

Award of Doc5534207316 to Alberici Constructors Ltd. for Replacement of Raw Water Pumps and Travelling Screens at the Island Water Treatment Plant, and Amendment of Purchase Orders 7100000228 and 7100000229 with R.V. Anderson Associates Limited for Services During Construction and Post-Construction

Date: July 7, 2026

To: General Government Committee

From: Chief Engineer and Executive Director, Engineering and Construction Services, General Manager, Toronto Water and Chief Procurement Officer

Wards: 10 (Spadina-Fort York)

SUMMARY

The purpose of this report is to advise of the results of Request for Tender Doc5534207316, Contract Number 25ECS-MI-01IS, for the Toronto Island Water Treatment Plant Travelling Screens and Raw Water Pumps Replacement (herein referred to as "The Project"), and to request authority to enter into an agreement with Alberici Constructors Limited, all in accordance with the terms, conditions and specifications contained in the Request for Tender documents, in the amount of \$34,027,915 net of all applicable taxes and charges (\$34,626,806 net of Harmonized Sales Tax recoveries).

Authority is also being requested to amend Purchase Order 7100000228 with R.V. Anderson Associates Limited, for additional Services During Construction in the amount of \$720,877 net of all applicable taxes and charges (\$733,564 net of Harmonized Sales Tax recoveries), and amend Purchase Order 7100000229 with R.V. Anderson Associates Limited, for additional Services During Post-Construction in the amount of \$119,258 net of all applicable taxes and charges (\$121,357 net of Harmonized Sales Tax recoveries). An extension of the delivery date is also being requested from December 31, 2028 to December 31, 2029, for Purchase Order 7100000228, and from December 31, 2030 to December 31, 2031, for Purchase Order 7100000229.

These amendments are required due to project scope changes and an extended construction schedule. The scope was expanded to include additional instrumentation, control systems, equipment testing, and repairs. The construction schedule has also

been extended to 33 months to allow the work to be completed while maintaining continuous operation of the Island Water Treatment Plant and uninterrupted drinking water and Deep Lake Water Cooling services.

To support the construction contract award and purchase order amendments, authority is being requested to reallocate project costs and cash flows within Toronto Water's Approved 2026 Capital Budget and Approved 2027-2035 Capital Plan in the amount of \$10,070,000 (net of Harmonized Sales Tax recoveries).

RECOMMENDATIONS

The Chief Engineer and Executive Director of Engineering and Construction Services, the General Manager of Toronto Water, and the Chief Procurement Officer, recommend that:

1. City Council, in accordance with section 71-8.C.(1) of the City of Toronto Municipal Code Chapter 71 (Financial Control By-law), authorize the reallocation of project costs and cash flows within Toronto Water's 2026 Capital Budget and 2027-2035 Capital Plan in the total amount of \$10,070,000 net of Harmonized Sales Tax recoveries from the 2022-2024 Watermain Replacement Project, as presented in Table 4 of the Financial Impact Statement, with zero budget impact to Toronto Water.
2. City Council, in accordance with Section 195-8.4B of the Toronto Municipal Code Chapter 195 (Procurement By-Law), grant authority to the Chief Engineer and Executive Director of Engineering and Construction Services, to award and enter into an agreement with Alberici Constructors Ltd., having submitted the lowest compliant bid and meeting the requirements of Request for Tender Doc5534207316, Contract Number 25ECS-MI-01IS for The Project in the amount of \$34,027,915 net of all applicable taxes and charges (\$34,626,806 net of Harmonized Sales Tax recoveries), subject to approval of Recommendation 1 above.
3. City Council, in accordance with section 71-11.1.C of the City of Toronto Municipal Code Chapter 71 (Financial Control By-law), grant authority to Chief Engineer and Executive Director of Engineering and Construction Services to amend Purchase Order 7100000228 with R.V. Anderson Associates Limited, for contract administration services in the amount of \$720,877 net of all applicable taxes and charges (\$733,564 net of Harmonized Sales Tax recoveries), revising the current Purchase Order value from \$1,048,108 net of all applicable taxes and charges to \$1,768,985 net of all applicable taxes and charges (\$1,800,119 net of Harmonized Sales Tax recoveries), subject to approval of Recommendation 1 above, and extend the delivery date from December 31, 2028 to December 31, 2029.
4. City Council, in accordance with section 71-11.1.C of the City of Toronto Municipal Code Chapter 71 (Financial Control By-law), grant authority to Chief Engineer and Executive Director of Engineering and Construction Services to amend Purchase Order 7100000229 with R.V. Anderson Associates Limited, for post-construction

