

**Minutes – Standing Policy Committee on Finance and Economic Development –
October 14, 2025**

REPORTS

**Item No. 8 Water Supervisory Control and Data Acquisition (SCADA) Upgrade,
Project ID: 2005100200,
Quarterly Project Status Report No. 21
For the Period Ended July 31, 2025**

STANDING COMMITTEE DECISION:

The Standing Policy Committee on Finance and Economic Development concurred in the recommendation of the Winnipeg Public Service and approved the following:

1. That the financial status of the Water Supervisory Control and Data Acquisition (SCADA) Upgrade project, as contained in this report, be received as information.
2. That the next reporting on the Water Supervisory Control and Data Acquisition (SCADA) Upgrade project occur in Q4 2026, as opposed to quarterly, given the long project delivery schedule. The project reporting schedule would be as identified in the Major Capital Projects Reporting Schedule.

**Minutes – Standing Policy Committee on Finance and Economic Development –
October 14, 2025**

DECISION MAKING HISTORY:

Moved by Councillor Lukes,

That the recommendation of the Winnipeg Public Service be concurred in.

Carried

ADMINISTRATIVE REPORT

Title: Water Supervisory Control and Data Acquisition (SCADA) Upgrade,
Project ID: 2005100200,
Quarterly Project Status Report No. 21
For the Period Ended July 31, 2025

Critical Path: Standing Policy Committee on Finance and Economic Development

AUTHORIZATION

Author	Department Head	CFO	CAO
C. D. Wiebe, P. Eng., CAMP, Manager of Engineering Services	T. W. Shanks, M. Eng., P. Eng. Director, Water and Waste Department	T. Graham	J. Dunford

EXECUTIVE SUMMARY

Project On Schedule: Yes ☐ No ☒

Project On Adopted Budget: Yes ☐ No ☒

Percent of Schedule Complete: 84%

Percent of Adopted Budget Spent: 78%

This report covers 13 months from June 1, 2024, to July 31, 2025. The amended capital budget for the Water Supervisory Control and Data Acquisition (SCADA) Upgrade project is \$19.115 million. The total project budget spent to date as of July 31, 2025, is \$9.6 million or 50 percent of the amended budget. A total of \$1.3 million was expended during this reporting period on consulting services, implementation, and networking equipment.

During this reporting period:

- Contract administration services were provided by Dillon Consulting.
- Implementation of the SCADA system replacement, Programmable Logic Controller (PLC) replacement, and power reliability upgrades for the City's drinking water regional distribution system is ongoing with Manco Control Systems (Manco).
- Manco has continued to develop the Functional Requirements Specification (FRS), advanced the programming for the work, and completed some Factory Acceptance Testing (FAT).
- Tender No. 553-2024 for the MacLean Valve House Electrical and Controls Upgrades was awarded to Robin Electric on December 6, 2024, at a cost of \$478,787.

Within the reporting period, unanticipated network communication issues with the existing ethernet SCADA network, modifications to the automation of McPhillips RPS, and issues encountered during commissioning have resulted in project delays. Manco is currently

projecting completion of the project in Q2 2027. A schedule extension has been granted to cover schedule impacts beyond the contractor's control.

Two over-expenditures to Manco's scope of work (805-2019) were approved for \$693,741.

The Advisory Committee has reviewed this report and recommends that the report be sent to the Standing Policy Committee on Finance and Economic Development.

RECOMMENDATIONS

1. That the financial status of the Water Supervisory Control and Data Acquisition (SCADA) Upgrade project, as contained in this report, be received as information.
2. That the next reporting on the Water Supervisory Control and Data Acquisition (SCADA) Upgrade project occur in Q4 2026, as opposed to quarterly, given the long project delivery schedule. The project reporting schedule would be as identified in the Major Capital Projects Reporting Schedule.

REASON FOR THE REPORT

Major Capital Projects are required to report quarterly to the Standing Policy Committee on Finance and Economic Development. The threshold for reporting is reviewed at the beginning of each multi-year budget cycle and revised, if required, for Council consideration. For the 2024-2027 multi-year budget cycle Council approved that the threshold be maintained at \$25 million. The Standing Policy Committee on Finance and Economic Development may also request reporting on any capital project.

IMPLICATIONS OF THE RECOMMENDATIONS

As this project falls below the Major Capital Reporting threshold, reporting on the Water Supervisory Control and Data Acquisition (SCADA) Upgrade project will be suspended until October 2026.

