

TO:	CHAIR AND MEMBERS WASTE MANAGEMENT WORKING GROUP MEETING ON SEPTEMBER 28, 2017
FROM:	JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE
SUBJECT:	UPDATE REPORT #6: PROPOSED TECHNICAL STUDIES FOR INCLUSION IN TERMS OF REFERENCE

RECOMMENDATION

That, on the recommendation of the Director - Environment, Fleet and Solid Waste, this report **BE RECEIVED** for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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Relevant reports that can be found at www.london.ca under City Hall (Meetings) include:

- Appointment of Consulting Engineer for Various Technical Studies as part of the Environmental Assessment Process for the Proposed Expansion of the W12A Landfill Site (July 17, 2017 meeting of the Civic Works Committee (CWC), Item #6)
- Update and Next Steps – Resource Recovery Strategy and Residual Waste Disposal Strategy as part of the Environmental Assessment Process (February 7, 2017 meeting of the CWC, Item #10)
- Individual Environmental Assessment Long Term Solid Waste Resource Recovery & Disposal Plans (October 6, 2015 meeting of the CWC, Item #14)

Relevant reports that can be found at www.london.ca under City Hall (Meetings – Advisory and other Committees) include:

- Decision Report #1: General Framework for the Community Engagement Program for the Resource Recovery and Residual Waste Disposal Strategies as part of the Environmental Assessment Process (January 19, 2017 meeting of the Waste Management Working Group, Item #5)

COUNCIL'S 2015-2019 STRATEGIC PLAN

Municipal Council has recognized the importance of solid waste management in its 2015-2019 - Strategic Plan for the City of London ([2015 – 2019 Strategic Plan](#)) as follows:

Building a Sustainable City

- Strong and healthy environment
- Robust infrastructure

Growing our Economy

- Local, regional, and global innovation
- Strategic, collaborative partnerships

Leading in Public Service

- Proactive financial management
- Innovative & supportive organizational practices
- Collaborative, engaged leadership
- Excellent service delivery

BACKGROUND

PURPOSE:

This report provides the Waste Management Working Group with an update on the technical studies required for completion of the Individual Environmental Assessment (EA) for the expansion of the W12A Landfill.

CONTEXT:Resource Recovery Strategy and Residual Waste Disposal Strategy

In October 2015 Municipal Council directed staff to proceed with the development of a long-term Resource Recovery Strategy and a Residual Waste Disposal Strategy.

City staff are responsible for the overall direction, management, community engagement and some of the technical work of the Resource Recovery and Residual Waste Disposal Strategies including the EA. Consultants are hired as required to prepare and/or assist in the preparation of supporting documentation and completion of technical studies.

Consultants

In spring 2016, City staff sought competitive proposals to provide consulting services for:

- Preparation of the Proposed Terms of Reference
- Completion of the Planning/Evaluation portion of the Environmental Assessment
- Assistance with the development of a Resource Recovery Plan
- Assistance with the Community Engagement Program

Golder Associates Ltd. was awarded the contract for \$567,000 on June 1, 2016.

The completion of technical studies was not included in the initial proposal call as the type and requirements of the various technical studies cannot be finalized until after initiation of the community engagement process and further discussions with the Ministry of the Environment and Climate Change (MOECC). Further, City staff wanted to assemble a strong team of technical specialists based on staff's understanding of the W12A Landfill and previous work that had been completed at the site and not rely on a consulting firm to create the team on our behalf.

DISCUSSION
Proposed Evaluation Criteria

It has been proposed that the expansion of the W12A Landfill is the overall preferred alternative to meet the City of London's long term residual waste needs. This is based on the conclusions of the *W12A Landfill Area Study* (IBI & MacViro, 2005) and an assessment of residual waste disposal alternatives using screening criteria from the *Terms of Reference Codes of Practice* (MOECC, 2014).

The proposed expansion of the W12A Landfill will occur above and/or immediately beside the existing W12A Landfill. Expansion alternatives (referred to as "Alternative Methods" in an Environmental Assessment) will be developed and presented to stakeholders in the fall of 2017. It is anticipated there will be three or four expansion Alternative Methods.

The selection of the preferred Alternative Method will require a systematic evaluation of the three or four Alternative Methods. The proposed evaluation criteria (Table 1) used to determine the overall preferred alternative for the landfill expansion was previously presented to Civic Works Committee on July 1, 2017 meeting and will be presented to stakeholders in the fall of 2017.

