

Amendment to Purchase Order Number 6047783 with Hatch Corporation and Purchase Order Number 6053327 with W.S. Nicholls Construction Inc. for the Rehabilitation and Upgrades at Four (4) Water Pumping Stations

Date: March 12, 2025

To: General Government Committee

From: General Manager, Toronto Water, and Chief Procurement Officer

Wards: 2 (Etobicoke Centre), 8 (Eglinton-Lawrence), 20 (Scarborough Southwest), and 21 (Scarborough Centre)

SUMMARY

This report is seeking authority to amend Purchase Order Number 6047783 issued to Hatch Corporation (Hatch), and Purchase Order Number 6053327 issued to W.S. Nicholls Construction Inc. (WSN) for work awarded through Request for Tender Doc 3134470485 for the Rehabilitation and Upgrades at Four (4) Water Pumping Stations for Toronto Water.

The amendment for Hatch is required to provide additional engineering services related to construction administration of two separate construction contracts over a longer period of time compared with the original scope. The total value of the requested amendment for Purchase Order Number 6047783 is \$1,458,000 net of all applicable taxes and charges (\$1,483,661 net of HST recoveries). The amendment will revise the current Purchase Order value from \$2,622,539 net of all applicable taxes and charges (\$2,668,695 net of HST recoveries) to \$4,080,539 net of all taxes and charges (\$4,152,356 net of HST recoveries).

The amendment for WSN is required to accommodate additional costs for construction services related to the price escalation of materials, equipment, and labour. The total value of the requested amendment for Purchase Order Number 6053327 is \$5,300,000 net of all applicable taxes and charges (\$5,393,280 net of HST recoveries). The amendment will revise the current Purchase Order value from \$16,080,829 net of all applicable taxes and charges (\$16,363,852 net of HST recoveries) to \$21,380,829 net of all taxes and charges (\$21,757,132 net of HST recoveries).

RECOMMENDATIONS

The General Manager, Toronto Water and the Chief Procurement Officer recommend that:

1. The General Government Committee, in accordance with section 71-11.1C of the City of Toronto Municipal Code Chapter 71 (Financial Control Bylaw), grant authority to amend Purchase Order Number 6047783 issued to Hatch Corporation for additional engineering services by increasing the overall value by \$1,458,000 net of all applicable taxes and charges (\$1,483,661 net of HST recoveries), revising the current Purchase Order value from \$2,622,539 net of all applicable taxes and charges (\$2,668,695 net of HST recoveries) to \$4,080,539 net of all taxes and charges (\$4,152,356 net of HST recoveries).
2. The General Government Committee, in accordance with section 71-11.1C of the City of Toronto Municipal Code Chapter 71 (Financial Control Bylaw), grant authority to amend Purchase Order Number 6053327 issued to W.S. Nicholls Construction Inc., for additional construction services by increasing the overall value by \$5,300,000 net of all applicable taxes and charges (\$5,393,280 net of HST recoveries), revising the current Purchase Order value from \$16,080,829 net of all applicable taxes and charges (\$16,363,852 net of HST recoveries) to \$21,380,829 net of all taxes and charges (\$21,757,132 net of HST recoveries).

FINANCIAL IMPACT

The total value of the requested amendment for Purchase Order Number 6047783 is \$1,458,000 net of all applicable taxes and charges (\$1,483,661 net of HST recoveries). The amendment will revise the current Purchase Order value from \$2,622,539 net of all applicable taxes and charges (\$2,668,695 net of HST recoveries) to \$4,080,539 net of all taxes and charges (\$4,152,356 net of HST recoveries).

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Funding is available in the 2025 Capital Budget and 2026-2034 Capital Plan for Toronto Water. Funding details are summarized in Table 1.

Table 1 - Financial Impact Summary (net of HST Recoveries)

WSB Element (Description)	Year	Purchase Order 6047783	Purchase Order 6053327	Total
CPW067-05 (Indoor/Outdoor Switchgear - Phase 4)	2025	\$300,000	\$5,300,000	\$5,600,000
	2026	\$300,000	\$93,280	\$393,280
	2027	\$300,000	\$0	\$300,000
	2028	\$300,000	\$0	\$300,000
	2029	\$283,661	\$0	\$283,661
Total		\$1,483,661	\$5,393,280	\$6,876,941

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the information as presented in the Financial Impact Section.

DECISION HISTORY

At its meeting on September 12, 2018, the Bid Award Panel adopted Item Number BA96.1, authorizing the Award of Request for Proposal Number 9117-17-7271 to Hatch Corporation for Engineering Services for Rehabilitation/Upgrade of Switchgear, Transformers and MCCs at Six (6) Water Pumping Stations. The Bid Award Panel decision can be found at:

[Agenda Item History - 2018.BA96.1 \(toronto.ca\)](#)

At its meeting on March 23, 2022, the Bid Award Panel adopted Item Number BA180.5 authorizing the Award of Doc3134470485 to W.S. Nicholls Construction Inc., for the Rehabilitation and Upgrades at Four (4) Water Pumping Stations for Toronto Water. The Bid Award Panel decision can be found at:

[Agenda Item History - 2022.BA180.5 \(toronto.ca\)](#)

COMMENTS

Background

The City of Toronto's drinking water supply system is designed to deliver clean and safe drinking water to residents, businesses, visitors and the Industrial, Commercial, Institutional sector in Toronto and portions of York Region. The primary source of water is Lake Ontario, from which water is drawn through intake pipes and treated at four water treatment plants. Once treated, more than 435 billion litres of water is distributed

annually through a network of approximately 6,100 kilometers of watermains, 18 pumping stations, and 15 reservoirs/storage tanks.

