Report to Civic Works Committee

To: **Chair and Members**
Civic Works Committee
From: **Kelly Scherr, P.Eng., MBA, FEC**
Deputy City Manager, Environment & Infrastructure
Subject: **Metamora Stormwater Outfall Replacement – Contract Award Increase (RFT21-91)**
Date: **March 29, 2022**

Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions be taken with respect to the award of contract for the Metamora Stormwater Outfall Replacement and Slope Rehabilitation:

(a) the contract award increase for BlueCon Construction for additional construction costs of $200,486, including 20% contingency, excluding HST, for the Metamora Stormwater Outfall Replacement and Slope Rehabilitation works, **BE APPROVED**, resulting in a total contract value of $1,200,386;

(b) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached, hereto, as Appendix ‘A’;

(c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this work;

(d) the approvals given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the project; and,

(e) the Mayor and the City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

Executive Summary

Purpose

This report seeks approval to increase the construction contract award for BlueCon Construction to complete the Metamora Stormwater Outfall Replacement and Slope Rehabilitation project.

Context

On February 24, 2021, Ecosystem Recovery Inc. was appointed the Consulting Engineers to complete the detailed design and construction administration for the Metamora Stormwater Outfall Replacement and Slope Rehabilitation works. This work included a detailed design for the replacement of the current outfall and channel works that was supported by necessary studies to efforts to reduce the amount of sediment going into Medway Creek, as well as to stabilize the lands that have eroded from the failing structure.

Subsequently, three bids were received for RFT21-91 for the construction of the Metamora Stormwater Outfall Replacement and Slope Rehabilitation. BlueCon Construction was the lowest bid and subsequently received Administrative Approval for the contract on August 20, 2021, in the amount of $999,900, excluding HST, with no contingency included at that time. This report seeks additional funding to address unforeseen issues that arose during construction.

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.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

- Civic Works Committee – February 9, 2021 - Metamora Stormwater Outfall Replacement Consultant AppointmenT.

- Planning and Environment Committee – April 16, 2018 – Conservation Master Plan for the Medway Valley Heritage Forest Environmentally Significant Area (South)

1.2 Location Map

Figure 1: Location map showing Metamora outfall replacement project area

2.0 Discussion and Considerations

The Metamora stormwater outfall is located in the Medway Valley Heritage Forest Environmentally Significant Area (ESA) at 23 Metamora Crescent (see Figure 1). The outfall is adjacent to a pedestrian pathway that runs along the ESA. The existing stormwater outfall was constructed in 1958 and was rated in poor and failing condition with significant erosion occurring around the outfall and into the creek. The Metamora Stormwater Outfall Replacement and Slope Rehabilitation project (Metamora Project) includes a new stormwater outfall, rehabilitation of failing slopes, channel reconstruction, and includes full restoration with new habitat features, tree plantings, invasive species management and inclusion of native species.

The Metamora Project has had many challenges during construction, including:

- An unseasonably wet fall in 2021, created challenging working conditions in the Medway Valley Forest ESA.
- Increased amounts of groundwater seepage and excessive overland flows during rain events lead to the requirement to relocate the construction access road and increase granular materials used to build the road to provide safe access into the ravine.
- Challenges occurred with by-pass pumping due to high water conditions which resulted in time delays.
- A high groundwater table required construction to pivot and make appropriate channel design changes.
- Additional fill material and hydro-seed will be required during the spring work to complete the slope rehabilitation.

3.0 Financial Impact/Considerations

There has been extra construction effort completed by BlueCon Construction due to adverse working conditions encountered that were not anticipated during the design or tender of the project. The additional effort completed to date is valued at $99,823.90, excluding HST. The remaining items for BlueCon Construction to amount to an additional $31,400, excluding HST. A 20% contingency is also recommended given the unpredictable conditions of the slope rehabilitation project. A breakdown of these costs is shown in Table 1 below.

Table 1: Summary of additional costs to complete the Metamora Stormwater Outfall Replacement and Slope Rehabilitation project

ITEM	ITEM DESCRIPTION	AMOUNT
1.15	TOPSOIL STRIPPING AND DISPOSAL OFF-SITE	$3,500.00
1.17	EXCAVATE FOR TEMPORARY CONSTRUCTION ACCESS	$19,575.00
1.18	SUPPLY AND PLACE 50-200MM ANGULAR CRUSHED STONE	$49,289.40
1.20	CREEK BYPASS	$10,200.00
2.1	SUPPLY AND PLACE IMPORTED CLEAN FILL ON SLOPE	$1,736.00
3	CREEK WORKS	$15,523.50
	Sub-Total Extras To Date	**$99,823.90**
1.19	SUPPLY AND PLACE CLEAN FILL MATERIAL	$21,400.00
6	SUPPLY AND PLACE HYDRO-SEED	$10,000.00
	Sub-Total Project Estimated Extras Remaining To Complete	**$31,400.00**
	Total Extras	**$131,223.90**
	Original Tender Value	$1,002,430.00
	Contingency (20%) (ex HST)	**$200,486.00**

The budget associated with “ES247821 Waterways Restoration” was established to design and rehabilitate priority channels within the City. There is budget available in this account to fund the contract increase to complete the Metamora Project.

Conclusion

The Metamora Project includes a new stormwater outfall, rehabilitation of failing slopes, channel reconstruction, and includes full restoration with new habitat features, tree plantings, invasive species management and inclusion of native species. It is recommended that BlueCon Construction’s contract award be increased to cover the cost of additional unforeseen construction challenges.

Prepared by: **Shawna Chambers, P.Eng., DPA,**
Division Manager, Stormwater Engineering

Submitted by: **Ashley Rammeloo, MMSc, P. Eng.**
Acting Director, Water, Wastewater and Stormwater

Recommended by: **Kelly Scherr, P. Eng., MBA, FEC**
Deputy City Manager, Environment & Infrastructure

Attachments: Appendix ‘A’ – Sources of Financing

CC: Steve Mollon
Gary McDonald
Alan Dunbar

Jason Davies
Aimal Shinwari
Monica McVicar