



TORONTO STAFF REPORT

September 15, 2006

To: City Council

From: General Manager, Solid Waste Management Services
 General Manager, Toronto Water
 Director, Purchasing and Materials Management

Subject: Request for Proposal (RFP) 6033-06-3218
 For Contingency Waste Disposal Capacity

Purpose:

The purpose of this report is to advise on the results of Request for Proposal 6033-06-3218 for Contingency Waste Disposal Capacity and request authority to award contracts to the recommended bidders.

Financial Implications and Impact Statement:

The total contract award identified in this report is \$24,219,945.30 including all applicable taxes and charges. This is based on a projected CPI increase of 1.9% per year. The cost to the City net of GST is \$22,849,005.00. Funding will be included in the 2007-2010 Toronto Water operating budget submissions in the amount of \$12,733,805.00 net of GST and in the Solid Waste 2007-2010 operating budget submissions in the amount of \$10,115,200.00 net of GST as follows:

Program	2007	2008	2009	2010	Total
Biosolids and By-Products - Toronto Water (WW100)	\$878,925	\$1,044,925	\$1,216,900	\$1,550,000	\$4,690,750
Reserve Fee - Toronto Water (WW100)	\$5,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$8,000,000
Beneficial Use Biosolids - Toronto Water (WW100)	\$43,055	\$0	\$0	\$0	\$43,055
Sub-Total - Toronto Water (WW100)	\$5,921,980	\$2,044,925	\$2,216,900	\$2,550,000	\$12,733,805
Solid Waste Disposal - Solid Waste Management (SW0554)	\$1,895,400	\$2,253,300	\$2,624,000	\$3,342,500	\$10,115,200
TOTAL	\$7,817,380	\$4,298,225	\$4,840,900	\$5,892,500	\$22,849,005

Recommendations:

It is recommended that:

- (1) authority be granted to the General Manager, Solid Waste Management, to negotiate and award a contract to St. Thomas Sanitary Collection Service Limited Partnership, to a maximum amount of \$10,722,112.00 including all applicable charges and taxes, for the receipt and disposal of residual solid waste re-directed from the Republic Agreement from January 1, 2007 to December 31, 2010, having submitted the highest scoring proposal for this requested service;
- (2) authority be granted to the General Manager, Toronto Water, to negotiate and award a contract to, St. Thomas Sanitary Collection Service Limited Partnership, subject to satisfactory negotiations, to a maximum amount of \$13,452,195.00 including all applicable charges and taxes, for the provision of contingency disposal capacity for biosolids and Water and Wastewater system by-products from January 1, 2007 to December 31, 2010, having submitted the highest scoring proposal for this requested service;
- (3) authority be granted to the General Manager, Toronto Water, to negotiate and award a contract to All Treat Farms Limited, subject to satisfactory negotiations, including an option for additional processing capacity if the project proves to be successful, in the amount of \$45,638.30 including all applicable charges and taxes, for processing 500 tonnes of biosolids for beneficial use in 2007;
- (4) the General Managers of Solid Waste Management and Toronto Water be authorized to negotiate amendments to contracts with haulage companies currently under contract to the City for the haulage of solid waste, biosolids and by-products to St. Thomas Sanitary Collection Service Limited Partnership, and biosolids to All Treat Farms Limited, if satisfactory terms and conditions can be attained, or proceed to a competitive procurement process if satisfactory terms and conditions cannot be attained;
- (5) the General Managers of Solid Waste Management and Toronto Water be directed to submit a staff report to the Works Committee on the outcome of the proposed contract negotiations identified in Recommendations 1, 2, 3 and 4 and report any net increase or decrease in associated haulage costs; and
- (6) the appropriate City officials be authorized and directed to give effect thereto.

Background:

The City of Toronto has contracted with Republic Services for the receipt and disposal of solid waste and other City waste streams at its Carleton Farms Landfill in Michigan. Until recently, that landfill also accepted the City's biosolids for disposal.

In order to attempt to address the need for contingency disposal capacity in the event of a closure of the U.S.-Canada border, City Council authorized the issuance of RFP No. 6033-06-3218 at its meeting of May 23, 24 and 25, 2006, Notice of Motion J (22), for Contingency Disposal Capacity.

