

COUNCIL REPORT

Meeting Date: July 7, 2025
Department: Engineering & Public Works
Report No.: EPW-2025-33
Prepared by: Paul Zuberbuhler, Manager of Environmental Services
Submitted by: Mark Ortiz, Director of Engineering and Public Works
Approved by: Rob Browning, Chief Administrative Officer
SUBJECT: **Strathroy Wastewater Treatment Facility Tender Estimate**

RECOMMENDATION: THAT: Council receive report EPW-2025-33 for information.

BACKGROUND:

The Strathroy Wastewater Treatment Plant (WWTP) is located at 27886 Pike Rd and was upgraded in the year 2000 to convert the treatment process from an aeration lagoon to a mechanical sewage treatment plant with a rated capacity of 8,560 m³/day. In 2010, the WWTP was re-rated to a capacity of 10,000 m³/day.

The primary contributor of flows to the WWTP is the Albert Street Pump Station which conveys approximately 65% of the plant's influent wastewater. The remaining 35% of the flows, are pumped to the WWTP by the Metcalfe Street Pump Station. The treated effluent discharges into the Sydenham River.

Currently, Strathroy WWTP has a single aeration basin (lagoon system) with no means to take offline while maintaining treatment. This prevents staff from isolating the system to undertake necessary maintenance and cleaning.

The inability to conduct maintenance has led to the accumulation of solids in the aeration basin. To allow for maintenance and cleaning, Strathroy WWTP requires a redundant aeration basin system which would allow the existing aeration basin to be taken offline for an extended period of time during maintenance activities. Redundancy is a key component required for effective wastewater treatment plant operations.

Additionally, upgrades to certain components of the WWTP are needed to meet adequate redundancy and resiliency of operation and to replace old worn out equipment. The facility upgrades, include process equipment, controls, instrumentation, electrical, mechanical and site work.

The project scope mainly includes upgrades or modification to:

- New Preliminary Treatment Building, including screens, grit removal and electrical room

- New Distribution Chamber to distribute wastewater flow between the aeration basins
- New Aeration Basin #2 with same capacity as existing
- Cleaning and Retrofit of Aeration Basin #1 including replacement of existing coarse bubble air diffuser system with fine bubble system, replacement of lagoon liner
- New Turbo Air Blowers (x2)
- Return and Waste Activated Sludge Upgrades
- Process Piping and Concrete Works
- Supernatant Chamber Repairs
- Replacement of UV System
- Replacement of Effluent Water Pump
- New Backup Generator
- Replacement of PLC Controls

Construction is estimated to start in the fall of 2025 ending early 2028. The lengthy construction schedule is required for the effective staging such that the new Aeration Basin and associated equipment is constructed and fully commissioned before existing Aeration Basing #1 is taken offline for upgrades.

In consideration of the current market conditions and priority of the upgrades, a pre-selection of headworks equipment and aeration blowers was completed.

Detailed design of the upgrades is nearing completion and the Municipality is currently undertaking a Request for Pre-Qualification (RFPQ) of General Contractors to ensure only qualified and experienced contractors are authorized to bid on the tender.

Staff are also in the process of procuring Site Inspection and Contract Administration Services.

COMMENTS:

The current Class 1 cost estimate for construction as prepared by the Municipality's Engineering Consultant, RV Anderson Associates Ltd., is \$18.3 M (excl. HST), including contingency of \$1.8 M.

Site Inspection and Contract Administration Services are to be procured separately and are estimated to be approximately \$1.3 M.

The total cost of construction is estimated to be \$19.6 M. This is approximately \$5.6 M (40%) higher than earlier cost estimates of \$14.0 M.

The increased construction cost estimates are attributed to:

- Inclusion of 10% contingency, Site Inspection and Contract Administration costs
- Approximately 6.7% construction sector inflation for the London area, since the last estimate was provided
- Conservative estimates on all materials based on present tariff uncertainty
- Increased construction staging cost estimates based on complexity of project and requirement to maintain continuous treatment
- Additional regrading and earthworks based on final refinements to the design

Provincial Funding Opportunity

Staff has applied for Provincial government funding through the Health and Safety Water Stream (HSWS) under the Municipal Housing Infrastructure Program.

This program is slated to fund \$175 M funding to help municipalities build, expand or rehabilitate aging water, wastewater, stormwater, flood and erosion infrastructure. These projects will help preserve the current housing supply and protect communities during extreme weather events.

Under the HSWS, the Province may fund a maximum of 73% of eligible project costs with the applicant required to fund the remaining.

CONSULTATION:

- Director of IT and Financial Services

FINANCIAL IMPLICATIONS:

The project currently has \$14 M in previously approved funding of which approximately \$3.1 M has been spent on engineering design and prior filter upgrades.

Additional funding of approximately \$8.7 M will be required.

Additional project costs will be funded through Wastewater reserves as well as approved funding under the Municipal Housing Infrastructure Program, if any.

STRATEGIC PLAN ALIGNMENT:

This matter is in accord with the following strategic priorities:

- Local Infrastructure – Households and businesses in Strathroy-Caradoc are supported by reliable, financially responsible and well-maintained infrastructure networks

ATTACHMENTS:

- Strathroy WWTF Upgrades Class 1 Cost Estimate