

Staff Report

Presented By: Matt Prentice, Director, Operations

Meeting Date: October 28, 2024

Subject: Water/Wastewater Generator Projects Update

Attachment(s): Photo 1 Water Low Lift PS Exterior
Photo 2 Water Low Lift PS Original Generator
Photo 3 Harbour St SPS Exterior
Photo 4 Harbour St SPS Original Generator
Photo 5 Portable Generator at Harbour St SPS
Photo 6 Proposed Generator Enclosure Example
Figure 1 Proposed Outdoor Generator Low Lift PS
Figure 2 Proposed Outdoor Generator Harbour St SPS

Recommendation

That Council receive the Water/Wastewater Generator Projects Update report for information.

Report Summary

The 2024 Business Plan includes two projects, to replace the outdated backup generator sets at the Southampton Low Lift Pumping Station and the Port Elgin Harbour Street Sewage Pumping Station. The current standard is to provide generator sets outside buildings, meeting required setbacks. This report is being provided to create awareness on the project change as the outdoor placement of the generators are highly visible public locations.

Background/Analysis

The 2024 Business Plan includes projects to replace the outdated backup generator sets at the Southampton Low Lift Pumping Station (West end of Bay Street) and the Port Elgin Harbour Street Sewage Pumping Station (West end of Green Street). Please refer to the attached photos of the original generator sets and their associated buildings ([Photo 1](#) and [Photo 2](#) for the Low Lift Site, and [Photo 3](#) and [Photo 4](#) for the Port Elgin Harbour Street Station).

The original generator sets are unreliable/inoperable, with replacement parts not readily available, should not be run in any case due to HVAC issues and resulting health and safety issues in their respective buildings, and are at locations where a spill or leak of fuel could find its

way into the drinking water raw clear well at the Low Lift Station, and the sewage wet well at the Harbour Street station.

Note that the condition of the interior generator at the Harbour Street Sewage Pumping Station is the worst of the two (inoperable) and as such, as a temporary solution, there is a portable generator set located outside the building to provide service (refer to [Photo 5](#)).

Replacing these two generators at their original indoor location would require substantial HVAC and electrical upgrades to meet current fire protection, water/wastewater, and electrical standards. In addition to the health, safety, and environmental risks of indoor installations, the extra costs cannot be supported by the existing budget. As such, it is recommended to replace the generator sets at an outdoor location, screened visually by an aesthetically pleasing board fence.

Please refer to attached [Figure 1 \(Low Lift PS\)](#) and [Figure 2 \(Harbour St SPS\)](#) which show the proposed outdoor location of the replacement generator sets. Please also see attached a photograph ([Photo 6](#)) of a typical similar generator set installation in an aesthetic enclosure in another community. Please note that the noise reduction requirement (colloquially called “hospital grade” silencing) is the same in either the indoor or outdoor installations.

The cost of upgrading the original generators in place indoors, including HVAC, electrical, Water/Wastewater regulations, and fire code upgrades, is \$7 Million combined for both locations. The combined budget for the generator replacement projects is only \$2.6 Million. Replacing the generators in the proposed outdoor locations will allow the project to proceed within budget.

This report is being provided to Council to create awareness on the project change as the outdoor placement of the generators are highly visible public locations.

Linkages

- Strategic Plan Alignment: Pillar 1: Meeting the Needs of a Growing Community
- Business Plan Alignment: Operations Capital Highlight

Financial Impacts/Source of Funding

Cost associated with this program are contained within the existing budget.

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