Comments:

Forty-three (43) bidders from the City's bidder's list were notified and invited to submit proposals for Contingency Waste Disposal Capacity RFP 6033-06-3218 and the RFP was advertised on the City's internet website. The proposals were opened and the firm names were read out at the public opening on July 18, 2006. Three (3) proposals were received from the following firms:

1. St. Thomas Sanitary Collection Service Limited Partnership (Green Lane Landfill)
2. All Treat Farms Limited
3. Greey CTS Inc.

RFP responses were to address contingency disposal capacity for the following three types of wastes:

- municipal solid waste ("MSW") or Industrial, Commercial, Institutional ("IC&I Waste"), or a combination of these;
- Toronto Water by-products, including dewatered biosolids; and
- street sweepings.

In addition, proposals were to address the receipt and disposal of solid waste "re-directed" from the Republic Agreement to one or more landfills in Ontario, in order to provide some contingency capacity in the event of short-term border closure, and to initiate the re-establishment of disposal in Ontario by the City.

When the Republic Agreement was re-negotiated in early 2006, the new contract provided the City with the option of re-directing residual solid waste to Ontario landfills as an alternative to Republic's Carleton Farms Landfill. In 2006, the amount of solid waste that can be re-directed is 25,000 tonnes, which adjusted on a weekly pro-rated basis allows for 7,000 tonnes from September to December 31, 2006.

The total amount of solid waste that can be re-directed increases annually, reaching a peak of 50,000 tonnes in 2010.

St. Thomas Sanitary Collection Service Limited Partnership (Green Lane Landfill)

Green Lane submitted a proposal that offers the City contingency disposal capacity for all waste types identified in the RFP. However, Green Lane has identified an initial “Reserve Fee” of \$5 million per waste type for the first year of service provision in order to construct receiving cells in anticipation of the receipt of waste from the City. The City would be required to pay an initial Reserve Fee of \$15 million for three waste types at the commencement of the contract. For the remaining three years, the Reserve Fee would drop to \$1 million per waste type per year for an additional reserve fee of \$9 million (2008 to 2010). In the event that the City activates the contingency disposal capacity, the tonnage rates to be charged range from \$65 for municipal waste to \$115 for street sweepings.

In addition, the City would have to contract for waste transport with a transport firm at an anticipated rate of approximately \$25 per tonne based on fuel at \$0.95 cents per litre. The disposal of one tonne of solid waste at Green Lane would cost the City approximately \$90 (in addition to the Reserve Fee). By comparison, the City pays a combined cost of approximately \$63 per tonne based on fuel at \$0.95 cents per litre for the haulage and disposal of waste at Republic’s Carleton Farms Landfill. Therefore, an estimated \$27 per tonne increase in disposal costs equates to an over 42% increase above the current contract with Republic’s Carleton Farms Landfill.

Due to the high per tonne disposal cost and the significant Reserve Fee required by Green Lane, it is being recommended that the award of contracts be limited to re-directed solid waste and to contingency disposal capacity for biosolids and other by-products based on a four-to-one ratio (four tonnes of solid waste to one tonne of biosolids).

Access to a landfill for the disposal of biosolids under a short-term border closure is critical for Toronto Water’s ability to manage this material. The same access to disposal is not critical for street sweepings (which can be temporarily stored or not collected), and waste from the private sector (i.e. “IC&I” waste) can be directed to private sector landfills. Alternative contingency disposal options will have to be found for the City’s municipal solid waste in the event of a border closure. Therefore the recommended award of contract is limited to re-directed solid waste and biosolids/by-products on a contingency basis.

