

Award of Ariba Document Number 3448368603 to CH2M Hill Canada Limited and Stantec Consulting Limited for Professional Engineering Services for Phase 5 of the Basement Flooding Protection Program

Date: February 16, 2023

To: General Government Committee

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

Wards: Ward 1 (Etobicoke North), Ward 2 (Etobicoke Centre), Ward 3 (Etobicoke-Lakeshore), Ward 8 (Eglinton-Lawrence), Ward 12 (Toronto-St. Paul's), Ward 15 (Don Valley West), Ward 20 (Scarborough Southwest)

SUMMARY

The purpose of this report is to advise of the results of Request for Proposal, Ariba Document Number 3448368603, Contract Number RFP-22ECS-LU-02FP, for professional engineering services associated with program management, preliminary and detailed design, construction administration and post construction services for Phase 5 of the Basement Flooding Protection Program, and request the authority to enter into agreements with CH2M Hill Canada Limited, in the amount of \$41,348,551 net of all applicable taxes and charges (\$42,076,285 net of HST recoveries) and Stantec Consulting Limited, in the amount of \$43,768,591 net of all applicable taxes and charges (\$44,538,918 net of HST recoveries), respectively, for a combined total of \$85,117,142 net of all applicable taxes and charges (\$86,615,203 net of HST recoveries).

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 195-8.4A of the Toronto Municipal Code Chapter 195 (Purchasing By-Law), grant authority to the Chief Engineer and Executive Director, Engineering and Construction Services to negotiate and enter into an agreement with CH2M Hill Canada Limited, being the highest overall

scoring Supplier meeting the requirements of Ariba Document Number 3448368603 to provide program management, preliminary and detailed design, construction administration and post construction services for Phase 5 of the Basement Flooding Protection Program Bundle 1 Assignments, in the total amount of \$41,348,551 net of all applicable taxes (\$42,076,285 net of HST recoveries) as follows:

- a) Program management, in an amount not to exceed \$10,090,986 net of all applicable taxes and charges (\$10,268,587 net of HST recoveries), including labour, disbursements, provisional allowances and contingency amounts;
- b) Preliminary and detailed design, in an amount not to exceed \$11,832,727 net of all applicable taxes and charges (\$12,040,983 net of HST recoveries), including labour, disbursements, provisional allowances and contingency amounts;
- c) Construction administration, in an amount not to exceed \$19,118,338 net of all applicable taxes and charges (\$19,454,820 net of HST recoveries), including labour, disbursements, provisional allowances and contingency amounts; and
- d) Post construction services, in an amount not to exceed \$306,500 net of all applicable taxes and charges (\$311,894 net of HST recoveries), including labour, disbursements, provisional allowances and contingency amounts.

2. The General Government Committee, in accordance with Section 195-8.4A of the Toronto Municipal Code Chapter 195 (Purchasing By-Law), grant authority to the Chief Engineer and Executive Director, Engineering and Construction Services to negotiate and enter into an agreement with Stantec Consulting Limited, being the next highest overall scoring supplier meeting the requirements of Ariba Document Number 3448368603 to provide program management, preliminary and detailed design, construction administration and post construction services for Phase 5 of the Basement Flooding Protection Program Bundle 2 Assignments, in the total amount of \$43,768,591 net of all applicable taxes (\$44,538,918 net of HST recoveries) as follows:

- a) Program management, in an amount not to exceed \$11,343,493 net of all applicable taxes and charges (\$11,543,138 net of HST recoveries), including labour, disbursements, provisional allowances and contingency amounts;
- b) Preliminary and detailed design, in an amount not to exceed \$11,046,265 net of all applicable taxes and charges (\$11,240,680 net of HST recoveries), including labour, disbursements, provisional allowances and contingency amounts;
- c) Construction administration, in an amount not to exceed \$21,088,833 net of all applicable taxes and charges (\$21,459,996 net of HST recoveries), including labour, disbursements, provisional allowances and contingency amounts; and
- d) Post construction services, in an amount not to exceed \$290,000 net of all applicable taxes and charges (\$295,104 net of HST recoveries), including labour, disbursements, provisional allowances and contingency amounts.

All 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 and in a form satisfactory to the City Solicitor.

FINANCIAL IMPACT

The total potential award identified in this report is \$85,117,142 net of all applicable taxes and charges, \$96,182,370 including all applicable taxes and charges. The total potential cost to the City is \$86,615,203 net of HST recoveries.

The total potential award identified in this report to CH2M Hill Canada Limited is \$41,348,551 net of all applicable taxes, \$46,723,863 including all applicable taxes and charges. The total potential cost to the City is \$42,076,285 net of HST recoveries.