services in the amount of \$119,258 net of all applicable taxes and charges (\$121,357 net of Harmonized Sales Tax recoveries), revising the current Purchase Order value from \$38,125 net of all applicable taxes and charges to \$157,383 net of all applicable taxes and charges (\$160,153 net of Harmonized Sales Tax recoveries), subject to approval of Recommendation 1 above, and extend the delivery date from December 31, 2030 to December 31, 2031.

FINANCIAL IMPACT

Award for Doc5534207316

The total value of the contract award is \$34,027,915 net of all applicable taxes and charges (\$38,451,544 including all applicable taxes and charges). The contract value includes allocated contingency that will be added into the contract to address any future unforeseen changes which may arise during the construction stage of The Project.

The total cost to the City of Toronto is \$34,626,806 including contingency and provisional sums, and net of Harmonized Sales Tax recoveries.

Funding details with forecasted expenditures (net of Harmonized Sales Tax recoveries) are summarized in Table 1 below under the account: CPW064-20 - Replacement of Raw Water Pumps and Screens at the Island Water Treatment Plant.

Table 1: Financial Impact Summary of Recommended Contract Award

WBS Element	CPW064-20 - Replacement of Raw Water Pumps & Screens at the Island Water Treatment Plant (net of Harmonized Sales Tax recoveries)
2026	\$1,844,000
2027	\$10,673,000
2028	\$15,897,806
2029	\$6,212,000
Total	\$34,626,806

Amendment to Purchase Order 7100000228

The request to amend the Purchase Order 7100000228 with R.V. Anderson Associates Limited, for additional contract administration services will increase the total Purchase Order value by \$720,877 net of all applicable taxes and charges (\$733,564 net of Harmonized Sales Tax recoveries), revising the current Purchase Order value from \$1,048,108 net of all applicable taxes and charges (\$1,066,555 net of Harmonized

Sales Tax recoveries) to \$1,768,985 net of all applicable taxes and charges (\$1,800,119 net of Harmonized Sales Tax recoveries).

Funding details for this Purchase Order Amendment with forecasted expenditures (net of Harmonized Sales Tax recoveries) are summarized in Table 2 below under the account: CPW064-20 - Replacement of Raw Water Pumps and Screens at the Island Water Treatment Plant.

Table 2: Financial Impact Summary of Purchase Order Amendment for Contract Administration Services

WBS Element	CPW064-20 - Replacement of Raw Water Pumps & Screens at the Island Water Treatment Plant (net of Harmonized Sales Tax recoveries)
2026	\$90,370
2027	\$269,076
2028	\$234,740
2029	\$139,378
Total	\$733,564

Amendment to Purchase Order 7100000229

The request to amend the Purchase Order 7100000229 with R.V. Anderson Associates Limited, for additional post-construction services will increase the total Purchase Order by \$119,258 net of all applicable taxes and charges (\$121,357 net of Harmonized Sales Tax recoveries), revising the current Purchase Order value from \$38,125 net of all applicable taxes and charges (\$38,796 net of Harmonized Sales Tax recoveries) to \$157,383 net of all applicable taxes and charges (\$160,153 net of Harmonized Sales Tax recoveries).

Funding details for this Purchase Order Amendment with forecasted expenditures (net of Harmonized Sales Tax recoveries) are summarized in Table 3 below under the account: CPW064-20 - Replacement of Raw Water Pumps and Screens at the Island Water Treatment Plant.

