Operations Committee

Wednesday, August 12, 2009, 4:00 p.m.
City Hall - Council Chambers

Committee Members	Areas of Responsibility	
Councillor S. Williams, Chair	Operations	CRCA
Councillor H. Noble	Community Services	Airport Board
Councillor L. Severson	Fire	Arena Advisory Board
Mayor D.L. Henderson, Ex-Officio	Museum	Visual/Performing Arts Committee
	Library Board	PLMG
	Cemetery Board	BMAAC
	St. Lawrence Lodge Mgmt.Board	Brockville Municipal Non-Profit Housing Committee
	L,L&G Health Unit	

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LANDFILL LEACHATE TREATMENT FEASIBILITY ANALYSIS

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REQUEST FOR STOP SIGNS VARIOUS LOCATIONS
(WOLTHAUSEN AT PEARL; WOLTHAUSEN AT BROCK; ADLEY AT BROCK)

CONSENT AGENDA

August 6, 2009

REPORT TO OPERATIONS COMMITTEE – AUGUST 12, 2009

2009-129-08
LANDFILL LEACHATE TREATMENT FEASIBILITY ANALYSIS

C.J. COSGROVE, P.ENG.
DIRECTOR OF OPERATIONS

RECOMMENDATION

THAT Golder Associates Ltd. be retained to conduct a feasibility analysis of on-site natural treatment of leachate at the Brockville landfill site at a cost of $53,000 plus GST; and

THAT this expenditure be charged to account C4060-LTTS.

PURPOSE

The purpose of this report is to initiate a feasibility analysis of on-site treatment of leachate from the City landfill site.

ORIGIN

An average of 1000 m^3/day of leachate from the City landfill site is pumped to the wastewater collection system and ultimately treated at the Water Pollution Control Centre (WPCC). As part of an overall plan to increase the available unallocated capacity at the WPCC, $70,000 was allocated in the 2008 Capital Budget for analysis of the feasibility of treating the landfill leachate on-site, thereby diverting this quantity of water from the WPCC.

ANALYSIS

Natural treatment systems include different types and combinations of filters, such as sand or peat, and wetlands, both existing and constructed. For leachate treatment, natural treatment systems typically have lower capital and operating costs than mechanical/chemical treatment systems.

Over recent years, the Ministry of Environment has modified their approach to the approval of leachate treatment systems to one that uses site-specific discharge criteria. This has broadened the potential use of natural treatment systems.

Golder Associates Ltd. (Golder) designed a vertical flow wetland treatment system which was constructed and commissioned in 2008 at the Ottawa Valley Waste Recovery Centre near Pembroke. Golder also has more than 20 years of experience of monitoring leachate, groundwater and surface water characteristics at the Brockville landfill site. Therefore, Golder was requested to submit a proposal to conduct a feasibility analysis of on-site natural treatment of leachate at the City landfill site.

The feasibility analysis will:

- Define design requirements (capacity and discharge criteria)
- Define areas suitable for construction of the system
- Define areas suitable for the use/discharge of treated leachate
- Determine permitting requirements
- Minimize environmental impacts
- Define capital and operations cost estimates
- Develop an implementation schedule

The final report would be completed by the second week of December 2009, with key deliverables received in time to include a project in the 2010 Capital budget, if deemed appropriate.

It is recommended that this assignment be awarded to Golder on the basis of their significant knowledge of the City landfill site, their leadership position in designing natural leachate treatment systems in Ontario, and their working relationship with the Ministry of the Environment in Eastern Ontario.

POLICY IMPLICATIONS

As per the City's Purchasing By-Law, Section 6.3, and Procedure 1012, Council approval is required for a consulting assignment of this magnitude where only one proposal is solicited.

FINANCIAL CONSIDERATIONS

$70,000 was allocated to this project in the 2008 Capital Budget. Therefore, there are sufficient funds in account C4060-LTTS for this work.

C. J. Cosgrove, P. Eng.
Director of Operations

D. Cyr
Director of Finance

B. Casselman
City Manager

August 6, 2009

REPORT TO OPERATIONS COMMITTEE – AUGUST 12, 2009

2009-132-08
REQUEST FOR STOP SIGNS
VARIOUS LOCATIONS

C. J. COSGROVE, P. ENG.
DIRECTOR OF OPERATIONS
P. E. RAABE, P. ENG.
MUNICIPAL ENGINEER

RECOMMENDED

THAT a stop sign be placed on Wolthausen Street in the southbound direction at Pearl Street; and

THAT a stop sign be placed on Wolthausen Street in the northbound direction at Brock Street; and

THAT a stop sign be placed on Adley Drive in the southbound direction at Brock Street; and

THAT By-law 21-93 is amended accordingly.

PURPOSE/BACKGROUND

The Operations Department, Engineering Division, was contacted by local residents requesting stop signs be placed at the above noted intersections to control traffic movements.

ANALYSIS/OPTIONS

According to the Highway Traffic Act (HTA), where no traffic control device is present at an intersection, the basic rules of the road apply. The HTA assigns priority to vehicles already within the intersection or, in the event two or more vehicles are approaching the intersection at the same time, the driver on the left must yield to the vehicle on the right. Intersections with no traffic control devices are not common and usually occur on local intersecting streets where traffic volumes are minimal, visibility is good, and operating speeds are low.

Should this method of operation not control the allocation of right-of-way movements of the intersection, it is necessary to install a traffic control device. There are a number of traffic control devices available, increasing in level of control from a yield sign to a stop sign up to full traffic signals.

Yield signs are used where the normal right-of-way rule does not provide safe, convenient and efficient traffic movements and where a stop sign would be too restrictive. Vehicles approaching the sign must yield the right-of-way to oncoming vehicles or vehicles on the

intersecting street. They are typically used on roads where traffic volumes are low, visibility is good and operating speeds are low.

Stop signs are used to clearly assign right-of-way at the intersection. In general, Stop signs should only be used where traffic engineering studies considering such factors as traffic speed, traffic volumes, restricted sight lines and collision experience indicate that the use of Stop sign is warranted.

With the development of Brockwoods Subdivision, it is recommended that stop signs be installed in the above noted locations.

POLICY IMPLICATIONS

The installation of stop signs should follow the guidelines and warrants of the Ontario Traffic Manual. An amendment to the City's Traffic By-Law 21-93 requires Council's authorization.

FINANCIAL CONSIDERATIONS

The Operations Department, Public Works Division will provide and install the necessary signage at the expense of the subdivision developer.

CONCLUSION

It is recommended that stop signs be installed in the above noted locations to control traffic movements at the intersections.

C.J. Cosgrove, P.Eng.
Director of Operations

P.E. Raabe, P.Eng.
Municipal Engineer

D. Cyr
Director of Finance

B. Casselman
City Manager