The awarded amount to Stantec Consulting Limited is \$43,768,591 net of all applicable taxes, \$49,458,508 including all applicable taxes and charges. The total potential cost to the City is \$44,538,918 net of HST recoveries.

Funding is available in the Approved 2023-2032 Capital Budget and Plan for Toronto Water under Account Number CWW421 (Basement Flooding Relief) with forecasted expenditures as shown below in Table 1.

Table 1 - Forecasted Expenditures (Net of HST Recoveries)

| Account Number CWW421 (Basement Flooding Relief) | | | |
|---|---------------------------------|-----------------------------------|--------------|
| Year | CH2M Hill Canada Limited | Stantec Consulting Limited | Total |
| 2023 | \$3,821,411 | \$4,142,471 | \$7,963,882 |
| 2024 | \$8,306,252 | \$8,550,302 | \$16,856,554 |
| 2025 | \$6,992,427 | \$6,517,340 | \$13,509,767 |
| 2026 | \$4,205,923 | \$4,095,077 | \$8,301,000 |
| 2027 | \$4,913,962 | \$5,442,038 | \$10,356,000 |
| 2028 | \$4,191,630 | \$4,640,370 | \$8,832,000 |
| 2029 | \$4,232,837 | \$4,679,163 | \$8,912,000 |
| 2030 | \$4,642,785 | \$5,126,215 | \$9,769,000 |
| 2031 | \$420,045 | \$462,955 | \$883,000 |

| Account Number CWW421 (Basement Flooding Relief) | | | |
|---|---------------------|---------------------|---------------------|
| 2032 | \$349,013 | \$882,987 | \$1,232,000 |
| Total | \$42,076,285 | \$44,538,918 | \$86,615,203 |

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

DECISION HISTORY

At its meetings of September 24, 2008 and September 21, 2011, Council adopted criteria to prioritize, and sequence recommended Basement Flooding Protection Program projects that are identified through completed studies to protect the greatest number of properties as soon as possible, within approved budgets, as appropriate funding opportunities are available and in coordination with other capital project and population growth needs in the area. The Council adopted criteria and the corresponding staff reports can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2008.EX23.16>

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.PW7.6>

City Council, at its meeting on October 8-11, 2013, requested the General Manager, Toronto Water, report during the 2014 budget process on the capital and operating budget impacts of expanding the Basement Flooding Protection Program on a City-wide basis beyond the existing 34 priority study areas, including methodologies for setting priorities and resource implications, so that the program continues to address urban flooding risks in a fair, well-organized, and efficient manner. The Council decision can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PW25.7>

At its meeting of December 16-18, 2013, City Council expanded the Basement Flooding Protection Program across the entire City, and specifically delineated 7 new study areas beyond the previously identified 34 study areas to address the basement flooding impacts associated with the extreme storm event of July 8, 2013. The staff report that provides background information about expanding the Basement Flooding Protection Program can be viewed at:

<http://www.toronto.ca/legdocs/mmis/2013/ex/bgrd/backgroundfile-63918.pdf>

At its meeting of June 18, 2019, Council granted the authority to apply for federal funding under the Disaster Mitigation and Adaptation Fund and enter into and execute any agreements, including any amendments, with the Government of Canada under the Disaster Mitigation and Adaptation Fund on terms and conditions satisfactory to the City Manager and the Chief Financial Officer and Treasurer and in a form satisfactory to the City Solicitor. The Council adopted item and the corresponding staff reports can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.EX6.4>

At its meeting of November 25 and 26, 2020, Council adopted the amended threshold per benefitting property at the preliminary design phase, and direct that projects identified through completed Basement Flooding studies proceed to detailed design and construction, if the cost per benefitting property, as determined during the preliminary design phase, is less than the amended threshold. The Council adopted item and the corresponding staff reports can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.IE17.5>

At its meeting of December 15, 16 and 17, 2021, Council adopted the 2022 Rate Supported Budgets - 2022 Water and Wastewater Consumption Rates and Service Fees. In support, a briefing note titled "2022 Capital Budget Briefing Note - Basement Flooding Protection Program - Program Status Update and Project List: 2022 to 2026", contains the updated planned schedule for engineering design and construction of infrastructure upgrades supporting Toronto Water's Basement Flooding Protection Program, including the Midtown Toronto Relief Storm Sewer Project. The Council adopted item and the briefing note can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.EX28.6>

<https://www.toronto.ca/legdocs/mmis/2021/ex/bgrd/backgroundfile-173775.pdf>

COMMENTS

Background

Since May 2000, the City has experienced multiple extreme storm events that resulted in flooding of more than 14,000 homes, erosion in ravines and watercourses and damage to City infrastructure. Following the August 2005 extreme storm event, which exceeded the 100 year design storm intensity in areas north of Highway 401, Council established the Basement Flooding Protection Program. This program was initially focused on areas impacted during the May 2000 and August 2005 storms. The Basement Flooding Protection Program was extended citywide in 2013 to address the basement flooding impacts associated with the extreme storm event of July 8, 2013.

