X IS IS NOT	PRIORITY	EMERGENCY WORK
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	IS X IS NOT	PRIORITY	EMERGENCY WORK
			DuPAGE WATER COMMISSION
		Ву:	Signature of Authorized Depresentative
		DATE:	Signature of Authorized Representative
CONTR	ACTOR RECEIPT ACKNOWLEDGED	AND DESIG	GNATION OF SAFETY REPRESENTATIVE:
Ву:		Safet	ty Rep:
	Signature of Authorized		Name and 24-Hr Phone No.
	Representative		
DATE:			



Resolution #: R-17-25 Account: 01-60-628000

Approvals: Author/Manager/Finance/Admin

JL JML CAP PDM

REQUEST FOR BOARD ACTION

Date: 2/20/2025

Description: A Resolution Approving Task Order No. 06 with Burns & McDonnell

Engineering Co., Inc.

Agenda Section: Engineering & Construction

Originating Department: Administration

The Commission entered into a Master Contract with Burns & McDonnell Engineering Co., Inc., dated October 21, 2022, for professional engineering services in connection with such discrete projects as are delineated and described in Task Orders to be approved by the Commission. Resolution No. R-17-25 would approve the following Task Order to the Master Contract:

Task Order No. 06: Hydraulic Model Development and Calibration - \$120,000

The Commission will provide Burns & McDonnell (BMcD) with the current hydraulic model, Geographic Information System (GIS) data and Pump Station information, in addition to supplemental survey data that is being collected currently. This information will be used to create an updated hydraulic model that can be used to analyze future demand scenarios. BMcD has previously performed a review of the current hydraulic model (maintained by a different party) and upon consultation with Commission staff, it has been determined that the creation of a new model is preferable to correction of the existing model to ensure an accurate representation of existing demand conditions.

Recommended Motion:

To approve Resolution R-17-25

RESOLUTION NO. R-17-25

A RESOLUTION APPROVING TASK ORDER NO. 06 WITH BURNS & MCDONNELL ENGINEERING CO. INC.

WHEREAS, the Commission was formed and exists pursuant to the Water Commission Act of 1985, 70 ILCS 3720/0.01 et seq., and Division 135 of Article 11 of the Illinois Municipal Code, 65 ILCS 5/11-135-1 et seq., for the purpose of securing an adequate source and supply of water for its customers; and

WHEREAS, the Commission entered into a contract with Burns & McDonnell Engineering Co., Inc. (the "Consultant"), dated as of October 22, 2022, to provide, from time to time, professional engineering services in connection with the design and construction of extensions and improvements to the Waterworks System and other projects of the Commission (the "Master Contract"); and

WHEREAS, the Master Contract sets forth the terms and conditions pursuant to which the Commission will obtain from time to time, and the Consultant will provide from time to time, professional engineering services for such discrete projects as are delineated and described in Task Orders to be approved by the Commission and the Consultant; and

WHEREAS, the Consultant has approved the Task Order attached hereto and by this reference incorporated herein and made a part hereof as Exhibit 1 (the "Task Order");

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the DuPage Water Commission as follows:

SECTION ONE: The foregoing recitals are incorporated herein and made a part hereof as findings of the Board of Commissioners of the DuPage Water Commission.

SECTION TWO: The Task Order attached hereto as Exhibit 1 shall be and hereby is approved and, if already issued, ratified because the Board of Commissioners of the DuPage Water Commission has determined, based upon the representations of Staff and Consultant, that the circumstances said to necessitate the Task Order was not reasonably foreseeable at the time the Master Contract was signed, the Task Order is germane to the Master Contract as signed, and/or the Task Order is in the best interest of the DuPage Water Commission and authorized by law.

SECTION THREE: This Resolution shall constitute the written determination required by Section 33E-9 of Article 33E of the Criminal Code of 1961 and shall be in full force and effect from and after its adoption.

