

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON TUESDAY, FEBRUARY 4, 2020</b>
<b>FROM:</b>	<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES &amp; CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>AWARD OF CONTRACT RFP 19-59: INSTALLATION OF SLUDGE MIXING SYSTEMS AT GREENWAY WASTEWATER TREATMENT PLANT</b>

<b>RECOMMENDATION</b>
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That, on the recommendation of the Managing Director of Environmental and Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to the award of a construction contract for the installation of sludge mixing systems at Greenway Wastewater Treatment Plant:

- a) The bid submitted by Dielco Industrial Contractors Ltd., **BE ACCEPTED** in the total amount of \$369,321.58, including contingency, excluding HST;
- b) the financing for the project **BE APPROVED** in accordance with the “Sources of Financing Report” attached hereto as Appendix “A”;
- c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract; and,
- e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

<b>PREVIOUS REPORTS PERTINENT TO THIS MATTER</b>
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Civic Works Committee, January 8, 2019, Item 2.3 – Greenway Sludge Tank Mixing System Pre-Purchase.

Civic Works Committee, October 4, 2016, Item 8 – Infrastructure Canada Phase 1- Project Requests- Clean Water and Wastewater Fund.

<b>2019-2023 STRATEGIC PLAN</b>
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**Strategic Plan**

This project supports the 2019-2023 Strategic Plan through the following: Building a Sustainable City, Build infrastructure to support future development and protect the environment.

<b>BACKGROUND</b>
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**Purpose**

The purpose of this report is to seek Council approval to award a contract for the

installation of hydraulic mixing systems in the sludge storage tanks at Greenway Wastewater Treatment Plant. These mixing systems were previously purchased.

## **Context**

Thickened sludge at the Greenway Wastewater Treatment Plant is stored in two above-ground storage tanks. The contents of these tanks require constant mixing. Hydraulic mixing is an upgrade intended to improve mixing and reliability, reducing operational costs.

## **DISCUSSION**

As previously reported to Council, solids handling operations at the City's wastewater treatment plants take waste activated sludge and thicken it from approximately 0.5% solids to over 5% solids by removing a portion of the water. This thickened sludge is stored in above-ground tanks at Greenway WWTP prior to dewatering by centrifuges and subsequent incineration.

Sufficient mixing of the thickened sludge is important for the performance of the centrifuges and the incinerator, since a consistent feedstock for those processes enables better fine-tuning of polymer addition (for dewatering) and temperature control (for incineration). This reduces overall operational cost and improves performance. Sufficient mixing also ensures that solids deposition in the tanks is minimized, reducing downtime and maintenance requirements.

Solids management at the City's plants and pumping stations was one of many Canadian Water and Wastewater Fund (CWWF) projects proposed and approved. This allows the City to purchase and install these important upgrades at a significantly reduced cost.

With the pre-purchase and delivery of two new hydraulic mixing systems now complete, the City requires an industrial contractor to undertake the installation.

## **Procurement Process**

A Request for Proposal (RFP): RFP19-59 was issued by the City. Three contracting companies submitted proposals as follows:

- BGL Contractors Corp.
- Dielco Industrial Contractors Ltd.
- JMR Electric Ltd.

The submissions were reviewed by staff from Wastewater Treatment Operations and Purchasing and Supply to ensure compliance with the City's Procurement of Goods and Services Policy. All proposals met the City's requirements for submission acceptance, and were evaluated via a weighted scoring system by the review team. The proposal from Dielco Industrial Contractors Ltd. scored the highest based on this scoring system and offered the best overall value to the City. City staff then undertook a Best and Final Offer process with Dielco to refine the work plan and arrive at a final agreed price and scope of work.

## **Project Schedule and Budget Implications**

The installation of the mixing systems must be complete by the end of March in order to take advantage of the remaining CWWF funding. This installation contract will be funded through a combination of CWWF- and rate-supported capital budgets.

<b>CONCLUSIONS</b>
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Dielco Industrial Contractors Ltd. received the highest score through the RFP selection process for RFP19-59. Dielco regularly competes work of a similar nature for the City and demonstrated a good understanding of the project in their proposal. It is recommended that Dielco Industrial Contractors Ltd. be awarded the contract for installation of hydraulic sludge mixing systems at Greenway Wastewater Treatment Plant.