HISTORY/DISCUSSION

See Appendix C – Key Project Events (History)

Design (Update from last report)

Contract administration services under Phase II of RFP No. 583-2016 were provided within this reporting period.

Tender No. 553-2024 MacLean Regional Pumping Station Valve House Electrical and Controls Upgrades was finalized, issued and awarded on December 6, 2024, at a cost of \$478,787.32, GST extra. The scope of this Tender is to replace the electrical systems at the MacLean Regional Pumping Station (RPS) Valve House and install a new Programmable Logic Controller (PLC) for automation of the local equipment and integration into Supervisory Control and Data

Acquisition (SCADA).

Construction (Update from last report)

Tender No. 805-2019:

Implementation is ongoing with Manco under Tender No. 805-2019. The scope of their work consists of the supply, installation, programming, testing, start-up commissioning, training, and support for a complete SCADA system replacement, and PLC system and power reliability upgrades for the City's drinking water regional distribution system.

During this reporting period, Manco completed the Regional Pumping Station (FRS), Factory Acceptance Testing (FAT), and the originally contracted construction and commissioning at McPhillips RPS. Additional work awarded by a Change of Work Order (CWO) and facility closeout will occur in Q3 2025. They have also completed the FRS, FAT Plan, and prepared for FAT of the MacLean RPS upgrades.

Substantial network communication issues were encountered with the existing Regional Distribution System (RDS) and Water Treatment Plant (WTP) ethernet SCADA network. This required Manco to diagnose the root cause, then design and implement changes to the network prior to resuming the work under the original contract. Delays were also encountered during the development of the FRS as additional changes to the control and automation of McPhillips RPS, beyond the scope of the original tender, were required. While commissioning the new automation and protection systems, further delays were experienced to ensure risks of interrupting the water supply to the City were minimized. The experience gained and solutions developed at McPhillips RPS will greatly assist the installation and commissioning process for the remaining sites as they consist of similar systems.

Tender No. 553-2024:

Work to procure long lead time electrical equipment has been completed for the MacLean RDS Valve House. The contractor is currently awaiting equipment delivery.

Table 1 – Contracts

Contracts							
Bid Opportunity #	Company Name	Description	Original Contract Award Value (GST & MRST extra as applicable)	Total Approved Over-Expenditures (Over-Expenditure amount only)	Date of Award	Date of Total Completion	Estimated % Complete
224-2012	SNC-Lavalin Inc.	PLC Replacement and Power Reliability Upgrades Preliminary Design	\$ 312,898.00	-	7/23/2012	1/31/2014	100%
307-2012	SNC-Lavalin Inc.	Equipment Identification Standard and Electrical Design Guide Development	\$ 45,500.00	1,448.00	4/24/2012	11/15/2013	100%
Consultant assignment at or under \$35,000	Dillon Consulting Ltd.	Regional SCADA Life Cycle Cost Analysis	\$ 35,000.00	-	9/26/2014	2/5/2016	100%
583-2016	Dillon Consulting Ltd.	Professional Consulting Services for the Regional Water Distribution System SCADA System Upgrade, Programmable Logic Contoller Replacement and Power Reliability Upgrades - Phase I	\$ 509,000.00	1,294,475.55	2/28/2017		99%
583-2016	Dillon Consulting Ltd.	Professional Consulting Services for the Regional Water Distribution System SCADA System Upgrade, Programmable Logic Contoller Replacement and Power Reliability Upgrades - Phase II	\$ 1,529,385.13	-	3/5/2021		73%
922-2017	Shaw Telecom G.P. operating as Shaw Business	Water SCADA Upgrade: Provision of Fiber Optic Based Transparent LAN Services	\$ 315,000.00	-	11/30/2018	2/20/2020	100%
805-2019	Manco Control Systems Inc.	RDS SCADA System Upgrade, PLC Replacement, and Power Reliability Upgrades	\$ 9,321,164.83	693,741.48	1/14/2021		58%
553-2024	Robin Electric Co. Ltd.	MacLean Regional Pumping Station Valve House Electrical Upgrade	\$ 478,787.32	-	12/6/2024		0%
Total			\$ 12,546,735.28	\$ 1,989,665			

Upcoming Procurements:

Description	Anticipated Award Date

Schedule (Update from last report)

A schedule extension to Tender No. 805-2019 was issued during this reporting period, extending the project completion from Q1 2026 to Q2 2027. This is the result of the City's requirement to resolve the existing network issues prior to continuing work under the original contract, the City's direction to modify the McPhillips control sequence during the FRS development, and due to commissioning delays beyond the contractor's control.

