# **Report to Civic Works Committee**

A, FEC
vironment & Infrastructure
: West London Dyke Norman
Bridge Concrete Repairs

### Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions **BE TAKEN** with respect to increasing the existing contract for Phase 7 West London Dyke project:

- (a) The Upper Thames River Conservation Authority **BE AUTHORIZED** to carry out added works for Phase 7 of the West London Dyke reconstruction by increasing the City's cost share by \$176,526.62, including contingency, excluding HST;
- (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 work.

### **Executive Summary**

#### Purpose

This report seeks Council approval to increase the City's share of the West London Dyke Phase 7 construction contract, administered by the Upper Thames River Conservation Authority (UTRCA), to allow for concrete repair works under the Norman Bradford bridge. This bridge crosses the Thames River at Oxford Street.

#### Context

The most recent reconstruction of West London Dyke Phase 7, from St. Patrick Street to north of Oxford Street is currently under construction and should be completed by late fall with some landscaping and amenity features to be added in 2022. Ro-buck Contracting Ltd. is undertaking this work under a contract administered by the UTRCA with a funding share provided by the City. Part of this work included construction of an underpass under the Norman Bradford Bridge to allow for safe pedestrian crossing to connect to the Thames Valley Parkway north of Oxford Street. This report seeks approval to increase the City's funding share to allow for the concrete repairs to the Norman Bradford Bridge to occur under this contract in order to allow the pedestrian pathway to be opened to the public upon completion of this phase of dyke.

#### Linkage to the Corporate Strategic Plan

This project supports the 2019-2023 Strategic Plan through the following: Building a Sustainable City, Build infrastructure to support future development and protect the environment, Improve London's resiliency to respond to future challenges, and Maintain or increase current levels of service; manage the infrastructure gap for all assets.

## Analysis

## **1.0 Background Information**

#### 1.1 Previous Reports Related to this Matter

Civic Work Committee – August 31, 2021 – Increase Contract Award: West London Dyke Reapplication of Anti-Graffiti Coating to Phases 1 and 2

Civic Works Committee – November 17, 2020 – West London Dyke – Phase 7 and Fanshawe Dam Safety Study PO Boost

Civic Works Committee – July 14, 2020 – Upper Thames Conservation Authority and City of London Flood Protection Projects: West London Dyke Phase 7

Civic Works Committee – March 10, 2020 – Upper Thames River Conservation Authority and City of London Flood Protection Projects

Civic Works Committee – August 12, 2019 – Upper Thames River Conservation Authority and City of London Flood Protection Projects

Civic Works Committee – June 18, 2018 – Upper Thames River Conservation Authority and City of London Flood Protection Projects

Civic Works Committee – July 17, 2017 – Water and Erosion Control Infrastructure (WECI) Program: 2017 Provincially Approved Project Funding (Sole Sourced)

Civic Works Committee – August 22, 2016 – Water and Erosion Control Infrastructure (WECI) Program: 2016 Provincially Approved Project Funding (Sole Sourced)

Civic Works Committee – February 2, 2016 – West London Dyke Master Repair Plan Municipal Class Environmental Assessment Study

Strategic Priorities and Policy Committee – January 28, 2016 – Downtown Infrastructure Planning and Coordination

## 2.0 Discussion and Considerations

#### 2.1 Norman Bradford Concrete Repairs

As per Reg 104/97, the structural integrity, safety and condition of every bridge shall be determined through the performance of at least one inspection every second calendar year under the direction of a Professional Engineer and in accordance with the Ontario Structure Inspection Manual, O.Reg. 472/10, s.2. Given this requirement, the City of London undertakes a condition assessment of the City's bridge inventory every two years. This inspection was last completed in 2019 by AECOM Canada Ltd.

The 2019 condition assessment indicated that the Norman Bradford Bridge (Oxford Street bridge) required repairs to the north soffit and fascia as well as some localized repairs around the western deck drains. These repairs were considered non-structural and would not normally be a high priority to address; however, given the introduction of the new pathway under the bridge, these repairs are now required to be addressed from a user safety perspective in order to prevent falling concrete.



Figure 1: Area of unsound/ delaminated concrete on soffit and fascia (North Side)

AECOM completed a full detailed design package for all required repairs of the Norman Bradford Bridge in 2020. To prevent falling concrete onto the new pathway, it is recommended to complete the works from the West Abutment and Pier 1 ahead of a full bridge rehab, as these works directly impact pedestrian safety. Should these works not be completed under this current contract, the pathway connection will be required to remain closed until the works can be completed after Ro-Buck's one-year warranty period expires.

Given the pedestrian safety concerns and to avoid overlapping warranty periods from multiple contractors, it is recommended to complete these concrete repairs under the current West London Dyke Phase 7 contract.