The Basement Flooding Protection Program consists of three main components:

- Infrastructure improvements, established through Environmental Assessment Studies which examine in detail the causes of flooding in a defined drainage area, and assess various alternatives for reducing the risk of urban flooding and sewer back-ups.
- A Basement Flooding Protection Subsidy Program, which promotes and provides financial subsidies for the installation of backwater valves, foundation drain modifications and sump pumps to reduce the risk of sewer backups and basement flooding.
- An education and outreach strategy to advise homeowners of the causes of and solutions to basement flooding.

As part of the infrastructure improvements, Toronto Water has identified 67 Basement Flooding Protection Program Study Areas across the entire City. Environmental Assessment Studies have been completed for 43 areas and studies are underway for the remaining 24 areas.

The Environmental Assessment Studies have been completed for Basement Flooding Protection Program Study Areas 34, 36, 38, 40 and 41, identifying a number of infrastructure and storm drainage improvements to address basement flooding at locations where chronic and recurring basement flooding problems were identified. Assignments (grouping of projects) identified in the Environmental Assessment Studies proceed to preliminary engineering design if Council adopted prioritization rules for Basement Flooding Protection Program implementation are met. As directed by Council, prioritization must be consistent with the principle that the greatest number of properties are protected within an approved funding envelope, which is currently \$68,000 per benefitting property. The study areas and associated Assignments to be delivered through Phase 5 of the Basement Flooding Protection Program are outlined in Table 2. Maps showing the locations of each Assignment are provided as Attachment 1.

The improvements to be delivered under the Assignments identified in Table 2, and presented in Attachment 1, include storm sewer upgrades, sanitary sewer upgrades, new storm and sanitary system infrastructure, in-line storm water storage infrastructure, catch basin inlet controls and outfall improvements.

Table 2 - Study Areas and Assignments for Phase 5 of the Basement Flooding Delivery

| Study Area | General Location | Ward(s) | Environmental Assessment Completion Date | Delivery Assignments |
|-------------------|--|----------------|---|---|
| 34 | Southwest Scarborough | 20 | 2018 | 34-06A 34-07A 34-08 34-12 34-13 |
| 36 | Etobicoke | 1, 2 | 2018 | 36-12 36-13 |
| 38 | Etobicoke | 2 | 2018 | 38-24 |
| 40 | Avenue Road – Eglinton Avenue and Yonge Area | 8, 12, 15 | 2019 | 40-02 40-03 40-06 40-07 40-12 40-13 40-14 |

| Study Area | General Location | Ward(s) | Environmental Assessment Completion Date | Delivery Assignments |
|------------|------------------|---------|--|----------------------|
| 41 | Etobicoke | 2, 3 | 2018 | 41-01 |

The professional engineering services associated with the delivery of Phase 5 of the Basement Flooding Protection Program consists of two separate engineering assignments: Bundle 1 and Bundle 2, respectively. CH2M Hill Canada Limited will provide program management, preliminary and detailed design, construction administration and post construction services for the Bundle 1 consisting of Assignments 40-02, 40-03, 40-06, 40-07, 40-12, 40-13 and 40-14, with a maximum capital construction cost estimated at \$115,000,000. Stantec Consulting Limited, will provide program management, preliminary and detailed design, construction administration and post construction services for the Bundle 2 consisting of Assignments 34-06A, 34-07A, 34-08, 34-12, 34-13, 36-12, 36-13, 38-24 and 41-01, with a maximum capital construction cost estimated at \$100,000,000. The preliminary design phase for both Bundles is expected to commence in Q2 of 2023 with construction planned to start in 2026. Construction is expected to be completed by 2030, followed by two years of post-construction services.

Award of Ariba Document Number 3448368603

A Request for Proposal, Ariba Document Number 3448368603, was issued to select two qualified Suppliers for the awarded of Work Bundles 1 and 2. The Request for Proposal was prepared by Engineering and Construction Services in consultation with Toronto Water, and in conjunction with the Purchasing and Materials Management Division, to provide professional engineering services to support the delivery of the Phase 5 of the Basement Flooding Protection Program.

