

Award of Request for Tender Doc512222325 to Black & McDonald Limited for the Installation of a Standby Generator for Critical Loads at the R.C. Harris Water Treatment Plant, and Amendment to Purchase Order Number 6055119 with Arcadis Professional Service (Canada) Inc. for Contract Administration and Post-Construction Services

Date: September 5, 2025

To: General Government Committee

From: Chief Engineer and Executive Director, Engineering and Construction Services, and Chief Procurement Officer, Purchasing and Materials Management

Wards: 20 (Scarborough Southwest)

SUMMARY

The purpose of this report is to advise of the results of Request for Tender Doc512222325, Contract Number 25ECS-MI-03HA, for the Installation of a Standby Generator for Critical Loads at the R.C. Harris Water Treatment Plant and to request authority to award the contract to Black & McDonald Limited, in the amount of \$5,364,167 net of all applicable taxes and charges (\$5,458,576 net of Harmonized Sales Tax recoveries).

Authority is also being requested to amend Purchase Order Number 6055119 with Arcadis Professional Services (Canada) Inc., for the provision of Contract Administration services during construction and Post-Construction services, in the amount of \$669,076 net of all applicable taxes and charges (\$680,852 net of Harmonized Sales Tax recoveries) and extend delivery date to December 31, 2029. This revises the current Purchase Order value from \$365,751 net of all applicable taxes and charges (\$372,188 net of Harmonized Sales Tax recoveries) to \$1,034,827 net of all applicable taxes and charges (\$1,053,040 net of Harmonized Sales Tax recoveries).

The Purchase Order Amendment for Contract Administration and Post-Construction services with Arcadis Professional Services (Canada) Inc. is required due to changes in the project's scope, complexity and duration.

RECOMMENDATIONS

The Chief Engineer and Executive Director, Engineering and Construction Services and the Chief Procurement Officer, Purchasing and Materials Management recommend that:

1. The General Government Committee, in accordance with Section 195-8.4B of the Toronto Municipal Code Chapter 195 (Purchasing By-Law), grant authority to award Request for Tender Doc512222325, Contract Number 25ECS-MI-03HA, for the Installation of a Standby Generator for Critical Loads at the R.C. Harris Water Treatment Plant, in the amount of \$5,364,167 net of all applicable taxes and charges (\$5,458,576 net of Harmonized Sales Tax recoveries) to Black & McDonald Limited, having submitted the lowest compliant bid and meeting the specifications in conformance with the Tender requirements.
2. The General Government Committee, in accordance with Section 71-11.1C of the City of Toronto Municipal Code Chapter 71 (Financial Control By-law), grant authority to amend Purchase Order Number 6055119 with Arcadis Professional Services (Canada) Inc., for the provision of Contract Administration and Post-Construction services by increasing the value by \$669,076 net of all applicable taxes and charges (\$680,852 net of Harmonized Sales Tax recoveries), from \$365,751 net of all applicable taxes and charges (\$372,188 net of Harmonized Sales Tax recoveries) to \$1,034,827 net of all applicable taxes and charges (\$1,053,040 net of Harmonized Sales Tax recoveries) and extend delivery date to December 31, 2029.

FINANCIAL IMPACT

Award for Contract Number 25ECS-MI-03HA

The total value of the contract award for Doc512222325, Contract Number 25ECS-MI-03HA, for the Installation of a Standby Generator for Critical Loads at the R.C. Harris Water Treatment Plant, is \$5,364,167 net of all applicable taxes and charges. The total cost to the City is \$5,458,576 including contingency and provisional sums, and net of Harmonized Sales Tax recoveries.

Funding for this contract is available in Toronto Water's 2025 Capital Budget and 2026-2034 Capital Plan. Funding details with forecasted expenditures (net of Harmonized Sales Tax recoveries) are summarized in Table 1 below:

Table 1: Financial Impact Summary of Recommended Contract Award

WBS Element	2025	2026	2027	Total (net of Harmonized Sales Tax recoveries)
CPW061 (Harris F.P. Equipment R&R)	\$200,000	\$3,500,000	1,758,576	\$5,458,576

Amendment to Purchase Order Number 6055119

The request to amend the Purchase Order Number 6055119 with Arcadis Professional Services (Canada) Inc., for Contract Administration and Post-Construction Services will increase the total contract value by \$669,076 net of all applicable taxes and charges (\$680,852 net of Harmonized Sales Tax recoveries), revising the current Purchase Order value from \$365,751 net of all applicable taxes and charges (\$372,188 net of Harmonized Sales Tax recoveries) to \$1,034,827 net of all applicable taxes and charges (\$1,053,040 net of Harmonized Sales Tax recoveries).

