



## Regular Council Meeting

<b>To:</b>	Mayor and Council
<b>Date:</b>	March 18, 2024
<b>From:</b>	Jessica Fradley, Water Wastewater Technician Wayne Hancock, Director of Public Works
<b>Report Number:</b>	Public Works 2024-02
<b>Subject:</b>	Millbrook Wastewater Treatment Plant Wet Well Upgrades

### Recommendations:

1. That Council receive for information that staff proceeded with the purchase of four (4) submersible Flygt sewage pumps for the Millbrook Wastewater Treatment Plant as per Section 5.6.2 Single Source of the Township Purchasing By-law No. 2020-22, by Xylem Canada Ltd in the amount of \$66,980.00 net Municipal H.S.T. in the amount of \$1,178.85 for a total amount of \$68,158.85.
2. Funds were approved in the 2024 Capital Budget under Water Wastewater (04-75-000-10011-6153) with an estimate of \$115,000.

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### Overview:

The 2024 Capital Budget for Water and Wastewater line item for Wet Well Upgrades includes the replacement of the four (4) KSB brand sewage pumps and the installation of flow meters on the pump discharge lines.

The Millbrook Wastewater Treatment Plant (WWTP) receives sewage from gravity mains from the higher elevation of town, and by forcemain from the Tupper Street Sewage pumping station (TSPS) that conveys the sewage from the lower area of town. Currently, the wet well has four (4) submersible KSB pumps, an ultrasonic level transmitter, and backup floats for level control. We cannot currently measure the amount of sewage flow entering the plant and have no way to differentiate between gravity flow and forcemain flow.

The intention of the Capital project is to upgrade the wet well with four (4) Flygt pumps that are better quality and more reliable and, install flow metering devices on each pump discharge pipe. Measuring the flow into the plant is an important operational component. This will better determine the capacity in the wet well, the amount being received from gravity mains, which predominantly comes from the newer developments, and how much is being received from the forcemain from TSPS. Having this data, we

can then trend it over the years as the development progresses and can better track the reduction of flow from sump pump discharges and groundwater infiltration when repairs are made.

The sewage entering the WWTP does not receive any screening or grit removal before it enters the wet well, meaning a large quantity of debris typically builds up within the well. Currently, there are four (4) KSB submersible raw sewage pumps in the wet well at the plant that lift the sewage to the primary treatment area of the plant where screening and grit removal is completed. These pumps cannot lift/move all of the debris within the wet well and therefore debris accumulates quickly.

The TSPS wet well went through an upgrade in 2018 where the three (3) KSB brand pumps were replaced with three (3) Flygt brand pumps. The upgrade has significantly reduced the number of callouts for operational issues since. The current KSB brand pumps in WWTP wet well have been causing operational issues from overheating, blockages, and failures over the last few years, with a higher number of incidents within the last year. This causes after-hours calls out for the Service Contractor (The City of Peterborough) and several repairs to the pumps. The Flygt pumps have been shown to perform better at the TSPS and we believe they will be a benefit at the WWTP.

By replacing the pumps in the WWTP wet well, there will be an increase in treatment effectiveness and reduce the number of after hours call out for City of Peterborough staff. The replacement of these pumps will reduce costs in the long run for the Township due to repairs and overtime.

The Flygt pumps are manufactured in Germany and Xylem Canada is the distributor for these pumps and parts in Ontario.

### **Financial Impact:**

This purchase falls under Section 5.6.1 Sole Source due to the unique nature of the pumps. The company chosen to complete this work is based on a Single Source Purchase as defined in the Township Purchasing By-law No. 2020-22. The By-law states that:

**“Single Source”** means that there is more than one source of supply in the open market, but only one source is recommended due to predetermined and approved specifications.

This work specifically falls under By-law 2020-22 Section 5.6.2;

“d. The required goods and/or services are to be supplied by a particular supplier(s) having special knowledge, skills, expertise or experience,”

The purchase of the pumps was quoted at \$66,980.00, excluding taxes. The total after taxes is \$68,158.85. An amount of \$115,000 was allocated in the approved 2024 Water Wastewater Capital Budget for the Wet Well Upgrades, account No. 04-75-000-10011-6153 for this work.

The City of Peterborough staff have recommended the pump replacement and we agree that the Flygt pump has less operational issues specifically with clogging. The supplier for these pumps is the only supplier of this type in this area.

The remaining budget of \$46,841.15 will be utilized for the labour involved with the installation of the pumps and flow meters. With the potential for long delivery lead times, staff were advised to purchase the capital equipment before scheduling the labour.

