Report to Civic Works Committee

To: Chair and Members

Civic Works Committee

From: Kelly Scherr, P.Eng., MBA, FEC

Deputy City Manager, Environment, and Infrastructure

Subject: Consultant Contract Increase for the Mud Creek Phase 2

Detailed Design

Date: July 26, 2022

Recommendation

That on the recommendation of Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to the requested increase to the Consultant contract services for the Mud Creek Phase 2 detailed design:

- (a) The engineering fees for AECOM Canada Ltd. **BE INCREASED** to recognize the additional scope of work for the project in accordance with the estimate on file, by \$145,338, excluding HST, from \$600,736 to a total upset amount of \$746,074, in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy,
- (b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix 'A'; and,
- (c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project.

Executive Summary

Purpose

This report recommends increasing the approved consultant award for AECOM Canada Ltd. related to detailed design for the Mud Creek Phase 2 project.

Context

The Phase 2 consultant assignment involves the detailed design to expand the capacity of the main channel from the CN Rail culvert crossing, northerly to Oxford Street and alleviate the frequent flooding of Oxford Street. During the detailed design process, two significant changes to the original scope were triggered, including additional ecological field data collection and the need to complete a Stage 4 Archaeological exploration.

Linkage to the Corporate Strategic Plan

This recommendation supports the following 2019-2023 Strategic Plan areas of focus:

- Building a Sustainable City:
 - London's infrastructure is built, maintained, and operated to meet the longterm needs of our community by replacing aged and failing infrastructure with new materials and sizing new infrastructure to accommodate future development.
 - Londoners can move around the city safely and easily in a manner that meets their needs by incorporating cycling infrastructure and safety enhancements; and
 - London has a strong and healthy environment by incorporating stormwater management quantity and quantity controls to protect downstream waterways.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

- Civic Works Committee August 25, 2014 Mud Creek Municipal Class Environmental Assessment;
- Civic Works Committee November 3, 2015 Appointment of Consulting Engineers for Design and Construction of Stormwater Management Facilities;
- Civic Works Committee October 4, 2016 Mud Creek Municipal Class Environmental Assessment Study – Status Update and Scope Change;
- Civic Works Committee June 7, 2017 Mud Creek Subwatershed Schedule B Municipal Class Environmental Assessment Notice of Completion;
- Civic Works Committee January 9, 2018 Appointment of Consulting Engineer Mud Creek Flood Reduction and Rehabilitation Phase 1 Detailed Design;
- Civic Works Committee August 11, 2020 Mud Creek Remediation Phase 1A Tunnel Contract Award and Consultant Contract Increase; and
- Civic Works Committee February 9, 2021 Mud Creek Phase 1B Channel Reconstruction: Consultant Appointment for Tendering and Construction Administration.
- Civic Works Committee June 22, 2021 Appointment of Consulting Engineer for Mud Creek Phase 2 Detailed Design

1.2 Location

The Mud Creek Phase 2 project is required to allow approximately 54 hectares of prime infill and intensification lands to develop and to reduce existing flooding within the Oxford Street and Proudfoot Lane areas. A project location map is provided in Appendix 'B'.

2.0 Discussion and Considerations

2.1 Discussion

In 2021, the City completed Phase 1A and 1B of the Mud Creek Project consisting of new twin tunnels under the Canadian National Railway (CNR) embankment as well as constructed a deeper and wider natural channel corridor to Wonderland Road.

AECOM's current assignment includes the detailed design and tendering of the Phase 2 Mud Creek project which includes approximately 850 linear metres of a new realigned natural channel from the Canadian National Rail embankment, northerly to Oxford Street, and the construction of a new Oxford Street water crossing.

During the detailed design process, it was determined that additional ecological field work would be required to meet updated requirements by the Ministry of Environment Conservation and Parks (MECP) which includes expanded breeding bird surveys, Eastern Hog-Nosed snake habitat assessment, and additional Bat acoustic monitoring.

In addition, the Stage 3 Archeological Study triggered the need to conduct a Stage 4 Archeological Study. To date, the findings on site have included several artifacts which has warranted further investigations by expanding the excavation sites. First Nations representatives have been on site during the Stage 2 and Stage 3 field work. The Stage 4 process will include continued involvement of Chippewa of the Thames First Nation, Oneida Nation of the Thames, and Munsee-Delaware Nation to attend the archeological discoveries.

The Phase 2 project was originally scheduled to commence in 2022, however, the additional scope of work has postponed the schedule. The Phase 2 Channel project is now anticipated to commence in July 2023, subject to receipt of all approvals and to

respect ecological windows. The project is planned to be completed with landscaping by mid-2024.

3.0 Financial Impact/Considerations

3.1 Budget Impact Table

The budget required to complete the additional scope of work is as follows:

Expanded Stage 4 Archaeological Work	\$123,641
Required Additional Ecological Work	\$21,697
Requested Budget Increase Total =	\$145,338

The construction administration fee is not included in the current scope but is planned to be awarded with the tender award. The project construction cost estimate exceeds \$6M and will be presented to Council for a contract award at a future CWC meeting.

Conclusion

It is recommended that the increase consulting fees be approved for AECOM Canada Ltd to complete the ecological and archaeological field work that are necessary to complete the detailed design assignment.

Prepared by: Shawna Chambers, DPA, P.Eng.

Division Manager, Stormwater Engineering

Submitted by: Ashley M. Rammeloo, MMSc., P.Eng.

Director, Water, Wastewater, and Stormwater

Recommended by: Kelly Scherr, P.Eng., MBA, FEC

Deputy City Manager, Environment, and Infrastructure

Appendix 'A' – Sources of Financing

Appendix 'B' - Location Map

CC:

P. Titus,

S. Mollon,

J. Haasen – AECOM

B. Trenouth - AECOM

Appendix "A"

#22106

July 26, 2022

(Consulting Engineers Contract Increase)

Chair and Members Civic Works Committee

RE: Mud Creek Phase 2 Detailed Design

(Subledger SWM21003)

Capital Project ES2681-2 - Mud Creek East Branch Phase 2

AECOM Canada Ltd. - \$746,074 (excluding HST)

Finance Supports Report on the Sources of Financing:

Finance Supports confirms that the cost of this project can be accommodated within the financing available for it in the Capital Budget and that, subject to the approval of the recommendation of the Deputy City Manager, Environment and Infrastructure the detailed source of financing is:

Estimated Expenditures	Approved Budget	Committed To Date	This Submission	Balance for Future Work
Engineering	1,017,010	869,114	147,896	0
Construction	6,152,590	5,662,566	0	490,024
Total Expenditures	\$7,169,600	\$6,531,680	\$147,896	\$490,024
Sources of Financing				
Drawdown from Sewage Works Renewal Reserve Fund	4,524,017	4,121,490	93,322	309,205
Drawdown from City Services - Stormwater Reserve Fund (Development Charges) (Note 1)	2,645,583	2,410,190	54,574	180,819
Total Financing	\$7,169,600	\$6,531,680	\$147,896	\$490,024

Financial Note:

Contract Price	\$746,074
Less Amount previously approved	600,736
	145,338
Add: HST @13%	18,894
Total Contract Price Including Taxes	164,232
Less: HST Rebate	-16,336
Net Contract Price	\$147,896

Note 1: Development charges have been utilized in accordance with the underlying legislation and the approved 2019 Development Charges Background Study and 2021 Development Charges Background Study Update.

Jason Davies Manager of Financial Planning & Policy

