

**Award of Request for Proposal Number Doc2248482116 (9117-20-7023), to CH2M HILL Canada Limited for Professional Services for Detailed Design, Contract Administration and Post-Construction Services for Secondary Treatment System Upgrades at the Ashbridges Bay Treatment Plant**

**Date:** December 18, 2020

**To:** Infrastructure and Environment Committee

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

**Wards:** 14 (Toronto-Danforth)

## **SUMMARY**

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The purpose of this report is to advise of the results of Request for Proposal Number Doc2248482116 (9117-20-7023) for the Provision of Professional Services for Design, Contract Administration and Post Construction Services for the Secondary Treatment System Upgrades at the Ashbridges Bay Treatment Plant and to request award of the Request for Proposal to CH2M Hill Canada Limited in the amount of \$42,590,930 net of all applicable taxes and charges, \$43,340,532 net of HST recoveries.

## **RECOMMENDATIONS**

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

1. The Infrastructure and Environment Committee, in accordance with Section 195-8.4A of the Toronto Municipal Code Chapter 195 (Purchasing By-Law), grant authority to award Request for Proposal Number Doc2248482116 to CH2M Hill Canada Limited having submitted the highest scoring proposal meeting the requirements of the Request for Proposal to provide Professional Services for Design, Contract Administration and Post Construction Services for the Secondary Treatment System Upgrades at the Ashbridges Bay Treatment Plant in the amount of \$42,590,930 net of all applicable taxes (\$43,340,532 net of HST recoveries), including disbursements, provisional

allowances and contingencies, where the agreements are established by major task categories as follows:

a) For the Preliminary Design and Detailed Design services of the Secondary Treatment System Upgrades in the amount of \$16,726,848 net of HST, including labour, disbursements, provisional allowances and contingencies. This amount includes a provisional allowance of \$3,360,000 and a contingency allowance of \$2,800,000 net of HST, for additional services, if necessary and authorized by the Chief Engineer and Executive Director, Engineering and Construction Services.

b) For Construction Administration services during the first construction Contract "Blower #9 replacement in East Blower building" in the amount of \$680,503 net HST, including labour, disbursements, provisional allowances and contingencies. This amount includes a provisional allowance of \$50,000 and a contingency allowance of \$115,000 net of HST, for additional services, if necessary and authorized by the Chief Engineer and Executive Director, Engineering and Construction Services.

c) For Construction Administration services during the main construction Contract in the amount of \$24,220,355 net HST, including labour, disbursements, provisional allowances and contingencies. This amount includes a provisional allowance of \$ 3,100,100 and a contingency allowance of \$4,000,000 net of HST, for additional services, if necessary and authorized by the Chief Engineer and Executive Director, Engineering and Construction Services.

d) For Post Construction services, upon achievement of substantial performance of the first construction Contract "Blower #9 replacement in East Blower building" in the amount of \$126,494 net HST, including labour, disbursements, provisional allowances and contingencies. This amount includes a provisional allowance of \$15,000 and a contingency allowance of \$20,000 net of HST, for additional services, if necessary and authorized by the Chief Engineer and Executive Director, Engineering and Construction Services.

e) For Post Construction services, upon achievement of substantial performance of the main construction Contract in the amount of \$836,730 net HST, including labour, disbursements, provisional allowances and contingencies. This amount includes a provisional allowance of \$ 330,000 and a contingency allowance of \$140,000 net of HST, for additional services, if necessary and authorized by the Chief Engineer and Executive Director, Engineering and Construction Services.

For each of a), b), c), d) and e), all agreements are to be in accordance with the terms and conditions as set out in the Request for Proposal and any other terms and conditions satisfactory to the Chief Engineer and Executive Director, Engineering and Construction Services, in a form satisfactory to the City Solicitor, and the services and dollar amounts set out to be executed as five (5) distinct consulting agreements and the issuance of five (5) Purchase Orders.

## FINANCIAL IMPACT

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The total value of the contract award for Document Number Doc2248482116 for the Provision of Professional Services for Design, Contract Administration and Post Construction Services for the Secondary Treatment System Upgrades at the Ashbridges Bay Treatment Plant is \$48,127,751 including HST and all applicable charges. This includes a total contingency amount of \$7,994,750 including HST and a total provisional sum amount of \$7,746,263 including HST. The total cost to the City for the project is \$43,340,532 net of HST recoveries including \$7,199,520 in contingency amounts and \$6,975,749 in provisional sums.

Funding for this contract is included in the 2021 recommended Capital Budget and 2022-2030 Capital Plan for Toronto Water under WSB Element CWW040-12 (Aeration Tank - 12 and 13) with forecasted expenditures as shown in the table below (net of HST recoveries).