Table 3: Financial Impact Summary of Purchase Order Amendment for Post-Construction Services

WBS Element	CPW064-20 - Replacement of Raw Water Pumps & Screens at the Island Water Treatment Plant (net of Harmonized Sales Tax recoveries)
2029	\$30,340
2030	\$65,017
2031	\$26,000
Total	\$121,357

Currently, there is insufficient funding in Toronto Water's 2026 Capital Budget and 2027 to 2035 Capital Plan to support the award of Doc5534207316 and the amendments to Purchase Orders 7100000228 and 7100000229. Additional funding is required to accommodate costs that are Summarized in Tables 1, 2 and 3 above.

The approval of Recommendation 1 will authorize the reallocation of funding required to support the award of Doc5534207316 and amendments to Purchase Orders 7100000228 and 7100000229 for associated consultant engineering services, including additional contract administration and post-construction services required as a result of the expanded project scope and updated consultant billing rates, as outlined in Table 4 below.

The additional costs for the award and associated Purchase Order Amendments will be offset from funds available within the 2022-2024 Watermain Replacement Project (CPW542-27). Funds are available for reallocation from some sub-projects which have been completed under budget and another project which is not scheduled to start in 2026.

Table 4: Budget Adjustment Reallocations (net of Harmonized Sales Tax Recoveries)

WBS Element	CPW64-20 (Replacement of Raw Water Pumps & Screens at the Island Water Treatment Plant)	CPW542-27 (2022-2024 Watermain Replacement)	Total (net of HST recoveries)
2026	\$0	\$0	\$0
2027	\$42,000	(\$42,000)	\$0
2028	\$5,023,000	(\$5,023,000)	\$0
2029	\$5,005,000	(\$5,005,000)	\$0
Total	\$10,070,000	(\$10,070,000)	\$0

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

DECISION HISTORY

At its meeting of December 20, 2023, the Bid Award Panel granted authority to enter into an agreement with R.V. Anderson Associates Limited, for the provision of Professional Engineering Services during design, construction and post-construction for the Replacement of Raw Water Pumps and Travelling Screens at the Island Water Treatment Plant, being the highest scoring proponent meeting the requirements of Request for Proposal Doc4104126185, Contract Number RFP-23ECS-MI-02IS, in the amount of \$1,712,946 net of all applicable taxes and charges (\$1,743,094 net of Harmonized Sales Tax recoveries). A copy of the Bid Award Panel Decision Document can be found at: <https://www.toronto.ca/legdocs/mmis/2018/ba/bgrd/backgroundfile-115847.pdf>

COMMENTS

Background

The Island Water Treatment Plant, with a rated capacity of 440 million litres per day, is one of four water treatment facilities operated by the City of Toronto. Located on Toronto Island between Centre Island and Hanlan's Point, the Plant supplies drinking water to the City's distribution system and supports Enwave's Deep Lake Water Cooling system, which serves approximately 200 buildings in Toronto's downtown core. The system requires a continuous minimum flow of treated water to maintain reliable cooling operations, resulting in sustained high utilization of the plant.

Raw water is drawn from Lake Ontario through three deep intake pipes, each approximately five kilometres in length. These intakes draw source water from a depth of about 80 metres, where temperatures remain consistently near 4°C throughout the year. A fourth intake, owned by Enwave, can be directed either to the cooling system or to the treatment plant, depending on operational requirements.

At the Raw Water Pumping Station, water passes through travelling screens to remove debris before entering a wet well and being pumped to the treatment process. The station includes five pumps (four installed in 1976 and one in 2008). While the theoretical firm capacity is approximately 456 million litres per day, all pumps are required to achieve the plant's full output, resulting in limited redundancy.

A 2020 study by R.V. Anderson Associates Limited identified capacity constraints caused by increased resistance to water flow in the intake system and reduced pump performance associated with aging infrastructure.