The revised targeted completion dates (shown in bold) in Table 2 below have been updated to

reflect the Contractor's implementation schedule for the work.

The overall schedule percent complete has changed from last report. The decrease from 99 percent to 84 percent is due to the contractual completion dates being extended. While the construction under Tender No. 805-2019 is estimated at 58 percent, the overall schedule completion is much higher at 84 percent due to the amount of time that elapsed during the design phase when the project delivery model changed from a design-build to a design-bid-build.

Table 2 – Milestones

	Deliverable	Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Date	Estimated % Complete
1	Issue RFP for Owner's Advocate Engineer			2016 Q4	100%
2	Complete Preliminary Design	2017 Q3	2018 Q2	2018 Q2	100%
3	Issue DB RFQ	2017 Q4	2018 Q2	2018 Q2	100%
4	Prequalify DB Proponents	2018 Q3	2018 Q4	2019 Q1 (no shortlist established)	100%
5	Complete Detailed Design	2020 Q3	-	2020 Q3	100%
6	Award Tender	2021 Q1	-	2021 Q1	100%
7	Complete SCADA Upgrade	2021 Q3	2023 Q1	2023 Q2	100%
8	Complete PLC Upgrading - Tache	2022 Q2	2023 Q1	2023 Q2	100%
9	Complete PLC Upgrading - Shoal Lake	2022 Q2	2023 Q2	2023 Q4	100%
10	Complete PLC Upgrading - McPhillips	2023 Q2	2025 Q3		95%
11	Complete PLC Upgrading - MacLean	2024 Q2	2026 Q1		10%
12	Complete PLC Upgrading - Hurst	2023 Q2	2026 Q3		0%
13	Complete PLC Upgrading - Deacon	2024 Q2	2027 Q1		0%
14	Complete Commissioning of all Project Components	2024 Q2	2027 Q1		0%
15	Project Closeout	-	2027 Q2		0%

Risk (Update from last report)

Ongoing from last report, schedule extensions to Tender No. 805-2019 also extend the schedule for Phase II of RFP 583-2016 which could result in an increase in consultant fees. Options to mitigate and reduce the impact of potential cost impacts are currently being investigated.

During this reporting period, a new risk was encountered and subsequently resolved. Unanticipated network communication issues with the existing ethernet SCADA network impacted the ability to install new ethernet connected PLC and SCADA hardware. This was rectified when the contractor upgraded the ethernet network. This did, however, result in project delay.

Table 3 – Significant Risks and Mitigations Strategies

Significant Risks and Mitigation Strategies	
Risk Statement and Explanation	Risk Mitigation Management Plan
New:	
Existing issues with the SCADA ethernet network can impact the ability to install new ethernet connected PLC and SCADA hardware.	The ethernet network was upgraded as a change to the construction contract.
Ongoing:	
Construction schedule delays may result in additional consultant time and fees being required.	Options to mitigate potential cost impacts are currently being investigated. Project contingency funds may be required.
Difficulties in commissioning or changeover that may affect system operation.	Project constraints were defined in the tender documents. Start upgrades at low risk stations and apply lessons learned to future station upgrades.
Constraints on implementation meant to minimize potential impacts on the water supply system mean that small changes in the schedule can cause completion date shifts of up to a year.	The project schedule will be reviewed and adjusted at key milestones including; upon receipt of Contractor's schedule and at completion of the Regional SCADA upgrade.
Mitigated:	
COVID-19 pandemic affecting workforce, travel, supply chain, and facility access.	COVID-19 schedule delay clauses have been incorporated into the Tender. Schedule extension to be considered as required. Amending agreement to allow the pre-purchase of hardware to mitigate supply chain impacts.
PLC components to be replaced are at the end of their intended service life and may fail prior to project completion. These components are no longer manufactured.	An inventory of spare PLC components has been obtained by the Department. As stations are upgraded, the obsolete PLC components will be retained and added to the spare parts inventory as necessary.
SCADA hardware to be replaced is at the end of its intended service life and may fail prior to project completion.	The Department has virtualized the existing SCADA servers to minimize system impacts and maintain system operation in the event of a failure prior to project completion. The purchased hardware will be re-used in the upgraded SCADA system as a test bed platform.