		Aye	Nay	Absent	Abstain
	Bouckaert, D.				
	Cuzzone, N.				
	Fennell, J.				
	(VACANT)				
	Novotny, D.				
	Pruyn, J.				
	Romano, K.				
	Rush, K.				
	Russo, D.				
	Saverino, F.				
	Suess, P.				
	Van Vooren, D.				
	Zay, J.				
	ADOPTED THIS _	DAY	OF		, 2025
ATTEST:			Jam	es F. Zay, Cha	irman
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Danna Mundall, C Board/Resolutions/2025/R-					

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Task Order No. 06: Hydraulic Model Development and Calibration for DuPage Water Commission

TASK ORDER NO. 06

In accordance with Section 1.1 of the Master Contract for Professional Engineering Services Owner and Consultant agree as follows:

1. Project: Hydraulic Model Development and Calibration

This task order authorizes Consultant (Burns & McDonnell) to provide professional consulting services to support the Owner (DuPage Water Commission) for developing a new hydraulic water model, calibrating the water model and providing additional water modeling support for the ongoing WaterLink project.

2. Services of Consultant:

Task 1 – Project Management, Meetings and Quality Assurance / Quality Control (QA / QC)

Task 1 includes the participation in a virtual kick-off meeting between Owner and Consultant to review the project scope, schedule, and planned deliverables. An agenda will be submitted prior to the meeting, and meeting notes will be prepared and distributed. Three (3) additional virtual meetings will be required to facilitate Tasks 2 and 3, including reviews of calibration results and WaterLink modeling results. One (1) half day field visit for two (2) Consultant Project members is included to review pumping infrastructure at the main pump station.

Task 2 – Hydraulic Modeling Development and Calibration

Consultant staff will perform hydraulic model development and calibration for average day and maximum day demand conditions. This is expected to include the following items:

- Build a hydraulic water model using existing Owner GIS information, including water system
 infrastructure such as the main pump station, storage tanks (standpipes and ground), meter
 station lead piping (exclusive of individual meter trains), and ROVs. The model build may be
 completed in either Autodesk InfoWater Pro or Bentley WaterGEMs water modeling
 software.
- 2. Review of Main Pump Station and Storage Tank (standpipes and ground) record drawings.
- 3. Geocode water model elevations based on available USGS information and Owner verified elevations at meter stations.
- 4. Geocode/allocate base system demands for each calibration scenario based on metered flows provided by Owner.
- 5. Develop boundary conditions of the ground storage reservoir that is located upstream of the main pump station.
- 6. Develop valve throttle controls for up to four tanks. Throttled valves will likely be modeled as pressure reducing valves or flow control valves to match system hydraulics. One review meeting will be held with Owner Staff to review data analysis results and recommendations for model implementation. Develop one approach to simulating throttle control valves during the maximum day demand calibration event.
- 7. Develop new diurnal curves for up to 84 meter stations/customer delivery points for each calibration scenario.
- 8. Develop calibration scenario pump operations and pump controls.
- 9. Performing two (2) 24-hour extended period simulations (EPS) in the hydraulic model, one for Average Day Demand (ADD) and one for Maximum Day Demand (MDD), to calibrate the water model and develop pipeline C-factors.
- 10. Monitor pressure transducer data from system assets, including the main pump station, standpipes, ground storage tank, meter stations, and ROV's to facilitate model calibration.

11. Perform two (2) 24-hour EPS in the water model using modified "uniform flow" diurnal pattern for all Owner customers. Summarize impacts to tank levels and system pressures under uniform flow pattern approach (for future scenario evaluation).

Task 3 – WaterLink Hydraulic Modeling

Consultant staff will perform additional hydraulic modeling analysis for the proposed WaterLink improvements. This will include the following:

- 1. Model build out including new WaterLink Customers, review of the latest schematics and drawings as necessary to include piping and meter station locations.
- 2. Demand allocation for WaterLink customers shall be completed based on available information provided by Owner.
- 3. Review of Historical Maximum Day Demand multiplier (ratio of maximum day and average day demand) since 2017 for proposed future maximum day demand multiplier adoption (Owner existing customers only). Owner shall confirm appropriate current customer future demands prior to additional water modelling.
- 4. Four (4) future simulations, including two (2) Maximum Day Demand and two (2) Average Day Demands of Owner Customers plus Waterlink Community Customers.