To address these issues, in 2024, the City retained R.V. Anderson Associates Limited through Request for Proposal Doc4104126185 to provide engineering services for the

Award of Doc5534207316 to Alberici Constructors Ltd., for Replacement of Raw Water Pumps and Travelling Screens at Island Water Treatment Plant

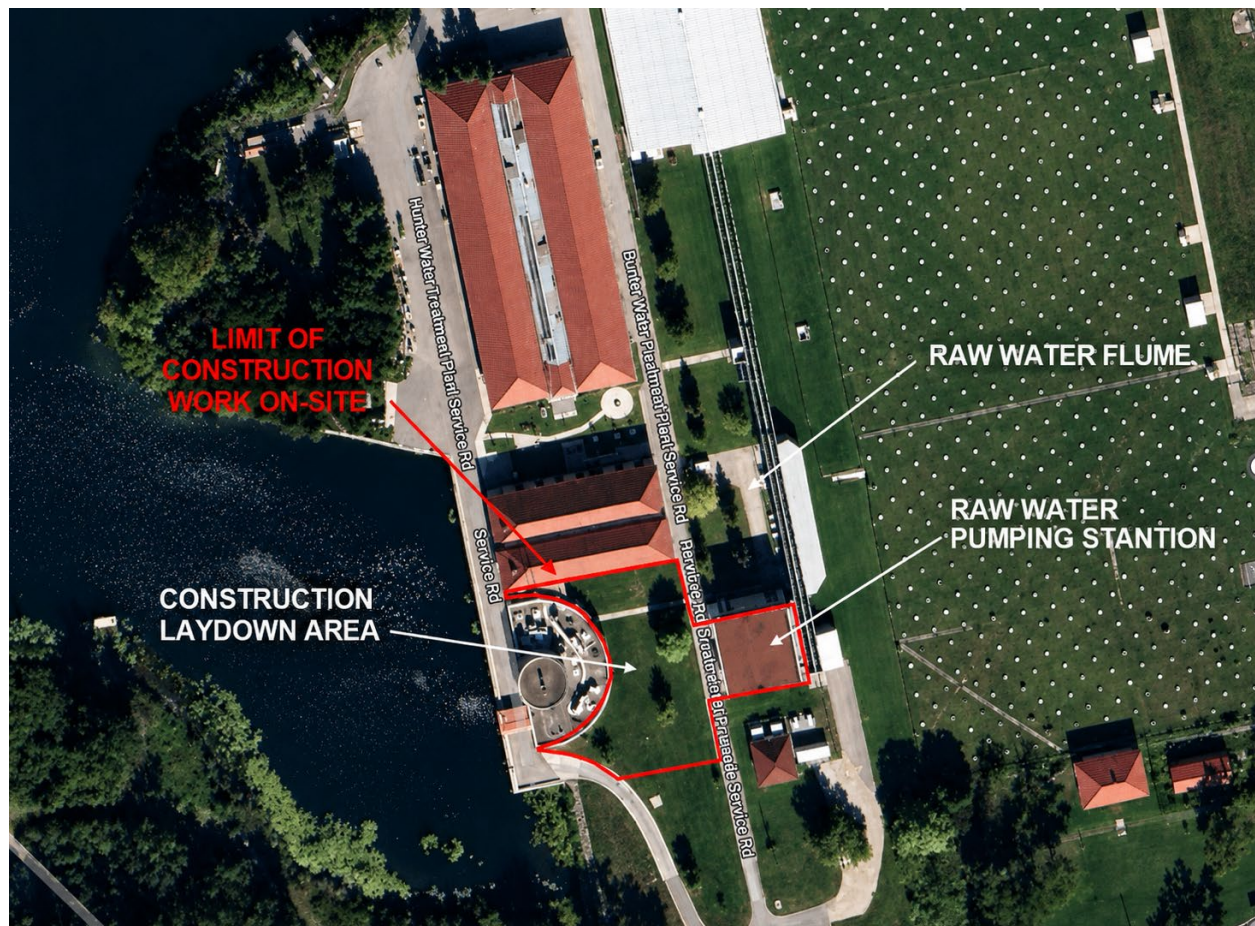
design, contract administration, and post-construction services for necessary raw water system upgrades.

The scope of this assignment includes the following:

- Replacement of raw water pumps, piping, and valves to improve reliability, efficiency, and flow performance.
- Replacement of travelling screens and associated mechanical, electrical, and structural components.
- Installation of new flow measurement and control equipment, including integration with the plant's monitoring and control systems.
- Rehabilitation of the raw water wet well and related structures, supported by hydraulic modelling to improve system performance and operational flexibility.