Financial (Update from last report)

For further information, refer to Appendix B – Financial Forecast

A total of \$1,286,272.64 was expended during this reporting period. Expenditures included \$342,881.77 on consulting services under RFP No. 583-2016 and \$820,325.07 on programming, configuration, factory acceptance testing, and implementation under Tender No. 805-2019. Additionally, insurance for Tender No. 805-2019 was extended at a cost of

\$48,336.37 and additional network hardware was purchased for the project at a cost of \$74,729.43.

During this reporting period, Over-Expenditures No. 1 and 2 were approved at a cost of \$432,311.23 and \$261,430.25 respectively for a total cost of \$693,741.48. The over-expenditures consist of additional work required during construction, additional improvements to the existing systems, re-establishing a contingency allowance, and upgrades to the RDS and WTP ethernet SCADA network.

Funding (Update from last report)

There is no external funding for this report.

Table 4 – Project Funding Forecast

Funding Forecast			
Funding Source	Adopted Budget (in millions)	Amended Budget (in millions)	Committed (in millions)
Class of Estimate	Class 3		
Retained Earnings	12.300	19.115	19.115
Total	12.300	19.115	19.115

Property Acquisition (Update from last report)

N/A

Stakeholder Engagements/Communications (Update from last report)

N/A

Subsequent Events after Report Period End Date

The McPhillips Station SCADA system was successfully commissioned in August 2025.

FINANCIAL IMPACT

Financial Impact Statement**Date:** September 9, 2025

Project Name:**Water Supervisory Control and Data Acquisition****(SCADA) Upgrade,****Project ID: 2005100200,****Quarterly Project Status Report No. 21****For the Period Ended July 31, 2025****COMMENTS:**

Financial Forecast for Water Supervisory Control and Data Acquisition (SCADA) can be found in Appendix B

Lucy Szkwarek, FCPA, FCGA

Lucy Szkwarek, FCPA, FCGA

Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with:

N/A

OURWINNIPEG POLICY ALIGNMENT

This report is in accordance with the OurWinnipeg 2045 Policy 2.18 Potable Water Conservation, by maintaining and renewing critical security and communication assets, thus providing a safe, reliable and sustainable supply of potable water. OurWinnipeg 2045 Objective: Protect and value ecosystems as essential components to quality of life through municipal activities and urban environment.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Climate Action Plan (CAP), and it was determined that the CAP is not applicable to this specific report.

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Poverty Reduction Strategy (PRS) and its Goals and Objectives, and it was determined that the PRS is not applicable to this specific report.

SUBMITTED BY

Department: Water and Waste
Division: Engineering Services
Prepared by: B. Borschawa, P. Eng., Project Engineer
Date: September 9, 2025

Appendices

Appendix A – Key Project Facts

Appendix B – Financial Forecast

Appendix C – Key Project Events (History)

Appendix A – Key Project Facts

Appendix A – Key Project Facts	
Project Name	Water Supervisory Control and Data Acquisition (SCADA) Upgrade
Business Owner (Department)	Water and Waste
Project ID	2005100200
Project Sponsor	Ken Dyck
Department Responsible for Project Delivery	Water and Waste
Consultant Engineer (Company Name)	Dillon Consulting Ltd.
Adopted Budget	\$12,300,000
Class of Estimate (Adopted)	3 (blended Class 3 and Class 4)
Range of Estimate (Adopted)	-24% to +35% or \$9,370,000 to \$16,660,000
Amended Budget	\$19,115,000
Class of Estimate (Amended)	3
Range of Estimate (Amended)	-20% to +30% or \$15,292,000 to \$24,849,500
<u>Project Scope</u>	
The SCADA system controls and monitors the operation of the Winnipeg Drinking Water Treatment Plant and the Water Supply and Distribution System. The automated control system is comprised of specialized computer hardware and software, remote communications, instrumentation and Programmable Logic Controllers (PLCs). The Department currently has two water SCADA systems; the Regional SCADA system which is used to control and monitor processes for the Water Supply and Distribution System and the Water Treatment Plant SCADA which is used to control and monitor processes at the Winnipeg Drinking Water Treatment Plant. The SCADA system is essential for the supply, water treatment process control, and distribution of drinking water.	
The computer servers, workstations, and software of the Regional SCADA system were last upgraded in 2006 and have reached the end of their useful life. Operating system support for this hardware ended in July 2015 and hardware age has exceeded the current industry standard for replacement, increasing risks to system reliability. To achieve system sustainability and to ensure continuous operation of the system, replacement of server and workstation hardware and installation of software with longer support lifespan, including compatibility with new hardware, is required. As part of the upgrade, the Regional SCADA will be integrated with the Water Treatment Plant SCADA as this solution was found to have an overall lower 25-year lifecycle cost than maintaining two separate SCADA systems. The Regional SCADA communication network will also be upgraded to increase bandwidth capacity.	
The PLCs currently in use at the three regional pumping stations (McPhillips, MacLean and Hurst), Tache and Deacon booster pumping stations, and the Shoal Lake Intake Facility were installed in 1992 and are no longer serviced or supported by the manufacturer. Upgrading the water supply system's PLCs at this time will allow for the review of the control software to optimize the operation of the system.	
A number of upgrades to address risks associated with the configuration of the pumping and ancillary equipment were identified in a Water Pumping Station Power Reliability Study. These power reliability upgrades will address shortcomings in the existing control and instrumentation design and will add redundancy to ensure greater station reliability. The Regional SCADA and PLC upgrades will be undertaken in conjunction with power reliability upgrades at the pumping stations to minimize station shut down times and potentially reduce overall project costs.	
Major Capital Projects Advisory Committee Membership: - Tim Shanks (Chair), Director of Water and Waste - Cynthia Wiebe, Manager of Engineering, Water and Waste - Cindy Fernandes, Director of Community Services - Hazel Borys, Director of Planning, Property & Development - Danny Tooth, Manager of Major Projects Oversight, Assets and Project Management - Lucy Szwerek, Manager of Finance and Administration, Water and Waste	