The total potential contract award to St. Thomas Sanitary Collection Service Limited Partnership identified in this report is \$10,722,112.00, including all applicable taxes and charges, for receipt and disposal of solid waste re-directed from the City’s contract with Republic Services for disposal of solid waste in Michigan. The contract award is based on the provision of disposal capacity from 2007 to 2010, beginning at 30,000 tonnes per year and peaking at 50,000 tonnes in 2010. The following table summarizes the annual costs for re-directed solid waste disposed at the Green Lane Landfill from 2007 to 2010:

Table 1 - Cost of Receipt and Disposal of Re-directed Solid Waste at Green Lane Landfill

Calendar Year	Maximum Tonnes per Year	Cost per Tonne *	Cost per Year	GST	Total Annual Cost incl. GST
2007	30,000	\$63.18	\$1,895,400	\$113,724	\$2,009,124
2008	35,000	\$64.38	\$2,253,300	\$135,198	\$2,388,498
2009	40,000	\$65.60	\$2,624,000	\$157,440	\$2,781,440
2010	50,000	\$66.85	\$3,342,500	\$200,550	\$3,543,050
Total	155,000		\$10,115,200	\$606,912	\$10,722,112

* Increased annually by a projected increase in CPI of 1.9%.

Green Lane has identified a “Provisional Fee” of \$1,060 per hour for extended receiving hours. Due to the relatively low quantities of re-directed solid waste we do not anticipate a need to have the landfill run extended receiving hours and have therefore not factored the Provisional Fee into the service cost.

The Reserve Fee does not apply to re-directed waste disposed at Green Lane since landfill capacity would not be held in reserve for the City as it would under a contingency scenario.

A contract award to Green Lane would result in a premium paid on a per tonne basis to Green Lane, instead of utilizing the City’s contract with Republic Services for haulage and disposal in Michigan. For example, the net cost of haulage and disposal of 1 tonne of solid waste to Republic in 2007 will be approximately \$63, as opposed to \$88.18 for haulage and disposal at Green Lane (allowing for approximately \$25 per tonne for haulage from Toronto to Green Lane). This represents a percentage increase of approximately 40 percent resulting in a premium of approximately \$755,000.00 in 2007, \$898,000 in 2008, \$1,046,000 in 2009 and \$1,332,000 in 2010.

Green Lane Landfill - Contingency Disposal Capacity for Biosolids and By-Products

Toronto Water is reliant on the disposal of biosolids and other by-products (such as grits and screenings) of the Water and Wastewater treatment systems at disposal sites in the U.S. and at co-composting sites in Quebec. Disruption in this supply chain that could result from a short-term closure of the U.S.-Canada border, processing equipment failure, or regulatory measures would result in a shortfall of required disposal capacity.

The availability of disposal capacity at Green Lane on a contingency basis would reduce the City’s risk in the event of a short-term border closure, processing equipment failure, or regulatory action, such as the temporary closure of a landfill and assist Toronto Water to maintain full service provision and operations.

In order to provide contingency disposal capacity, Green Lane has identified a requirement for Toronto Water to pay a Reserve Fee to retain landfill capacity in the form of a constructed cell, in order to be able to respond to the delivery of waste. The initial Reserve Fee is \$5 million, which is reduced to \$1 million in remaining years (2008-2010).

Green Lane has quoted a cost for provision of extended receiving hours. However, it is not anticipated that extended receiving hours will be required due to the tonnage amount and the relative short distance to the Green Lane Landfill.

The following two tables summarize the costs including the Reserve Fee where the contingency disposal capacity is fully utilized (Table 2) and where no disposal capacity is utilized, so only the cost of the Reserve Fee is therefore applicable (Table 3).

Green Lane’s proposal offers to receive and dispose biosolids and other by-products on a contingency basis on a four-to-one ratio with solid waste, for on-site management purposes. The tonnage calculations in the following table are linked to the recommended award of contract to Green Lane for re-directed solid waste for the years 2007-2010, on the required four-to-one ratio basis.

Table 2 - Contingency Disposal Capacity at Green Lane Landfill for Biosolids and Toronto Water By-Products (Cost Calculations Based on Total Usage of Contingency Disposal Capacity)

Calendar Year	Maximum Tonnes per Year	Cost per Tonne *	Disposal Cost	Reserve Fee	Total Cost including Reserve Fee	GST	Total Cost including Reserve Fee and GST
2007	7,500	\$117.19	\$878,925	\$5,000,000	\$5,878,925	\$352,736	\$6,231,661
2008	8,750	\$119.42	\$1,044,925	\$1,000,000	\$2,044,925	\$122,695	\$2,167,620
2009	10,000	\$121.69	\$1,216,900	\$1,000,000	\$2,216,900	\$133,014	\$2,349,914
2010	12,500	\$124.00	\$1,550,000	\$1,000,000	\$2,550,000	\$153,000	\$2,703,000
Total	38,750		\$4,690,750	\$8,000,000	\$12,690,750	\$761,445	\$13,452,195

* Increased annually by a projected increase in CPI of 1.9%.