An overview of the work areas is shown in Figure 1 below:

Figure 1 - Overview of The Project Work Area



Award of Doc5534207316 Contract Number 25ECS-MI-01IS

Request for Tender Doc5534207316, Contract Number 25ECS-MI-01IS for The Project was issued by Purchasing and Materials Management Division and advertised on both the City's and Ariba Discovery websites on February 24, 2026, with a closing date of

May 22, 2026, and an issuance of ten (10) addenda. One Supplier responded as listed below in Table 5 below:

Table 5: Supplier and Bid Price for Doc5534207316

Suppliers	Bid Price Excluding Harmonized Sales Tax
Alberici Constructors Ltd.	\$29,614,874 *

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

The bid was reviewed for compliance by staff from the Purchasing and Materials Management Division and the Engineering and Construction Services Division and was found to be in conformance with the Tender requirements. The recommended lowest compliant bid meeting requirements for the Contract Number 25ECS-MI-01IS is Alberici Constructors Ltd.

The total value of the contract award (\$34,027,915 net of all applicable taxes and charges) includes allocated contingency that will be added into the contract to address any future unforeseen changes which may arise during the construction stage of The Project.

Engineering and Construction Services Division staff compared the bid to the engineering estimate. The bid price of the recommended supplier is in the amount of \$29,614,874 net of all applicable taxes and charges and is approximately 25 percent higher than the engineering estimate of \$23,622,184 net of all applicable taxes and charges.

The higher bid price compared to the estimate can be explained by a combination of broader market conditions and project-specific challenges:

- The work is being delivered on Toronto Island, which presents significant logistical complexity, including limited site access, restricted laydown and storage areas, and the reliance on ferry/barge transport personnel, materials, and equipment. These constraints increase both the time and cost required to complete the work compared to similar projects on the mainland. In addition, recent disruptions and limitations affecting the airport ferry terminal have further complicated material transportation and construction logistics. As a result, the 15 percent "Island factor" initially estimated by RVA prior to the tender issuance was considered conservative and may not have fully reflected the risks and costs associated with delivering the work in this unique environment.
- Market conditions have shifted since the estimate was prepared, including increases in construction labour, materials, fuel, and transportation costs, as well as ongoing supply chain uncertainty. In addition, only one bid was received, reducing competitive pricing pressure.
- Contractors have also likely included additional allowances for project risks such as work within limited shutdown windows, winter construction conditions, complex

sequencing, and the extended project duration, all of which increase uncertainty and carrying costs.

The Tender submission from Alberici Constructors Ltd., for Doc5534207316, includes their agreement to complete the works within 143 weeks from the date that the written order to commence work is issued by the City.

Upon award, contract execution is anticipated by end of August 2026, with Order to Commence expected in October 2026 and substantial performance projected for Q2 2029.

The Fair Wage Office reported that the recommended Supplier, Alberici Constructors Ltd., indicated they have reviewed and understand the Fair Wage Policy and Labour Trades requirements and the recommended Supplier has agreed to comply fully.

Amendment to Purchase Order 7100000228 for Contract Administration Services for R.V. Anderson Associates Limited

The original Request for Proposals assumed a 22-month construction period for the Replacement of Raw Water Pumps and Travelling Screens at the Island Water Treatment Plant, from September 2024 to July 2026.

The existing Purchase Order with R.V. Anderson Associates Limited for contract administration services requires amendment to reflect the extended construction duration and associated increase in scope and support requirements.

The factors contributing to the amendment include:

1. Extended Construction Schedule

The original Request for Proposal assumed a 22-month construction period; however, the schedule has been extended by approximately 33 months to accommodate the need to keep the Island Water Treatment Plant fully operational, including maintaining drinking water supply and Enwave's Deep Lake Water Cooling system. As a result, major construction can only take place during the annual winter shutdown period (January 6 to March 31 each year), when the plant can be safely taken out of service.