Appendix B – Financial Forecast

Appendix B - Project Water Supervisory Control and Data Acquisition (SCADA) Financial Forecast As at July 31, 2025

Project Component Deliverables	Budget (in 000's)			Expenditure Forecast (in 000's)							Surplus (Deficit) From Amended Budget	Variance Last Report	Change in Variance
	Adopted Budget ¹	Council Approved Change ²	Amended Budget	Actual Costs To July 31, 2025	Projected Costs				Total Forecasted Costs				
					2025	2026	2027	2028					
Engineering, Design and Other ³	\$ 1,428	\$ 2,403	\$ 3,831	\$ 3,306	\$ 170	\$ 303	\$ 52	\$ -	\$ 3,831	\$ -	\$ -	\$ -	
Construction ⁴	\$ 8,872	\$ 1,433	\$ 10,305	\$ 6,312	\$ 1,463	\$ 2,402	\$ 1,539	\$ -	\$ 11,716	\$ (1,411)	\$ (179)	\$ (1,232)	
Contingency	\$ 2,000	\$ 2,979	\$ 4,979					\$ 3,568	\$ 3,568	\$ 1,411	\$ 179	\$ 1,232	
Total Project Budget	\$ 12,300	\$ 6,815	\$ 19,115	\$ 9,618	\$ 1,633	\$ 2,705	\$ 1,591	\$ 3,568	\$ 19,115	\$ -			
% of Project Budget Spent (Actual Costs to Date / Adopted & Amended Budget)	78%		50%										

Adopted and Amended budget and actual costs to date have been agreed to the City's general ledger and Monthly Capital Expenditures Report. Actual cost variance equals spending from closed budget years. See table below.

¹The distribution of costs between engineering, construction and contingency was done by the Water and Waste Department.

²On March 20, 2019, Council adopted the 2019 Capital Budget which included a \$4,125,000 increase to the Water SCADA Upgrade budget. On March 20, 2020, Council adopted the 2020 Capital Budget which included a \$2,690,000 increase to the Water SCADA Upgrade budget.

³Engineering, Design, and Other includes professional engineering services (preliminary design, life cycle cost analysis, procurement services, detailed design and contract administration).

⁴Construction includes equipment and hardware, software, programming, implementation, warranty services, insurance and internal finance and administration costs associated with construction.

Project ID	Project Year	Amended Budget	Costs to Date
2005100200	2016-2020	\$18,712,661	\$9,216,116
Total Closed Project Budget ⁵		\$402,339	\$402,339
Total Project Budget to Date		\$19,115,000	\$9,618,455

⁵Does not appear in the Capital Expenditures Monthly Report as the funds have been expended and it is designated as a closed Project ID.

Appendix C – Key Project Events (History)

In 2012, SNC-Lavalin Inc. was retained by the City to provide professional consulting services for the predesign of the Programmable Logic Controller (PLC) replacement. The predesign was undertaken in conjunction with the predesign of power reliability upgrades required at the pumping stations. A final preliminary design report was issued in 2013 and recommended the complete replacement of the PLCs and that a complete rewrite of the PLC program code be undertaken. A Class 3 cost estimate was prepared for the PLC upgrades as part of the preliminary design work.

