

# STAFF REPORT

THE CORPORATION OF THE TOWN OF COBOURG



<b>Report to:</b>	Mayor and Council	<b>Priority:</b>	<input checked="" type="checkbox"/> High <input type="checkbox"/> Low
<b>Submitted by:</b>	Bill Peeples, Manager Environmental Services <a href="mailto:bpeeples@cobourg.ca">bpeeples@cobourg.ca</a>	<b>Meeting Type:</b>	Open Session <input checked="" type="checkbox"/> Closed Session <input type="checkbox"/>
<b>Meeting Date:</b>	September 5, 2023		
<b>Report No.:</b>	Public Works-171-23		

**Subject/Title:** Forth Street Pump Station – Pump Replacements

## RECOMMENDATION:

THAT Council approve the Staff recommendation to purchase and install two (2) new Xylem Pumps for the Forth St Pump Station for a total cost not to exceed **\$70,000** (including non-refundable HST). Council approved \$150,000 for this project in the 2022 Environmental Services Capital Budget.

### 1. STRATEGIC PLAN

N/A

### 2. PUBLIC ENGAGEMENT

N/A

### 3. PURPOSE

To maintain the functionality of the Forth St Pump Station.

### 4. ORIGIN AND LEGISLATION

- 2022 Environmental Services Capital Project – Account No. 2240083
- Public Works Report 146-23

### 5. BACKGROUND

An Environmental Assessment (EA) is scheduled to be completed for the sanitary catchment area encompassing the Forth St and Monk's Cove Pump Stations and Water Pollution Control Plant #1. The purpose of which is to review the capacities of the Pump Stations and Treatment Plant and provide recommendations to optimize, enhance, expand and/or relocate these assets to better serve the existing residents as well as accommodate future growth.

The Forth Street pump station has been in need of upgrades and budget was allocated in 2022. Until the ultimate solution is determined for this station, the station must continue to be maintained adequately.

Earlier this year, Staff anticipated that only one pump needed replacement and the other could be refurbished to save on costs, all of which would be under \$50,000 which was approved to proceed through the CAO (refer to Public Works Report No. 146-23). However, once the old pump was shipped to the supplier for refurbishment it was determined that the costs to repair would be nearly as much as a replacement. The project is now expected to be over the \$50,000 approval limit for the CAO and requires Council approval to proceed.

## 6. ANALYSIS

All of the Town Pump Stations use Xylem pumps. This allows the department to maintain an inventory of common parts and a single servicing agreement. A recent facility condition assessment identified the pumps, valves and piping at the Forth St Pumping Station as needing to be replaced. A second assessment was conducted by Xylem during their annual inspection. Although Xylem concurred with the findings of the facility condition assessment, they suggested a plan that could save the Town costs by refurbishing the pumps.

## 7. FINANCIAL IMPLICATIONS/BUDGET IMPACTS

Earlier this year, two options were considered as follows:

### **Option #1: Rebuild Both Pumps**

- Ship one pump to Xylem to be refurbished: \$11,000
- Install a rental pump to replace the missing pump: \$8,800 (\$2,200/month x 2 months x 2 pumps)
- When rebuilt pump is returned, ship second pump to Xylem for rebuild: \$11,000
- **Total Cost: \$30,800 and 6 months**

### **Option #2: One New Pump and One Rebuilt Pump**

- Purchase new pump: \$25,449.75 (\$25,898 including non-refundable HST)
- Once new pump is commissioned, send second pump out for rebuild: \$11,000

- **Total Cost: \$36,898 and 4 months**

Option #2 was deemed to be the most appropriate choice since having one brand new pump to rely on would be key to the reliability of the station. Upon a detailed review of the pump by Xylem technicians, the quote to refurbish the pump was \$21,464 instead of the estimated \$11,000. Given that a new pump would only cost an additional \$4,434, Option #3 is now the preferred option.

**Option #3: Purchase Two (2) New Pumps**

- Purchase two new pumps: 2 x \$25,449.75 (\$25,898 including non-refundable HST)
- **Total Cost: \$51,796 and 4 months**

The replacement work for any of the options also requires the following parts plus installation at an estimated cost of \$12,000:

- Pump Installation
- New piping
- Isolation Valves (2)
- Flap Check Valves (2)
- Flow Meter (1)

The total estimated cost of the upgrades including parts and installation is not expected to exceed **\$70,000**. Council had approved a \$150,000 Capital Budget for upgrades to the Forth Street pumping station in 2022.

**8. CONCLUSION**

Options #3 will allow the Forth Street Pump Station to operate reliably for many years, allowing sufficient time for the Environmental Assessment to be completed without risk of pump failure.

**Report Approval Details**

Document Title:	Revised - Forth St Pump Station Upgrade - Public Works-171-23.docx
Attachments:	- Forth St Pump Station Upgrade - Public Works-146-23.docx
Final Approval Date:	Aug 25, 2023

This report and all of its attachments were approved and signed as outlined below:

**No Signature found**

**Laurie Wills, Director of Public Works - Aug 24, 2023 - 8:41 AM**