The schedule has also been affected by equipment procurement requirements. Key components such as raw water pumps and travelling screens require manufacturing and delivery lead times of more than six months. These requirements were confirmed during detailed design and were not fully anticipated in the original Request for Proposal. The construction schedule has therefore been adjusted to match these timelines, reduce the risk of delays, and support successful installation and commissioning.

This extended construction period requires additional contract administration services to oversee the work. The updated schedule will not affect the plant's ongoing operations.

2. Scope Changes

The scope of contract administration services has expanded due to post-award additions and refinements not fully defined at the time of the Request for Proposal.

The main changes include:

- Additional hydraulic analysis completed during detailed design to improve system performance, resulting in increased construction oversight and commissioning support to confirm that the system performs as intended.
- Addition of new instrumentation and control components, including a flowmeter, heat tracing controls, and Supervisory Control and Data Acquisition (SCADA) integration, requiring additional shop drawing and submittal reviews, field verification, and commissioning and testing support.
- Expanded repair work to the raw water wet well, increasing construction complexity and requiring closer site inspection and coordination during construction.
- Additional factory testing of key equipment, including travel and coordination with suppliers, to verify performance before installation and reduce risk during commissioning.

Collectively, these changes have increased the level of engineering support, site oversight, and technical coordination required during construction beyond what was originally anticipated. These refinements were made following further technical review and consultation with plant operations to improve long-term reliability, maintainability, and performance of the facility.

3. Inflationary Impacts

The extended construction schedule requires updated billing rates for contract administration services, as the original rates apply only up to 2028 and must be revised for the 2029–2031 period in accordance with the professional services agreement. While design work was completed under the original rates, updated rates are required for a portion of the remaining construction and post-construction phases to reflect current market conditions, including increases in labour, overhead, and consultant costs since the agreement was executed.

These updated rates reflect current market conditions and increased cost pressures. The amendment aligns the Agreement with the revised schedule and applicable rates, while all other terms of the original agreement remain unchanged.

An amendment to the Purchase Order with R.V. Anderson Associates Limited is required to provide additional funding for Construction services. The amendment reflects the cumulative impact of scope changes, schedule extension, and inflationary impacts.

The total value of this Purchase Order Amendment is \$720,877 net of all applicable taxes and charges (\$733,564 net of Harmonized Sales Tax recoveries) for the provision of contract administration services. This revises the current Purchase Order value from \$1,048,108 net of all applicable taxes and charges (\$1,066,555 net of Harmonized Award of Doc5534207316 to Alberici Constructors Ltd., for Replacement of Raw Water Pumps and Travelling Screens at Island Water Treatment Plant

Sales Tax recoveries) to \$1,768,985 net of all applicable taxes and charges (\$1,800,119 net of Harmonized Sales Tax recoveries).

Amendment to Purchase Order 7100000229 for Post-Construction Services for R.V. Anderson Associates Limited

The original Request for Proposals contemplated a 24-month post-construction services period for the Replacement of Raw Water Pumps and Travelling Screens at the Island Water Treatment Plant, spanning from July 2026 to July 2028.

An amendment to Purchase Order 7100000229 with R.V. Anderson Associates Limited is required to provide additional funding for post-construction services resulting from project scope expansion and updated billing rates. Similar to the contract administration services, the rates established under the original agreement apply only through 2028 and must be adjusted for the 2029–2031 period in accordance with the professional services agreement. The revised rates reflect current market conditions and increased labour and operating costs. The amendment aligns the agreement with the extended project schedule and applicable rate structure, while all other terms and conditions of the original agreement remain unchanged.

Additional effort is also required to prepare and coordinate contract closeout documentation to incorporate the design revisions identified during detailed design.

The total value of this Purchase Order Amendment is \$119,258 net of all applicable taxes and charges (\$121,357 net of Harmonized Sales Tax recoveries), revising the current Purchase Order value from \$38,125 net of all applicable taxes and charges (\$38,796 net of Harmonized Sales Tax recoveries) to \$157,383 net of all applicable taxes and charges (\$160,153 net of Harmonized Sales Tax recoveries).

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