## 2.1 Norman Bradford Guard Rails

The original issued-for-tender design planned to reinstate the existing guard rails on the south side of Oxford Street upon completion of the dyke work. Upon further review, it was determined that the existing guard rails on both sides of Oxford Street did not provide adequate protection. In order to meet crash test standards, the guard rails are required to be upgraded in order to provide pedestrian and motorist protection.

# 3.0 Financial Impact/Considerations

At this time, it is proposed that the concrete repairs be completed under the current contract to avoid a one-to-two-year pathway closure while contractor warranty periods expire. Robuck provided a quote of \$78,526.62 to complete the concrete repair work and a cost of \$98,000 to complete the guard rail replacement has been provided by Robuck Contracting Ltd. Staff have reviewed Robuck's fees and hours and have deemed the quote to represent a fair and consistent price with previously completed repair work.

## Conclusion

It is recommended that the City's share to the West London Dyke Phase 7 construction contract that is administered by UTRCA, be increased to repair the concrete works and guard rail installation for the Norman Bradford Bridge.

Prepared by:

Shawna Chambers, P.Eng., DPA, Division Manager, Stormwater Engineering

Submitted by:	Scott Mathers, MPA, P. Eng., Director, Water, Wastewater, and Storm Water				
Recommended by:	Kelly Scherr, P. Eng., MBA, FEC Deputy City Manager, Environment & Infrastructure				
Attachments:	Appendix 'A' – Source of Financing				
CC:	John Freeman Gary MacDonald Alan Dunbar Jason Davies Geoff Smith Monica McVicar Karl Grabowski Jeff Bruin				

Chair and Members

ES2474 - Total

Civic Works Committee

RE: West London Dyke Norman Bradford (Oxford Street) Bridge Concrete Repairs (Subledger SWM20001) Capital Project ES2474 - UTRCA Remediating Flood Control Works within City Limits Capital Project PK213520 - Maintain Thames Valley Parkway (2020-2023)

Capital Project TS176320 - Bridges Major Upgrades

Upper Thames River Conservation Authority - \$176,526.62 (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 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
ES2474 - UTRCA Remediating Flood Control Works within City Limits				
Engineering	6,485,357	6,485,357	0	0
Construction	9,892,742	6,101,580	49,862	3,741,300
City Related Expenses	80,859	80,859	0	0
ES2474 - Total	16,458,958	12,667,796	49,862	3,741,300
PK213520 - Maintain Thames Valley Parkway (2020- 2023)				
Engineering	234,794	67,348	0	167,446
Construction	613,206	272,290	39,954	300,962
City Related Expenses	2,000	0	0	2,000
PK213520 - Total	850,000	339,638	39,954	470,408
TS176320 - Bridges Major Upgrades				
Engineering	1,062,755	1,062,755	0	0
Land Purchase	2,500	2,500	0	0
Construction	4,967,297	664,221	89,817	4,213,259
City Related Expenses	20,000	0	0	20,000
TS176320 - Total	6,052,552	1,729,476	89,817	4,233,259
Total Expenditures	\$23,361,510	\$14,736,910	\$179,633	\$8,444,967
Sources of Financing				
ES2474 - UTRCA Remediating Flood Control Works within City Limits				
Capital Sewer Rates	1,000,000	1,000,000	0	0
Debenture By-law NoW.5610-251	2,750,000	0	0	2,750,000
Drawdown from Sewage Works Renewal Reserve Fund	12,657,213	11,616,051	49,862	991,300
Other Contributions	51,745	51,745	0	0

16,458,958

12,667,796

49,862

3,741,300

#### Chair and Members

Civic Works Committee

RE: West London Dyke Norman Bradford (Oxford Street) Bridge Concrete Repairs (Subledger SWM20001)

PK213520 - Maintain Thames Valley Parkway (2020- 2023)	Approved Budget	Committed To Date	This Submission	Balance for Future Work
Canada Community-Building Fund (Federal Gas Tax)	850,000	339,638	39,954	470,408
TS176320 - Bridges Major Upgrades				
Capital Levy	959,226	959,226	0	0
Drawdown from Self Insurance Reserve Fund	4,631	4,631	0	0
Drawdown from Capital Infrastructure Gap Reserve Fund	12,472,688	0	0	2,472,688
Canada Community-Building Fund (Federal Gas Tax)	2,516,381	665,993	89,817	1,760,571
Other Contributions	99,626	99,626	0	0
TS176320 - Total	6,052,552	1,729,476	89,817	4,233,259
Total Financing	\$23,361,510	\$14,736,910	\$179,633	\$8,444,967
<b>-</b>				
Financial Note:	ES2474	PK213520E	TS176320	l otal
	\$49,000 6,270	\$39,203 F 101	\$88,264	\$176,527
Auu: IDI (U13%) Total Contract Drive Including Taxes	0,370	0,104	11,474	22,948
	5 508	44,307	99,130 0 021	199,470
Net Contract Price	\$49,862	\$39,954	\$89,817	\$179,633

Jason Davies

Manager of Financial Planning & Policy

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