Year	Funding Details	Year	Funding Details
2021	\$2,000,000	2026	\$4,929,327
2022	\$3,442,184	2027	\$4,929,327
2023	\$3,085,512	2028	\$4,929,327
2024	\$2,981,968	2029	\$5,330,784
2025	\$11,262,103	2030	\$450,000

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

## DECISION HISTORY

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At its meeting held on March 25, 2015, the Bid Committee adopted the recommendations in the staff report from the Director of Purchasing and Materials Management dated March 13, 2015, and authorized the retention of Black & Veatch Canada Company for provision of Engineering Study Services for the Ashbridges Bay Treatment Plant Process Roadmap.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.BD18.4>

At its meeting held on April 04, 2018, the Bid Committee adopted the recommendations in the staff report from the Director of Purchasing and Materials Management dated March 21, 2018, and authorized the retention of Stantec Consulting Limited, for provision of Engineering Services for Aeration Upgrades Study at the Ashbridges Bay Treatment Plant.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.BA70.1>

## COMMENTS

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### Background

For over one hundred years the Ashbridges Bay Treatment Plant (the Plant) has played a vital role in treating wastewater for the City of Toronto and now services a customer base of over 1.6 million people.

The City has completed the following two studies that outline the steps necessary to ensure the performance of the Plant continues to meet regulatory requirements and the City's future wastewater treatment needs within the Ashbridges Bay Treatment Plant's service area.

The Ashbridges Bay Treatment Plant Process Roadmap Study completed in 2018 provides direction for upgrading major treatment plant processes over the next several decades in order to ensure continued performance, sustainability and cost-effectiveness. The study concluded that the secondary treatment system (i.e., the core biological treatment process) part of the plant needs upgrades to maintain the overall Ashbridges Bay Treatment Plant current rated capacity while accommodating the expected future population growth to 2049.

A second study, the Aeration Upgrades Study completed in 2019 provides additional recommendations for future upgrades at the Plant needed to deal with ageing infrastructure and to ensure better energy efficiency.

The scope of this project is derived from the recommendations of the above two studies and focuses on major upgrades to the secondary treatment system infrastructure in order to meet future needs while adopting more energy-efficient treatment technologies. The upgrades will also improve the ability of the Plant to manage peak flows during wet weather events.

The scope includes construction of two new aeration tanks and final clarifiers to improve plant firm capacity and enable increased flexibility for future maintenance activities. The existing infrastructure and configuration of the Plant limits the ability to shutdown certain tanks for routine maintenance activities. The upgrades will also improve the constructability of future expansions when these become necessary.

The detailed scope of the works associated with this project includes the engineering design, contract administration and post-construction services for:

- Two (2) new aeration tanks, clarifiers and associated mechanical, electrical, instrument and controls systems;
- Upgrade and retrofit of the existing secondary treatment train number 11 including aeration tanks, clarifiers and associated structural, mechanical, electrical, instrumentation and controls work;
- Addition of a second blower building to supplement the existing blowers and the associated electrical, instrumentation, controls and network systems;

- Replacement of weir gates and addition of new channel mixing systems;
- Addition of a new above-ground process air ducting (Header);
- Addition of new west and east side control buildings including associated infrastructure for electrical distribution;
- Replacement of an electrical substation and power feeders and construction of a new additional electrical substation including power feeders and associated systems;
- Replacement of an existing blower and preliminary design only for the future replacement of all remaining blowers and associated systems in the East Blower Building including electrical, instrument, controls and network systems along with required building renovations.

In addition to the detailed design for this contract the scope of work under this assignment includes the preliminary design for full rehabilitation and retrofit of the remaining ten aeration tanks, final clarifiers and connected channels and conduit for a future construction contract.

Given the complexity and scale of the above, it is estimated that the engineering design will take approximately four years to complete and the subsequent construction phase will take a minimum of seven years to complete.

### **Request for Proposal**

A Request for Proposal was prepared by Engineering and Construction Services with Toronto Water, in conjunction with the Purchasing and Materials Management Division to procure the necessary professional engineering services.

Request for Proposal Number Doc2248482116 (9117-20-7023) was issued by the Purchasing and Materials Management Division on June 12, 2020, and was available on the City's website on June 12, 2020.

Optional site information meetings were held on June 18, 2020 and June 22, 2020. Due to COVID 19 restrictions, this was available by appointment only and for a maximum of one site visit per firm to which three (3) firms attended. In addition, an optional virtual information meeting was held on June 25, 2020 to which four (4) firms attended.