The Request for Proposal was advertised on both the City's and Ariba Discovery websites on June 20, 2022, with a closing date of September 14, 2022 and an issuance of eight (8) addenda. The following eight (8) Suppliers submitted proposals:

1. AECOM Canada Limited
2. CH2M Hill Canada Limited
3. Hatch Limited
4. TYLin International Canada Incorporated
5. R.V. Anderson Associates Limited
6. Stantec Consulting Limited
7. SNC-Lavalin Inc.*
8. WSP Canada Inc.

* Supplier was found non-compliant with the mandatory requirements.

The Request for Proposal was structured as a "two-envelope" process and the submissions included a detailed Technical Proposal (Envelope 1) and a separate sealed envelope (Envelope 2) with a Cost of Services Proposal (or Proposals). The

selection process stipulated that the Cost of Services Proposals would not be opened until the evaluation of the Technical Proposals had been completed.

Suppliers could elect to submit a proposal for any, or both, Bundles. One Technical Proposal in Envelope 1 was sufficient for both Bundles. But the Supplier needed to identify therein if the proposal was being submitted for both Bundles or a single Bundle. A separate Cost of Services proposal was required in Envelope 2 for each Bundle, as applicable.

Pursuant to the terms of the Request for Proposal, Bundle 1 is to be awarded to the Supplier that achieves the highest proposal score for Bundle 1. Bundle 2 is to be awarded to the Supplier that achieves the highest proposal score for Bundle 2, unless that Supplier has already been selected for Bundle 1, in which case Bundle 2 will be awarded to the Supplier with the second highest proposal score for Bundle 2.

A formal evaluation team comprised of three (3) Engineering and Construction Services staff evaluated the seven (7) proposals in accordance with the pre-established criteria outlined in the Request for Proposal. A minimum threshold score of 70 percent was required for Suppliers to proceed to have their cost proposal opened and evaluated. Of the seven (7) technical proposals submitted, all seven (7) successfully passed the minimum threshold score of 70 percent, which allowed the proposal evaluation to proceed to the cost of services evaluation. The cost proposals were scored and added to the technical proposal score, resulting in overall scores for the seven (7) Suppliers ranging from 73.98 to 90.05 for Bundle 1 and 73.21 to 80.89 for Bundle 2, respectively.

On completion of the process, the proposal from CH2M Hill Canada Limited was ranked first with the highest overall point score for Bundle 1, and Stantec Consulting Limited was ranked first with the highest overall point score for Bundle 2. Consequently, pursuant to the terms of the Request for Proposal, CH2M Hill Canada Limited has been recommended for award of Assignments 40-02, 40-03, 40-06, 40-07, 40-12, 40-13, and 40-14 (Bundle 1) and Stantec Consulting Limited has been recommended for award of Assignments 34-06A, 34-07A, 34-08, 34-12, 34-13, 36-12, 36-13, 38-24 and 41-01 (Bundle 2).

Following the review of the proposals submitted, the evaluation team concluded that the proposals submitted by CH2M Hill Canada Limited and Stantec Consulting Limited satisfied the overall project requirements and demonstrated an appropriate level of effort for the proposed work. The Suppliers' scores and staff analysis of the evaluation results can be provided to Councillors in an in-camera presentation if requested by members of Council.

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

Fairness Monitor

The firm of P1 Consulting Incorporated was retained through a competitive bidding process to act as Fairness Monitor for this Request for Proposal. The Fairness Monitor's scope of work included:

- Reviewing all Request for Proposal documents prior to and after the issuance of the Request for Proposal.
- Monitoring the procurement process.
- Identifying and addressing any concerns relating to accountability/fairness (monitoring the level of openness, transparency and competitiveness of the procurement process).
- Independent assurance of the integrity of the procurement process with a signed attestation statement for the Request for Proposal.
- Preparing a Final Attestation Report for the City.

The Fairness Monitor concluded that "from a fairness perspective, the processes undertaken related to the (Basement Flooding 5): Engineering Services for Phase 5 of the Basement Flooding Protection Program (Request for Proposal) have been conducted in a fair, open and transparent manner. As Fairness Monitor for this Project, we are satisfied that the City has followed the procedures in accordance with the applicable [Request for Proposal] and policy documentation and that the participants followed the procedures and fairly applied the evaluation criteria." The Fairness Monitor's Report is included as Attachment 2.

CONTACT

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SIGNATURE

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ATTACHMENTS

Attachment 1 - Delivery Assignments Location Maps

Attachment 2 - Fairness Monitor's Report