

## 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:** Award of Consulting Engineering Services for Detailed Design, Tendering Assistance, Construction Oversight and Contract Administration for Expansion of Landfill Gas Collection System W12A Landfill Site

**Date:** March 19, 2024

## Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to the approval to hire Comcor Environmental Ltd. for detailed design, tendering assistance, construction oversight, and contract administration consulting services for the expansion of the landfill gas collection system at the W12A Landfill site:

- a) Comcor Environmental Ltd. **BE APPOINTED** to carry out detailed design, tendering assistance, construction oversight, and contract administration consulting services for the expansion of the landfill gas collection system at the W12A Landfill site, in the total amount of \$176,640, including a contingency of \$23,040, excluding HST, in accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy;
- b) the financing for the work identified in (a), above, **BE APPROVED** in accordance with the "Sources of Financing Report" attached hereto as Appendix "A";
- c) Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this work; and
- d) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

## Executive Summary

Landfill gas (LFG) collection and flaring systems are the primary odour and greenhouse gas emission control systems employed at landfills. The LFG collection and flaring system at the W12A Landfill began operation on June 30, 2004. The LFG collection system has been expanded several times since then as areas of the W12A Landfill were filled to final elevations. The existing LFG collection and flaring system consists of vertical and horizontal LFG extraction wells that are connected through a network of system piping and associated equipment whereby the LFG being generated within the landfill is collected under vacuum and combusted in the LFG flaring facility.

The existing LFG flaring facility reached volumetric capacity in approximately Q4 of 2020. The existing flaring facility is currently being replaced with a larger LFG flaring facility with a volumetric capacity to accommodate the LFG flows being generated by the current and proposed expanded W12A Landfill. It is anticipated that the larger LFG flaring facility will be commissioned in Q3 2024.

This report seeks approval from Committee and Council to award an engineering consulting services contract to Comcor Environmental Limited (Comcor) for detailed design, tendering assistance, construction oversight, and contract administration in accordance with the Procurement of Goods and Services Policy Section 15.2 g, in section 15.0 Appointment of Professional Consulting Services. The funds required for this award are available within the existing capital budget. It is expected there will be a minor net increase (less than \$10,000) in annual operating costs that can be covered in the base annual operating budget for the W12A Landfill.

## Linkage to the Corporate Strategic Plan

City Council continues to recognize the importance of waste management and the need for a more sustainable and resilient city in the development of its 2023-2027 Strategic Plan for the City of London. Specifically, London's efforts in waste management address the two following areas of focus: Climate Action and Sustainable Growth and Well-Run City.

The Climate Emergency Action Plan (CEAP) was approved by Council in April 2022 following the declaration of a climate emergency in 2019. CEAP includes Area of Focus 5, Transforming Consumption and Waste as Part of the Circular Economy.

## Analysis

### 1.0 Background Information

#### 1.1 Previous Reports Related to this Matter

Relevant reports that can be found at [www.london.ca](http://www.london.ca) under Council and Committees meetings include:

- Award of Construction Administration Services, Landfill Gas Flaring Facility Replacement at the W12A Landfill Site (March 21, 2023, meeting of the Civic Works Committee (CWC), Item#2.12)
- Award of Consulting Services for Detailed Design and Tendering for a New Landfill Gas Flaring Station (March 2, 2021, meeting of the CWC, Item#2.9)
- Environmental Assessment – Updates and Preferred Method to Expand the W2A Landfill (September 22, 2020, meeting of the CWC, Item #2.11)

#### 1.2 Existing W12A Landfill Gas Collection and Flaring System

The existing LFG collection and flaring system at the W12A Landfill site consists of vertical and horizontal LFG extraction wells installed within the compacted waste materials. The LFG extraction wells are connected to an enclosed LFG flaring facility through a network of piping and associated equipment (e.g., flow control assemblies, drain traps etc.). Vacuum is applied through centrifugal fans (blowers) to the LFG extraction wells to draw the LFG being produced within the landfill to the LFG flaring facility where it is combusted. The landfill gas collection and flaring system is the primary odour control and greenhouse gas emission reduction system employed at the W12A Landfill site.

The LFG collection and flaring system began operation on June 30, 2004, and initially burned approximately 500 standard cubic feet per minute (scfm) of LFG. The amount of LFG that is generated and captured has increased over the years as areas of the landfill reached final elevation and new LFG wells were installed, and the addition of horizontal LFG collectors (starting in 2020) has been employed for additional odour control.

As a result of expanding the capacity to collect LFG and the incorporation of horizontal LFG collectors, the volumetric capacity of the existing LFG flaring facility was reached in approximately Q4 of 2020.

#### 1.3 W12A Landfill Gas Flaring Facility Replacement

To address the volumetric capacity limitation of the existing LFG flaring facility the City applied for and received approval from the Ministry of the Environment, Conservation and Parks (MECP) to replace the existing LFG flaring facility with a larger one in November 2022. The larger LFG flaring facility is sized to manage the LFG production of the existing W12A Landfill and the proposed expanded W12A Landfill.

After receiving MECP approval, a tender for the supply, construction and installation of the replacement, larger LFG flaring facility was released and awarded in accordance with the Procurement of Goods and Services Policy Administrative Approval of Tender Acceptance/Contract Award (AATACA) process in Q2 of 2023. The work associated with this project is currently underway with an anticipated commissioning date of Q3 2024.

