## **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 Construction Administration Services, Landfill Gas

Flaring Facility Replacement at the W12A Landfill Site

Date: March 21, 2023

## Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** with respect to the award of construction administration services to Comcor Environmental Ltd. for the construction of the landfill gas flaring facility replacement at the W12A landfill site:

- a) Comcor Environmental Ltd. **BE APPOINTED** to carry out construction administration services for the landfill gas flaring facility replacement at the W12A landfill site, in the total amount of \$217,520, including a contingency of \$28,380, 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**

Committee and Council previously approved the award of an engineering services contract for the Environmental Compliance Approval (ECA) package preparation, detailed design and project tendering assistance of the Landfill Gas (LFG) Flaring Facility replacement at the W12A to Comcor Environmental Ltd. (Comcor). The Ministry of Environment, Conservation and Parks (MECP) approved the ECA application to replace the existing LFG Flaring Facility on November 17, 2022 (ECA Number 1028-CKDR4S). It is currently anticipated that tendering of the replacement LFG Facility will proceed in Spring 2023, with project commissioning in Spring 2024.

The funds required for this award and LFG Flaring Facility replacement are available within the existing capital budget.

This report seeks approval from Committee and Council to award the subsequent phase of construction administration services related to the LFG Flaring Facility replacement to Comcor in accordance with the Procurement of Goods and Services Policy Section 15.2 g, in section 15.0 Appointment of Professional Consulting Services.

# **Linkage to the Corporate Strategic Plan**

Municipal Council continues to recognize the importance of solid waste management and the need for a more sustainable and resilient city in the development of its 2019-2023 - Strategic Plan for the City of London. Specifically, London's efforts in solid waste management address three Areas of Focus, at one level or another:

- Building a Sustainable City
- Growing our Economy
- Leading in Public Service

On April 23, 2019, the following was approved by Municipal Council with respect to climate change:

Therefore, a climate emergency be declared by the City of London for the purposes of naming, framing, and deepening our commitment to protecting our economy, our eco systems, and our community from climate change.

The LFG collection and Flaring Facility at the W12A Landfill is a key component of London's upcoming Climate Emergency Action Plan. LFG is approximately 50% methane gas which is 25 times more potent greenhouse gas (GHG) than carbon dioxide. In 2022, the existing LFG collection and Flaring Facility captured and destroyed 171,000 tonnes CO<sub>2eq</sub> of GHG. This GHG reduction is equivalent to removing 43,000 cars from the streets of London for the year.

## **Analysis**

## 1.0 Background Information

### 1.1 Previous Reports Related to this Matter

Relevant reports that can be found at <a href="www.london.ca">www.london.ca</a> under City Hall (Meetings – Council and Standing Committees) include:

- Award of Consulting Services for Detailed Design and Tendering for a New Landfill Gas Flaring Station (March 2, 2021, meeting of the Civic Works Committee (CWC), Item#2.9)
- Environmental Assessment Updates and Preferred Method to Expand the W2A Landfill (September 22, 2020, meeting of the Civic Works Committee (CWC), Item #2.11)
- Landfill Gas (LFG) Utilization: Next Steps in the Development of a Renewable
   Natural Gas (RNG) Facility (September 24, 2019, meeting of the CWC, Item #2.4)

#### 1.2 Existing Landfill Gas Generation

The W12A Landfill operates an enclosed LFG flaring facility that is sized to combust a maximum of approximately 1,700 standard cubic feet per minute (scfm) of LFG. The LFG collection system and Flaring Facility are approved under ECA No. A042102.

The flare began operation on June 30, 2004, and initially burned approximately 500 scfm of LFG. The amount of LFG that is captured has increased over the years as the area of completed landfill within the approved waste disposal footprint has increased 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 Future Landfill Gas Generation

The amount of LFG currently being collected has not been observed to decrease in the last few years and the flare continues to run at its maximum capacity of 1,700 (scfm). It is assumed that the use of horizontal collectors in addition to the traditionally used vertical extraction wells in the most recent LFG collection system expansion has increased the collection efficiency of the collection system.