A summary technical memorandum, written in letter report format, will be provided to Owner that documents Tasks 2 and 3.

Task Order Assumptions and Exclusions

- 1. If requested by Consultant, Owner will provide details on pressure transducer locations, including pipeline size, distance from any reducer fittings, and distance from the primary Owner transmission main system.
- 2. Consultant will not need to review existing Owner transmission main record drawings or incorporate them into the hydraulic model. GIS data will be used for model development.
- 3. Owner will provide SCADA data for the average day and maximum day demand calibration events for all meter and pressure adjusting stations, ROVs, standpipes, ground storage reservoirs, and main pump station.
- 4. Owner will provide direction and final water demands/locations of WaterLink customers. Consultant will perform one layout (group of water delivery pipelines) of WaterLink customers based on information provided by the Owner. Using the model to simulate additional WaterLink customers layouts is excluded.
- 5. Owner shall provide direction and confirmation for current customer future demands as it relates to this task order.
- 6. All data provided by Owner will be in Microsoft Excel format.
- 7. Except as specifically noted under Task 1 herein, site visits or field data collection, including but not limited to C-factor testing or hydrant testing, is excluded from this task order.
- 8. Owner will provide an expected "uniform flow" diurnal pattern (or confirm 1.0 for all timesteps) that will be adopted for all Owner customers in Task 3, WaterLink Hydraulic Modelling.
- 9. Detailed review and implementation of individual meter station meter trains into the hydraulic model is excluded. It is assumed all pressure transducer records provided by Owner are upstream of metering equipment and before any flow splits associated with Owner's multiple meter station trains.
- **3. Approvals and Authorizations:** Consultant shall obtain the following approvals and authorizations: None.

4. Commencement Date:

February 21, 2025

5. Completion Date:

20 weeks after all requested data is received

6. Submittal Schedule: None.

7. Key Project Personnel:

Paul St. Aubyn – Project Manager

Joe Darlington – Client Services Manager

Sasa Tomic - QAQC

Tim Kargl – Hydraulic Modeling Lead

Claire Samojedny – Hydraulic Modeling

8. Contract Price:

For providing, performing, and completing all Services, the following lump sum amount set forth opposite each such task:

Task	Lump Sum
Task 1 – Project Management, Meetings and Quality Assurance / Quality Control (QA / QC)	\$20,000
Task 2 – Hydraulic Model Development and Calibration	\$80,000
Task 3 –WaterLink Hydraulic Modeling	\$20,000
TOTAL	\$120,000

9. Payments:

For purposes of payments to Consultant, the value of the Services shall be determined by Owner on the basis of Consultant's estimate of the proportion of total services actually completed at the time of invoicing.

10. Modifications to Contract: N/A

11. Attachments: None

Approval and Acceptance: Acceptance and approval of this Task Order, including the attachments listed above, shall incorporate this Task Order as part of the Contract.

The Effective Date of this Task Order is February 21, 2025.

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Ву:		
	Paul D. May, P.E.	
	General Manager	

DESIGNATED REPRESENTATIVE FOR TASK ORDER:

Name: Jeff Loster, P.E. Title: Engineering Manager

Address: 600 East Butterfield Road, Elmhurst, Illinois 60126-4642

E-mail Address: loster@dpwc.org

Phone: 630-834-0100

BURNS & MCDONNELL ENGINEERING CO., INC.

By:			
-			

Patrick Clifford

Regional Water Manager

DESIGNATED REPRESENTATIVE FOR TASK ORDER:

Name: Paul St. Aubyn, P.E. Title: Project Manager

Address: 1431 Opus Place, Suite 400, Downers Grove, IL 60515

E-mail Address: pdst.aubyn@burnsmcd.com

Phone: (872) 804-9958