## **2.0 Discussion and Considerations**

### **2.1 Project Description**

The existing LFG collection system in general consists of the following:

- 93 active vertical LFG extraction wells;
- 5 active horizontal LFG extraction wells;
- 25 pumped drain traps; and
- Extended network of header and lateral system piping connecting all the installed and active LFG gas extraction wells.

The expansion of the LFG collection system will include the following:

- Drilling and installation of approximately 35 new LFG extraction wells;
- Extension of main header piping along the north limit of the waste footprint;
- Installation/extension of lateral piping network from header piping network;
- Installation of pumped drain traps, flow control assemblies and associated equipment as determined and required during detailed design work; and
- Repairs to existing system if necessary.

It is anticipated that the expansion of the LFG collection system will be completed shortly after the larger replacement LFG flaring facility is commissioned, thereby providing for an additional enhancement in overall odour control and reduction of greenhouse gas emissions.

### **2.2 Procurement Process - Appointment of ComScore Environmental Ltd.**

Comcor has specialized experience in the field of design, installation, construction contract administration and operation of LFG collection and flaring systems. The firm has provided these specialized services since 1985 and is located in Cambridge, Ontario with operations staff also based out of satellite offices in Mississauga, Niagara Falls, Ottawa and Moose Creek, Ontario and Winnipeg, Manitoba. Comcor currently operates and maintains over 20 landfill gas collection, flaring and/or utilization facilities across Canada, with 16 of these projects being located in Ontario. Comcor has also completed design work, on-site supervision and commissioning associated with most of these facilities.

Comcor has completed the design and oversaw installation of the existing LFG collection and flaring facility and several LFG collection system expansions at the W12A Landfill site. Comcor is also currently under contract by the City to operate and maintain the existing LFG flaring facility.

Comcor was previously awarded the engineering services contract related to the *Environmental Protection Act* approval, detail design, tendering assistance and construction administration services for the LFG flaring facility replacement. Using Comcor for detailed design, tendering assistance, construction oversight, and contract administration of the expansion of LFG collection system will expedite the project without losing time to seek and review alternative proposals. Comcor has specific knowledge of the existing LFG collection and flaring system as well as the replacement larger LFG flaring facility currently being constructed. Other consultants would need time to review these design details.

Considering the above, Comcor was invited to submit a proposal to carry out the consulting engineering services related to the detailed design, tendering assistance, construction oversight, and contract administration for expansion of the LFG collection system. Staff have reviewed the fee submission in detail considering the various activities, time allotted to each project task and related hourly rates provided. The review supports the hiring of Comcor on this project.

The continued use of Comcor for LFG collection system expansions is of financial advantage to the City because the firm has specific knowledge of the existing LFG collection and flaring system as well as the current construction of the replacement larger LFG flaring facility and has undertaken work for which duplication would be required if another firm were to be selected.

In accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy (15.0 Appointment of Professional Consulting Services), Civic Administration is recommending Comcor Environmental Ltd. be authorized to carry out detailed design, tendering assistance, construction oversight, and contract administration services for the expansion of the LFG collection system for a fee of \$176,640 (excluding HST). The fee includes a 15% contingency of \$23,040.

Procurement and Supply has reviewed the rationale to award Comcor Environmental Ltd. a contract and supports the decision as it provides best value to the City of London.

### **3.0 Financial Impact/Considerations**

#### **3.1 Capital Budget**

The funds required for this award are available within the existing capital budget. The Sources of Financing Report is attached as Appendix "A".

#### **3.2 Operating Budget**

It is expected there will be a minor net increase (less than \$10,000) in annual operating costs associated with operating the expanded LFG collection system. This amount has been planned for in the overall operating budget of the W12A Landfill as part of the 2024-2027 Multi-year Budget.

## **Conclusion**

Comcor Environmental Ltd. has demonstrated an understanding of the City's requirements for this project and hiring Comcor Environmental Ltd., will expedite completion of the project and allow for additional odour control and reduced greenhouse gas emissions once completed.

It is recommended that Comcor be awarded the consulting services contract in accordance with their proposal for detailed design, tendering assistance, construction oversight and contract administration for expansion of the LFG collection system at the W12A Landfill site, as it is in the best financial, community and technical interests of the City.

**Prepared by:** Mike Losee, B.SC  
Division Manager, Waste Management

**Submitted by:** Jay Stanford, MA, MPA  
Director, Climate Change, Environment & Waste Management

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

**Appendix "A"**

**#24049**

March 19, 2024

(Appoint Consulting Engineer)

Chair and Members

Civic Works Committee

RE: Expansion of Landfill Gas Collection System W12A Landfill Site

(Subledger LF240001)

Capital Project SW604024 - Landfill Gas Collection

Comcor Environmental Ltd. - \$176,640.00 (excluding HST)

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**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:

<b>Estimated Expenditures</b>	<b>Approved Budget</b>	<b>This Submission</b>	<b>Balance for Future Work</b>
Engineering	179,749	179,749	0
Construction	264,251	0	264,251
<b>Total Expenditures</b>	<b>\$444,000</b>	<b>\$179,749</b>	<b>\$264,251</b>

**Sources of Financing**

Canada Community-Building Fund	444,000	179,749	264,251
<b>Total Financing</b>	<b>\$444,000</b>	<b>\$179,749</b>	<b>\$264,251</b>

**Financial Note:**

Contract Price	\$176,640
Add: HST @13%	22,963
Total Contract Price Including Taxes	199,603
Less: HST Rebate	-19,854
Net Contract Price	\$179,749

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Jason Davies

Manager of Financial Planning and Policy

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