Funding for this Purchase Order Amendment is available in Toronto Water's 2025 Capital Budget and 2026-2034 Capital Plan. The total cost to the City is \$680,852 net of Harmonized Sales Tax recoveries. Funding details with forecasted expenditures (net of Harmonized Sales Tax recoveries) are summarized in Table 2 below:

Table 2: Financial Impact Summary of Purchase Order Amendment for Contract Administration and Post-Construction Services

WBS Element	2026	2027	2028	2029	Total (net of Harmonized Sales Tax recoveries)
CPW061 (Harris F.P. Equipment R&R)	\$340,329	\$313,502	\$20,662	\$6,359	\$680,852

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

On June 20, 2016, Engineering and Construction Services entered into an agreement with Cole Engineering Group Ltd., (now Arcadis Professional Services (Canada) Inc.), for the provision of professional engineering services to undertake the preliminary and detailed design, construction administration, and post-construction services for the installation of a standby Generator for critical loads at the R.C Harris Water Treatment Plant, as Cole Engineering was the highest scoring proponent meeting the requirements of Request for Quotation Roster Request for Expression of Interest Number 9117-14-7051; Work Assignment Number ECS-MI-16-C08-001. Purchase Order Number 6043458 was issued to Cole Engineering Group Ltd., on June 27, 2016, in the amount of \$397,004 net of all applicable taxes and charges (\$403,991 net of HST recoveries).

On September 6, 2018, Amendment Number 1 was issued, due to additional scope, in the amount of \$50,500 (\$51,389 net of HST recoveries), increasing the total value to \$447,504 net of all applicable taxes and charges (\$455,380 net of HST recoveries). On October 22, 2021, Purchase Order Number 6043458 was replaced with 6052026 due to acquisition of Cole Engineering Group Ltd., by IBI Group Professional Services Canada Inc., and the original target value was reduced by the amount already spent of \$274,461 (\$279,291 net of HST recoveries) to a new value of \$173,043 net of all applicable taxes and charges (\$176,089 net of HST recoveries). Amendment Number 2 of \$249,918 net of all applicable taxes and charges (\$254,317 net of HST recoveries) was added to the same Purchase Order Number 6052026 to support redesign, increasing the value to \$422,961 net of all applicable taxes and charges (\$430,405 net of HST recoveries).

On November 27, 2023, Purchase Order Number 6052026 was replaced with 6055119 due to a name change to Arcadis Professional Services (Canada) Inc., and the original target value was reduced by the amount already spent of \$57,210 (\$58,217 net of HST recoveries) to a new value of \$365,751 net of all applicable taxes and charges (\$372,188 net of HST recoveries). The cumulative amendment increase has revised this Engineering Service Purchase Order from \$397,004 net of all applicable taxes and charges (\$403,991 net of HST recoveries) to \$697,422 net of all applicable taxes and charges (\$709,697 net of HST recoveries).

COMMENTS

Background

The R.C. Harris Water Treatment Plant, located at 2701 Queen Street East, is a heritage-designated facility constructed in the 1930s. It supplies an average of 365 million litres of potable water daily to Toronto and parts of York Region, with a maximum capacity of 950 million litres. The plant currently lacks emergency or backup power, posing risks to operational continuity during power outages.

Arcadis Professional Services (Canada) Inc. (formerly Cole Engineering Group Ltd.) was retained through a competitive process to provide engineering services for the

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installation of emergency power systems. Initially, a single 250–300 kW generator was proposed for the Residual Management Facility (RMF) piping gallery. However, further design review revealed the need for a second generator to ensure redundancy and accommodate additional critical loads. This led to the inclusion of a second 200–250 kW generator in the facility’s Screen Room.

The project scope was subsequently revised to incorporate a new requirement for the generator(s) to be housed in a fire-rated service room, which extended the overall schedule. The project was revised to include a single 300 kW generator in the RMF building, enclosed in a 1-hour fire separation.

The final Issued for Tender design package and permit approvals were completed in March 2025, following resolution of several technical and heritage-related challenges. These included sourcing a custom water-cooled generator that could be delivered in parts to preserve the building’s architecture, conducting further heritage reviews for intake and exhaust duct penetrations, and addressing electrical and structural upgrades. The construction scope now includes installation of the generator system including gas, intake/exhaust, cooling water, and drain lines, heating and ventilation system, associated structural and architectural rehabilitations, and electrical, instrumentation and control system integrations. The scope also includes rehabilitation and upgrades to the cable tray tunnel that will house the generator electrical conduits.

Award for Contract Number 25ECS-MI-03HA, Doc512222325

Request for Tender Doc512222325, Contract Number 25ECS-MI-03HA, for the Installation of a Standby Generator for Critical Loads at the R.C. Harris Water Treatment Plant was issued by Purchasing and Materials Management Division and advertised on both the City’s and Ariba Discovery websites on May 27, 2025, with a closing date of July 15, 2025, and an issuance of seven (7) addenda. A total of two Suppliers responded as listed in Table 3 below:

Table 3: Suppliers and Bid Prices for Doc512222325

Suppliers	Bid Price excluding HST
Black & McDonald Limited	\$4,673,765*
E.S. Fox Limited	\$7,575,577

*Pursuant to the Request for Tender document the contract award price includes contingency.