In 2014 and 2015, Dillon Consulting Ltd. performed a Regional Supervisory Control and Data Acquisition (SCADA) life cycle cost analysis. The Department currently has two water SCADA systems; the Regional SCADA system which is used to control and monitor processes for the Water Supply and Distribution System and the Water Treatment Plant SCADA which is used to control and monitor processes at the Winnipeg Drinking Water Treatment Plant. The life cycle cost analysis examined the option of upgrading the existing Regional SCADA system and the option to integrate the Regional SCADA with the Water Treatment Plant SCADA into a single SCADA system. The life cycle cost analysis found that integrating both the Water Treatment Plant SCADA and the Regional SCADA into a single system was the preferred option having the lowest life-cycle cost. A Class 4 cost estimate was prepared for the Regional SCADA upgrade as part of the life cycle cost analysis. The life cycle of the equipment is 25 years.

On April 9, 2015, the Water SCADA Upgrade project began reporting to the Standing Policy Committee on Finance under the \$10 million reporting threshold for capital projects in effect at that time.

On October 28, 2015, Council approved a new reporting threshold of \$20 million for capital projects. The Council approval also included provision for adjustment of the reporting threshold on an annual basis to account for construction inflation. Projects reporting to the Standing Policy Committee on Finance under the previous \$10 million reporting threshold will continue to report.

In early 2016, the Department determined that design build (DB) was the preferred delivery method for the project. The DB project delivery method was selected due to shorter implementation timelines and the additional benefit of having the contractor on the design team. The project design will require significant overlap between the designer and contractor to complete the programming, shut down planning and coordination and commissioning for the project. The Department also determined that an Owner's Advocate Engineer would be required to provide additional preliminary design services, to procure the design-builder and to provide guidance to the City throughout the project.

On February 28, 2017, Dillon Consulting Ltd. was engaged under Request for Proposal (RFP) No. 583-2016 as an Owner's Advocate Engineer. Services to be provided under Phase I of the Contract included: preliminary design, procurement of a design-builder and associated project management services. Phase II of the Contract included contract administration, post construction services and associated project management and was to be awarded at a later date subject to the conditions of RFP No. 583-2016. As part of the preliminary design work under RFP No. 583-2016, the Owner's Advocate Engineer provided an updated Class 3 cost estimate for the project to confirm project budgets.

On May 1, 2018, Request for Qualifications (RFQ) No. 706-2017A was issued to shortlist DB Proponents. The RFQ closed on July 31, 2018 and three Proponent submissions were received. The technical and financial consensus meetings for the RFQ determined the three Proponent submissions did not meet the passing thresholds required to pre-qualify any of the Proponents to advance to the RFP process for the DB project. The Department determined that changing the project delivery method from a DB to a Design-Bid-Build (DBB) was the option with the greatest likelihood of successful procurement with the least impact on the project schedule. On February 22, 2019, the Major Capital Projects Advisory Committee concurred with the Department's recommendation to change the project delivery method from DB to DBB. This change still resulted in a significant delay in project start.

On March 20, 2019, Council adopted the 2019 Capital Budget which included a \$4,125,000.00 increase to the Water SCADA Upgrade budget. The increase was due to project amalgamation (\$1,539,000.00) and cost increases identified in an updated Class 3 cost estimate for the project (\$2,586,000.00).

On March 20, 2020, Council adopted the 2020 Capital Budget which included a \$2,690,000.00 increase to the Water SCADA Upgrade budget. The increase includes additional funds to account for construction innovation loss that may have been achieved through a design-build project delivery method and project scope and cost increases.

On January 14, 2021, Tender No. 805-2019 was awarded to Manco Control Systems Inc. for the implementation phase of the project. The work of Tender No. 805-2019 consists of the supply, installation, programming, testing, start-up commissioning, training, and support for a complete SCADA system replacement, and PLC system and power reliability upgrades for the City's drinking water regional distribution system.

On March 5, 2021, Phase II of RFP No. 583-2016 was awarded to Dillon Consulting Ltd. in accordance with the terms of the Contract. The Phase II services to be provided include contract administration, post construction services, and associated project management.

On December 6, 2024, Tender No. 553-2024 MacLean Regional Pumping Station Valve House Electrical Upgrades was awarded to Robin Electric Co. Ltd. The project includes the replacement of electrical and control equipment.