Table 3 Contingency Disposal Capacity at Green Lane Landfill for Biosolids and Water By-Products (Cost Calculations Based on Zero Usage of Available Capacity)

Calendar Year	Annual Reserve Fee	GST	Annual Reserve Fee Including GST
2007	\$5,000,000	\$300,000	\$5,300,000
2008	\$1,000,000	\$60,000	\$1,060,000
2009	\$1,000,000	\$60,000	\$1,060,000
2010	\$1,000,000	\$60,000	\$1,060,000
Total	\$8,000,000	\$480,000	\$8,480,000

All Treat Farms Ltd.

All Treat Farms Ltd. has submitted a proposal for the receipt and beneficial use of up to 500 tonnes per year of biosolids through the “Gore Cover System”, which is an in-vessel composting technology that provides rapid organic decomposition at a total cost of \$43,055.00 (net of GST rebate) based on a cost of \$86.11 per tonne for 500 tonnes.

The receipt of 500 tonnes of biosolids by All Treat Farms meets the City’s requirement for contingency disposal capacity because it could be utilized by the City on an “as-needed” basis. However, as the Gore technology provides Toronto Water with a beneficial use technology for biosolids, it forms an “alternate” proposal under the RFP. If successful, the Gore composting technology could provide the City with an option for the beneficial use of substantial quantities of biosolids.

It is therefore being recommended that All Treat Farms be awarded a contract to receive 500 tonnes of biosolids from the City, to manage it for beneficial use, and that the City negotiate an option for additional processing capacity if the Gore technology proves successful in processing biosolids from the City.

A potential exists to expand the contract for processing capacity in excess of 100,000 tonnes per year. A subsequent report will be submitted on the results of the processing of the initial 500 tonnes of biosolids and associated cost implications of potentially expanding the amount of biosolids processed by All Treat Farms.

Greedy CTS

Greedy CTS has submitted a proposal to manage the City’s residual solid waste, however, at an as yet to be built gasification plant in Southgate Township, Ontario (near Arthur). This does not satisfy the requirements of the RFP and therefore this proposal has been declared informal.

Greedy CTS’ contact information will be maintained on the City’s vendor database and the firm will be notified in the event that a procurement call is issued for new and emerging technologies.

Haulage

It is anticipated that current haulage providers operating under current or supplementary contracts to the City will be able to provide the required haulage services to Green Lane and All Treat Farms. Should there be any cost increases, the General Managers of Solid Waste Management and Toronto Water will report to Works Committee.

Conclusions:

Awarding contracts to St. Thomas Sanitary Collection Service Limited Partnership (Green Lane Landfill near London, Ontario) and All Treat Farms (near Arthur, Ontario) will reduce the City's reliance on disposal in Michigan by re-initiating disposal in Ontario and assisting in meeting the commitment of concluding waste shipments to Michigan by the end of 2010; provide a contingency plan for the disposal of biosolids in the event of a short-term border closure; and trigger the use of a beneficial use technology for biosolids, at a facility located in Ontario.

Contact:

Lawson Oates
Manager, Strategic Planning
Solid Waste Management Services
Phone: (416) 392-9744
e-mail: loates@toronto.ca

Nancy Fleming
Senior Engineer
Toronto Water
Phone: (416) 397-9556
e-mail: nfleming@toronto.ca

John McNamara, Manager
Corporate Purchasing, Goods and Services
Purchasing and Materials Management
Phone: (416) 392-7316
e-mail: jmcnama@toronto.ca

L.A. Pagano, P. Eng.
Director
Purchasing and Materials Management

Lou Di Gironimo
General Manager
Toronto Water

Richard Butts
General Manager
Solid Waste Management Services