<b>PREPARED BY:</b>	<b>REVIEWED BY:</b>
<b>GEORDIE GAULD DIVISION MANAGER WASTEWATER TREATMENT OPERATIONS</b>	<b>SCOTT MATHERS, MPA, P.ENG. DIRECTOR WATER AND WASTEWATER</b>
<b>RECOMMENDED BY:</b>	
<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL &amp; ENGINEERING SERVICES &amp; CITY ENGINEER</b>	

Attachment: Appendix "A" Sources of Financing

cc: John Freeman, Purchasing and Supply  
Kirby Oudekerk, WTO  
Alan Dunbar, FP&P  
Jason Davies, FP&P  
Chris Ginty, Procurement Officer  
Dave Goyette, Dielco Industrial Contractors Ltd.

**APPENDIX 'A'**

#20009

Chair and Members  
Civic Works Committee

February 4, 2020  
(Award Contract)

**RE: RFP 19-59: Installation of Sludge Mixing Systems at Greenway Wastewater Treatment Plant  
(Subledger FS19GW01)  
Capital Project ES3080 - Greenway Incinerator Refurbishment  
Capital Project ES5086 - Solids & Floatables Management Equipment at 8 Locations  
Dielco Industrial Contractors Ltd. - \$369,321.58 (excluding H.S.T.)**

**FINANCE & CORPORATE SERVICES REPORT ON THE SOURCES OF FINANCING:**

Finance & Corporate Services confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Managing Director, Environmental & Engineering Services & City Engineer, the detailed source of financing for this project is:

<b><u>SUMMARY OF ESTIMATED EXPENDITURES</u></b>	<b><u>Approved Budget</u></b>	<b><u>Committed to Date</u></b>	<b><u>This Submission</u></b>	<b><u>Balance for Future Work</u></b>
<b><u>ES3080-Greenway Incinerator Refurbishment</u></b>				
Engineering	\$613,323	\$613,323		\$0
Construction	5,424,526	5,424,526		0
City Related Expenses	601,130	601,130		0
Additional Vehicle & Equipment	1,079,151	670,797	332,999	75,355
	<u>7,718,130</u>	<u>7,309,776</u>	<u>332,999</u>	<u>75,355</u>
<b><u>ES5086-Solids &amp; Floatables Management Equipment at 8 Locations</u></b>				
Engineering	280,314	280,314		0
Construction	618,010	618,010		0
City Related Expenses	990	990		0
Replace Vehicles & Equipment	1,318,686	1,275,863	42,823	0
	<u>2,218,000</u>	<u>2,175,177</u>	<u>42,823</u>	<u>0</u>
<b>NET ESTIMATED EXPENDITURES</b>	<b><u>\$9,936,130</u></b>	<b><u>\$9,484,953</u></b>	<b><u>\$375,822</u></b> 1)	<b><u>\$75,355</u></b>

**SUMMARY OF FINANCING:**

<b><u>ES3080-Greenway Incinerator Refurbishment</u></b>				
Capital Sewer Rates	\$543,000	\$543,000		\$0
Debenture By-law No. W.-5590-307	1,812,530	1,404,176	332,999	75,355
Drawdown from Sewage Works Reserve Fund	5,362,600	5,362,600		0
	<u>7,718,130</u>	<u>7,309,776</u>	<u>332,999</u>	<u>75,355</u>
<b><u>ES5086-Solids &amp; Floatables Management Equipment at 8 Locations</u></b>				
Drawdown from Sewage Works Reserve Fund	554,500	543,794	10,706	0
Clean Water and Wastewater Fund	1,663,500	1,631,383	32,117	0
	<u>2,218,000</u>	<u>2,175,177</u>	<u>42,823</u>	<u>0</u>
<b>TOTAL FINANCING</b>	<b><u>\$9,936,130</u></b>	<b><u>\$9,484,953</u></b>	<b><u>\$375,822</u></b>	<b><u>\$75,355</u></b>

1) **Financial Note:**

	<b><u>ES3080</u></b>	<b><u>ES5086</u></b>	<b><u>Total</u></b>
Contract Price	\$327,240	\$42,082	\$369,322
Add: HST @13%	42,541	5,471	48,012
Total Contract Price Including Taxes	369,781	47,553	417,334
Less: HST Rebate	36,782	4,730	41,512
Net Contract Price	<u>\$332,999</u>	<u>\$42,823</u>	<u>\$375,822</u>

JG

Jason Davies  
Manager of Financial Planning & Policy