A total of four (4) proposal submissions were received by the August 21, 2020, closing date from the following firms:

- AECOM Canada Limited
- CH2M Hill Canada Limited
- Stantec Consulting Limited
- Joint Venture of CIMA Canada Inc. and GHD Limited

The Request for Proposal presented the scope of work and described the proposal evaluation process and criteria. The Fairness Monitor retained for the procurement process of this assignment by the City, Robinson Global Management Incorporated, oversaw the procurement evaluation process.

The evaluation process consisted of three stages:

- Stage 1: Mandatory Submission Requirements
- Stage 2: Technical Proposal Structure, Attributes and Contents
- Stage 3: Cost of Services

All four (4) submissions complied with the mandatory Request for Proposal requirements, and all four (4) Technical Proposals were evaluated by a selection committee comprised of six (6) City staff from Engineering and Construction Services and Toronto Water. The proponents' Technical Proposals were first evaluated and scored independently, in accordance with the pre-established criteria and the Request for Proposal evaluation guide provided by Purchasing and Materials Management Division. The scores were then jointly reviewed by all members of the selection committee under the guidance of Purchasing and Materials Management Division and the Fairness Monitor. Scores were assigned based on the content of the Technical Proposal as well as referenced appendices.

All four (4) proposals met the minimum threshold score for the Technical Proposal, and their Cost of Services proposals were opened and scored in compliance with the Request for Proposal criteria. The Total Score was the sum of the Technical Proposal and Cost of Services scores, and the proponent with the highest overall Total Score was ranked first.

On completion of the above process, CH2M Hill Canada Limited (Jacobs), was ranked first with the highest overall Total Score. The selection committee therefore recommends award of the assignment to CH2M Hill Canada Limited (Jacobs).

The Fair Wage Office has reported that the recommended firm has indicated that it has reviewed and understands the Fair Wage Policy and Labour Trades requirements and has agreed to comply fully.

Suppliers' scores by criteria, price comparison and a staff analysis of the evaluation results can be provided in a closed session presentation if requested by Committee Members.

### **Application of the City's Social Procurement Policy**

This Request for Proposal was selected by Engineering and Construction Services in consultation with the Purchasing and Materials Management Division and the Social Procurement working group, as a project to implement the City's Social Procurement Policy. The Request for Proposal required the proponents to submit a proposal on workforce development. CH2M Hill Canada Limited (Jacobs), detailed a Workforce Development Plan that is aligned with the City's objectives and provides a good basis for working together towards successful Workforce Development outcomes within the Social Procurement framework.

In particular, CH2M Hill Canada Limited focused on implementation of the Diversity Policy, Workforce Development requirements including; local hiring from Neighbourhood Improvement Areas, engagement with Social Purpose Enterprises for

subcontracts, and the potential for trades and apprenticeship training projects, which have all been proposed as part of the Plan.

**Fairness Monitor:**

The firm of Robinson Global Management Incorporated was retained through a competitive bidding process to act as Fairness Monitor for the procurement evaluation process. The Fairness Monitor's scope of work included:

- Providing oversight on the procurement evaluation process to ensure adherence to high standards, objectivity of evaluation, and transparency.
- Addressing any concerns relating to accountability/fairness (monitoring the level of openness and competitiveness of the procurement process).
- Independent assurance of the integrity of the procurement evaluation process with a signed attestation statement.
- Preparing a Final Attestation Report for the City.

The Fairness Monitor concluded that the procurement process satisfied the principles of openness, fairness, consistency and transparency.

As described under the recommendations section above, five (5) distinct Purchase Orders will be issued for Request for Proposal Number Doc2248482116 for the Professional Engineering Services for Secondary Treatment System Upgrades at the Ashbridges Bay Treatment Plant to CH2M Hill Canada Limited in, the total amount of \$42,590,930 net of all applicable taxes and charges, \$43,340,532 net of HST recoveries.

**CONTACT**

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Simon Hopton, P. Eng., Director, Major Infrastructure, Engineering and Construction Services, Telephone: 416-395-6270, Email: [Simon.Hopton@toronto.ca](mailto:Simon.Hopton@toronto.ca)

Allison Phillips, Manager, Professional Services, Purchasing and Materials Management Division, Telephone: 647-882-9803, Email: [Allison.Phillips@toronto.ca](mailto:Allison.Phillips@toronto.ca)

**SIGNATURE**

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Michael D'Andrea, M.E.Sc., P.Eng.  
Chief Engineer and Executive Director, Engineering and Construction Services

Michael Pacholok, JD  
Chief Procurement Officer, Purchasing and Materials Management