The electrical system supporting Toronto Water's drinking water system plays a critical role in ensuring reliable operations. It powers the pumping stations and treatment plants and includes a complex network of transformers, switchgear, and electrical control systems to manage the flow of electricity, ensuring that operations are efficient and continuous. Additionally, advanced monitoring and control systems are employed to oversee the system's performance, alerting operators to any irregularities, and enabling quick responses to potential issues. This integrated electrical infrastructure supports Toronto Water in meeting high standards for water quality and reliability.

Toronto Water's 2025 Capital Budget and 2026-2034 Capital Plan includes \$63.931 million for electrical switchgear and transformers. The purpose of these projects is to maintain infrastructure in a state of good repair and ensure reliable operation.

In 2018, the City retained Hatch to provide engineering services related to the rehabilitation and upgrades of six (6) water pumping stations and in 2022 the City executed an agreement with WSN for the construction services related to the rehabilitation and upgrade of four (4) stations.

The scope of work includes the rehabilitation and upgrades of switchgear, transformers, and motor control centers at six (6) water pumping stations: Eglinton, Scarborough, Wm. Johnston, Lawrence, John Street, and Thornhill Pumping Stations.

Amendment of Purchase Order Number 6047783 with Hatch Corporation

The purchase order issued to Hatch for engineering services includes design, tender preparation, tender evaluation and assistance with contract award, site inspection and contract administration during construction, and post-construction services.

The design phase of the project started in November 2018 for all six pumping stations and was completed in June of 2021. Prior to the Request for Tender (RFT), it was determined that the cost estimate for construction was higher than the allocated budget for the work and it was decided to proceed with one RFT for the first four stations and a second RFT later for the John Street and Thornhill Pumping Stations. The first RFT was issued in September 2021 and was awarded to WSN in March 2022. The second RFT is planned to be issued in 2026.

The construction phase of the project began in May 2022. During the shop drawing review with WSN, the proposed 10 sets of power transformers were rejected and required replacement. Although one Canadian transformer manufacturer listed in the specifications initially agreed to fulfill the order, they withdrew last minute due to a business partnership change. Meanwhile, the COVID-19 pandemic and global supply chain disruptions sharply increased costs for components, including transformers, switchgear, e-house, cables, conduit, and wire. The project team explored alternative suppliers and allowed specification variances but still could not obtain valid quotations to stay within budget. After evaluating operational risk, construction timelines, and project costs, it was determined that securing funds for the existing contract was the

most prudent and cost-effective approach to ensure reliable and safe operation of the City's water supply. The evaluation of options delayed the ordering of equipment by more than two years.

The project is currently in its seventh year of engineering services with Hatch. Under the terms of the Request for Proposal (RFP), a cost-of-living (CPI) adjustment is allowed after six years, resulting in a 16.7% increase scheduled for April 2025, with another review planned in 2026.

Over the past six years, electrical site inspection costs have risen significantly, making it difficult to find qualified inspectors at the original proposed rates. To ensure proper inspection of all six pumping stations over the next five years, the City has agreed to the additional cost.

Additionally, the original Hatch contract did not account for two separate construction contracts (the 2022 RFT awarded to WSN for four pumping stations, and the 2026 RFTs for the remaining two pumping stations), which are now needed. Additional expenses have been identified for splitting the drawings and specifications, creating separate tender packages, conducting multiple tender evaluations, reviewing shop drawings, and managing the contracts with a second general contractor. Due to schedule delays, renewed engineering permits and additional Toronto Hydro coordination are also required, adding more consultant effort.

The total additional cost for engineering services is \$1,458,000, excluding taxes and other charges.

Amendment of Purchase Order Number 6053327 W.S. Nicholls Construction Inc.

Although the construction phase of the project began in May 2022, the evaluation of equipment options took considerable time and effort, delaying the ordering of equipment needed to start construction by more than two years. At this time, it is anticipated that the equipment will be ordered in Q1 2025, delivered by Q3 2026, and installed at all four stations by Q4 2027.

Project delays have led to increased costs, with the largest attributable factors being the price escalation of materials, equipment, and labour. The cost escalation of electrical equipment such as switchgear, transformers, and motor control centers during the COVID-19 pandemic can be attributed to disruption to global supply chains, leading to shortages of raw materials, delays in manufacturing, and increased transportation costs.

Many factories faced temporary shutdowns or reduced production capacity, which caused a bottleneck in the availability of critical components. Additionally, the rising demand for essential infrastructure and energy projects, coupled with limited workforce availability due to lockdowns and health restrictions, further exacerbated the problem. The increased costs of labour, raw materials, and logistics, combined with the volatility of international markets, resulted in a significant price increase for these electrical components. The uncertainty around global economic recovery and the tightening of supply chains led to higher procurement prices as suppliers adjusted to the new market realities.

The total additional cost for construction services related to the price escalation of materials, equipment and labour is \$5,300,000, excluding taxes and other charges.

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SIGNATURE

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