LFG generation modelling was completed as part of the EA for the proposed expansion of the W12A Landfill. The modelling estimates that the amount of LFG to be flared will peak in 2049 at approximately 3,700 scfm.

### 1.4 Status of Renewable Natural Gas (RNG) Negotiations

On October 1, 2019, Council directed staff to potentially supply renewable natural gas (RNG) to FortisBC Energy Inc. through a future facility at the landfill, subject to the outcome and Council approval through a request for proposal (RFP) process. Discussions with FortisBC have resumed. They were on hold due to regulatory discussions in British Columbia, the pandemic, and the impacts and uncertainties occurring in energy markets.

#### 2.0 Discussion and Considerations

### 2.1 Project Description

The existing LFG Flaring Facility is operating at capacity and will not be able to destroy more landfill gas until a new larger flaring station is constructed. The next LFG collection system expansion is anticipated to occur in Winter 2023-2024 in consideration of the current final capping progress within the existing approved waste footprint. The MECP has approved the ECA application to replace the existing LFG Flaring Facility. Construction of a new larger flaring facility includes the following improvements:

- Accommodate increasing landfill gas flow collected from new waste at W12A;
- Has been sized to accommodate the expected landfill gas produced from the proposed expanded W12A landfill:
- Destroy more GHG gases and mitigate potential odour emission from the landfill;
- Establish infrastructure for a future potential RNG project.

### 2.2 Appointment of Comcor Environmental Ltd.

Comcor has specialized experience in the field of design, installation and operation of LFG Flaring Facilities. 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 as associated with the majority of these facilities.

Comcor 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 EPA approval, detail design and tendering assistance for the LFG Flaring Facility replacement by Council on March 23, 2021. Using Comcor for the subsequent construction administration services related to the new LFG Flaring Facility construction will expedite the project without losing time to seek and review alternative proposals. Comcor has specific knowledge of this project whereas other consultants would need time to review the new LFG Flaring Facility design details.

Considering the above, Comcor was invited to submit a proposal to carry out the engineering services related to the construction contract administration of the replacement Landfill Gas Flaring Facility. 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 on this project for the construction administration is of financial advantage to the City because the firm has specific knowledge of the project 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 the EPA approval, detailed design and tendering process for this project for a fee of \$217,520 (excluding HST). The fee includes a 15% contingency of \$28,380.

## 3.0 Financial Impact/Considerations

### 3.1 Capital Budget

The funds required for this award and LFG Flaring Facility replacement are available within the existing capital budget.

The Sources of Financing Report is attached hereto as Appendix "A".

### 3.2 Operating Budget

It is expected there will be no increases in annual operating costs for the landfill associated with operation of the new LFG Flaring Station. This is expected as the installation of new equipment such as centrifugal fans and variable frequency drives will be more efficient even though the overall system will have more volumetric capacity.

## 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. It is recommended that Comcor continue as the Consultant and provide construction administration services for the new LFG Faring Facility 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 – Source of Financing

#### #23062

March 21, 2023 (Award Contract)

Chair and Members
Civic Works Committee

RE: Award of Construction Administration Services, Landfill Gas Flaring Facility Replacement at W12A Landfill Site (Subledger LF210001)

Capital Project SW604020 - Landfill Gas Collection

Comcor Environmental Ltd. - \$217,520.00 (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	This Submission	Total
Engineering	50,000	0	50,000
Construction	560,605	221,349	339,256
Total Expenditures	\$610,605	\$221,349	\$389,256
Sources of Financing			
Canada Community-Building Fund	610,605	221,349	389,256
Total Financing	\$610,605	\$221,349	\$389,256
Financial Note:			
Contract Price	\$217,520		
Add: HST @13%	28,278	_	
Total Contract Price Including Taxes	245,798		
Less: HST Rebate	-24,449	_	
Net Contract Price	\$221,349		

Jason Davies

Manager of Financial Planning and Policy

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