The bids were reviewed and evaluated by staff from Purchasing and Materials Management Division and the Engineering and Construction Services Division and were found to be in conformance with the Tender requirements. The recommended supplier for Contract Number 25ECS-MI-03HA is Black & McDonald Limited. The bid price of the recommended supplier is in the amount of \$4,673,765 net of all applicable taxes and charges and is approximately 6.8 percent higher than the pre-tender engineering estimate of \$4,375,820.

A contingency allowance on the base scope of work has been added to the proposed contract award for additional work and/or services which may be required to address any unforeseen conditions, interferences, access restrictions and heritage architectural preservations which may arise during construction and copper price fluctuations due to tariffs. This contingency is deemed necessary to address the significant risks associated with the retrofit work of an older operating plant such as R.C. Harris Water Treatment Plant, and the heritage architectural preservations required. The Installation of a Standby Generator for Critical Loads will be undertaken while the plant remains fully operational and must always meet regulatory compliance requirements.

The Fair Wage Office reported that the recommended Supplier, Black & McDonald Limited, indicated they have reviewed and understand the Fair Wage Policy and Labour Trades requirements and the recommended Supplier has agreed to comply fully.

The Tender submission from Black & McDonald Limited for Doc512222325, includes their agreement to complete the works within 68 weeks from the date that the written order to commence work is issued by the City.

A single Purchase Order will be issued to Black & McDonald Limited for Doc512222325 in the amount of \$5,364,167 net of all taxes.

Amendment to Purchase Order Number 6055119 for Contract Administration and Post-Construction Services

The original Request for Quotation (RFQ) was based on the installation of a single, standard market-available natural gas fired generator. At the time, the need for a custom generator enclosed in a fire rated room - requiring additional cooling systems, specialized ventilation, intake/exhaust duct penetrations through heritage architecture and complex hoisting requirements - was not anticipated. Similarly, associated upgrades to the cable tray tunnel and upgrades to the plant's Uninterruptible Power Supply (UPS) system were beyond the original scope.

Consequently, the scope of construction and post-construction contract administration services has significantly expanded from that in the original agreement.

The existing Purchase Order with Arcadis Professional Services (Canada) Inc. for professional engineering services to undertake the preliminary and detailed design, construction administration, and post-construction services needs to be amended to adequately respond to the requirements of the Installation of a Standby Generator for Critical Loads at the R.C. Harris Water Treatment Plant construction contract.

The factors contributing to the amendment are:

1. **Scope Changes** - The scope of contract administration and post-construction services has significantly expanded due to increased complexity of installing a custom generator within a fire rated room, integration of cooling water systems, specialized HVAC and lifting mechanisms, intake/exhaust ductwork through

heritage-designated areas, cable tray tunnel rehabilitation works, and additional programming to integrate the existing plant controls with minimal interruptions. These changes require additional Engineering support during construction. There is also a requirement for material and welding quality assurance testing services, heritage consultant services, and programming coordination services to be provided, that were not planned at the time of the RFQ.

2. **Extended Construction Schedule** – The original construction duration was anticipated at 54 weeks. However, due to the increased technical complexity and generator lead time, the construction schedule has been extended to 76 weeks to Total Performance. The extended schedule necessitates a corresponding increase in Contract Administration services to support construction.
3. **Inflationary Impacts** –The original staff rates submitted are no longer applicable under the terms of the Agreement. Arcadis completed the design phase using those rates through to March 2025 until Design completion. However, for the construction and post-construction phases extending through 2029, updated rates reflecting current market conditions are required. The amendment will align the Agreement with the revised schedule and applicable rates, while all other terms of the original agreement will remain unchanged.

An amendment to the Purchase Order with Arcadis Professional Services (Canada) Inc. is required to provide for additional contract administration and post-construction services beyond the original RFQ scope. This amendment reflects the extended schedule of 76 weeks to total completion, increased construction complexity, staff rate adjustments, and scope changes that have emerged during the course of the project.

This is the third amendment to the Engineering Service Purchase Order with the first and second related to additional detailed design services. Amendment Number 1 approved on September 6, 2018 under PO 6043458 Cole Engineering Group Ltd., was \$50,500 (\$51,389 net of HST recoveries). Amendment Number 2 approved on October 22, 2021 under PO 6052026 IBI Group Professional Services Canada Inc., was \$249,918 (\$254,317 net of HST recoveries).

The total value of this Purchase Order Amendment is \$669,076 net of all applicable taxes and charges (\$680,852 net of HST recoveries) for the provision of Contract Administration and Post-Construction services. This revises the current Purchase Order value from \$365,751 net of all applicable taxes and charges (\$372,188 net of HST recoveries) to \$1,034,827 net of all applicable taxes and charges (\$1,053,040 net of HST recoveries) and extend delivery date to December 31, 2029.

The cumulative amendment increase will revise this Engineering Service Purchase Order from \$397,004 net of all applicable taxes and charges (\$403,991 net of HST recoveries) to \$1,366,498 net of all applicable taxes and charge (\$1,390,549 net of HST recoveries).

The amendment also includes a reserved allowance should any unknown additional work be required during the construction phase.

CONTACT

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SIGNATURE

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