Table 1 – Proposed Evaluation Criteria

Component	Sub-component	Rationale for Sub-component
Natural Environment Criteria		
Atmosphere	Air quality (including odour and greenhouse gases)	Landfill expansion and associated operations can produce gases containing contaminants that degrade air quality if they are emitted to the atmosphere. Construction activities associated with landfill expansion and continued landfill operation can lead to levels of particulates (dust) in the air. Landfill operation can also result in odour effects.

Table 1 – Proposed Evaluation Criteria

Component	Sub-component	Rationale for Sub-component
Natural Environment Criteria (continued)		
Atmosphere	Noise	Landfill expansion and associated operations will generate noise that will be emitted into the atmosphere and could affect off-site points of reception.
Biology	Aquatic ecosystems	Landfill expansion can remove or disturb the functioning of natural aquatic habitats and species, including rare, threatened or endangered species.
	Terrestrial ecosystems	Landfill expansion could remove or disturb the functioning of natural terrestrial habitats and vegetation, including rare, threatened or endangered species.
Geology and Hydrogeology	Groundwater quality	Contaminants associated with the landfill expansion and associated operations can enter the groundwater and impact off-site groundwater or surface water.
Surface Water	Surface water quality	Contaminants associated with the landfill expansion and associated operations can seep or enter into surface water and adversely affect water quality and aquatic life.
	Surface water quantity	Operations associated with the landfill expansion can alter runoff and peak flows.
Socio-Economic Criteria		
Agriculture	Agriculture	The agricultural land base or agricultural operations may be impacted by the landfill expansion and associated operations.
Archaeology	Archaeological	A horizontal landfill expansion has the potential to affect archaeological resources.
Culture	Cultural Heritage Landscapes	Identified cultural heritage landscapes can be altered by the landfill expansion. Depending on the nature of identified cultural heritage landscapes, there could be an impact by the ongoing operation of the landfill.
	Cultural Heritage Resources	Heritage attributes of identified cultural heritage resources could be impacted by the landfill expansion and associated operations.
Land Use	Current and planned future land uses	Waste disposal facilities can potentially affect the use and enjoyment of sensitive uses in the vicinity of the site.
Socio-economic	Economic	The continued operation of the landfill can influence employment in the regional area.
Visual	Visual	The landfill expansion can affect the local community by changes in the visual appearance of the site.
Transportation	Traffic	The operations at the landfill can impact the surrounding traffic through changes in truck traffic to/from the landfill.
Technical Criteria		
Design and Operations	Design and Operations	Sites that require less engineering to assure protection of off-site groundwater or air quality are typically preferred from a public and regulatory perspective.

Consultant Selection

Eleven (11) technical studies will be required to generate the information and data necessary to undertake the comparative evaluation using the criteria in Table 1. Table 2 provides an update on the consultants selected as per the Procurement of Goods & Services Policy and the budget for each study.

Table 2 – Technical Studies, Consultant and Budget

Study	Consultant	Budget
Natural Environment Criteria		
Atmosphere (Air Emissions, Odour, Dust and Noise)	• Golder Associates Ltd.	\$70,500
Biology (Aquatic Terrestrial)	• AECOM	\$90,460
Hydrogeology	• Golder Associates Ltd	\$25,810
Surface Water	• Dillon Consulting Limited (Hydrology)	\$83,990
	• Golder Associates Ltd (Stormwater Management Ponds)	\$48,680
Socio-Economic Criteria		
Agriculture and Land Use	• MacNaughton Hermsen Britton Clarkson Planning Limited (MHBC)	\$33,330
Archaeology, Cultural and Heritage	• Golder Associates Ltd	\$99,680
Economic	• Golder Associates Ltd	\$25,810
Transportation	• Dillon Consulting Limited	\$41,330
Visual	• Ron Koudys Landscape Architects	\$25,360
Technical Criteria		
Design and Operations	• Golder Associates Ltd	\$87,390
Total		\$632,340

The initial assignment to Golder Associates Ltd. coupled with the technical study assignments in Table 2 total approximately \$1.2 million. The budget for this portion of the project was \$1.25 million. The overall budget for the project is \$2.8 million.

ACKNOWLEDGEMENTS

This report was prepared with assistance from Mike Losee, Division Manager, Solid Waste Management and Jane Kittmer, Solid Waste Planning Coordinator.

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