Attachments:

1. Millbrook Wastewater Plant Wet Well Drawings
2. Xylem Canada Pump Quote

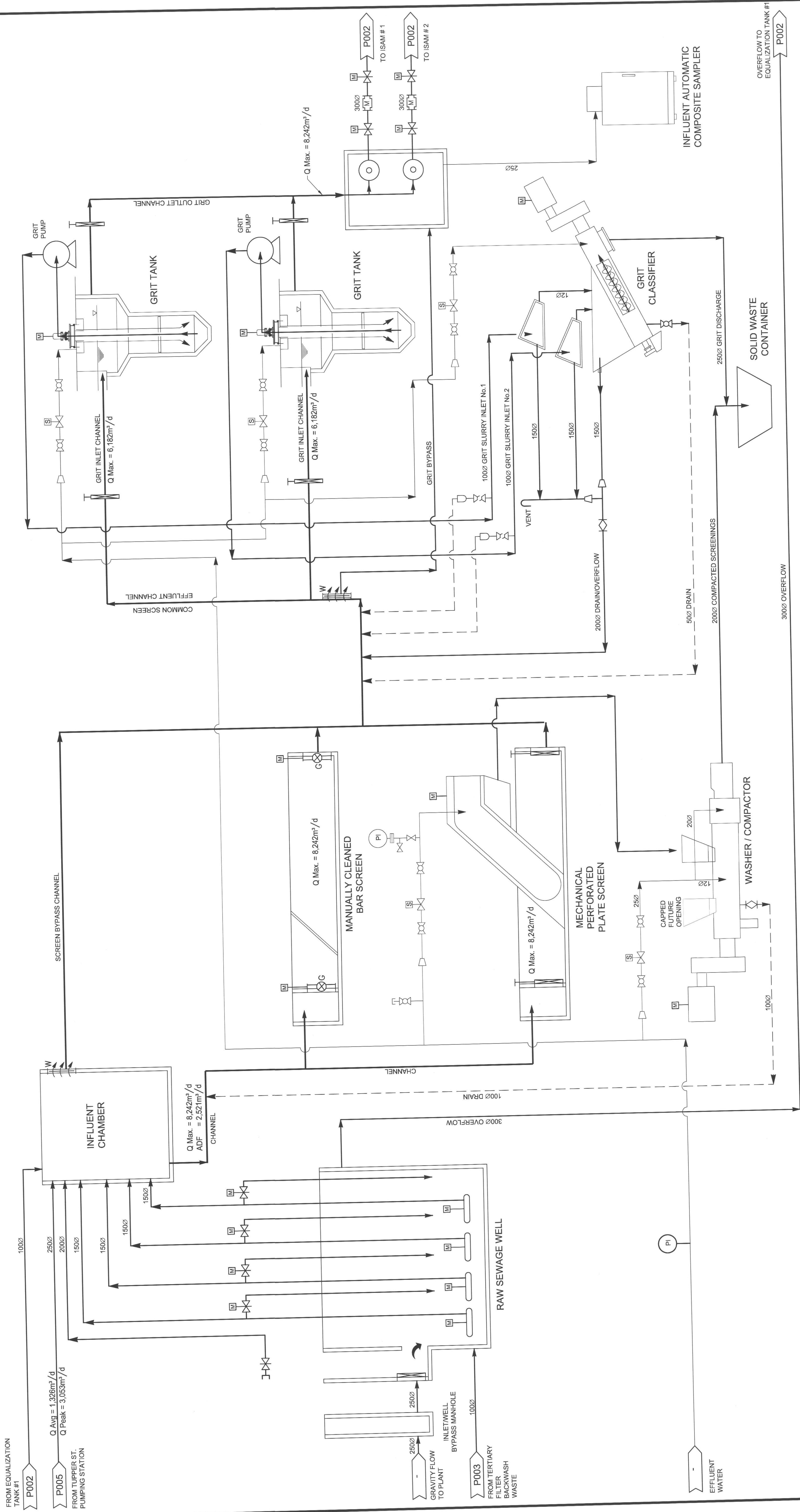
Respectfully Submitted by,

Jessica Fradley,  
Water Wastewater Technician

Wayne Hancock,  
Director of Public Works

Reviewed by,

Yvette Hurley  
Chief Administrative Officer



NOTES	TOWNSHIP OF CAVAN MONAGHAN									
	CONTRACT NO. XXX-XXX									
	MILLBROOK WASTEWATER TREATMENT PLANT					PROCESS BUILDING				
	CAPACITY UPGRADES					PROCESS FLOW DIAGRAM (1)				
Scale	R.V. Anderson Associates Limited					PROCESS				
	engineering environment infrastructure					RAW SEWAGE WELL AND HEADWORKS				
	AS SHOWN					RVA Project No. 122670				
						Dwg No. P001				
Description						JDC				
						VWS				
						LRT				
						Date				
By						OCT. 2013				
No.										

# Proposal

Date: Monday, July 17, 2023

Quotation #: 22-30-1106/1/2

## Project Information

Company Name: TWNSHP OF CAVANGHN &amp; MONAGHAN

Project Name: MillBrook WPCP Main Pump UPGRADES

 Xylem  
Representative: Derek Godfrey

## Attention to: JESSICA

Xylem Canada LP proposes to furnish the Purchaser the equipment covered by this proposal as follows:

### MillBrook raw sewage pumps 1-4 30.9 @ 9.62

Item#	Qty	Description
1.1	4	3127.070-0128 FLYGT MODEL NX-3127 SUBMERSIBLE PUMP 7.5HP/5.6KW 600VOLT 3PHASE 60HZ 4POLE HT IMPELLER CODE 489, ANSI 4" 16M 4G2.5+2X1.5 FLS, FLUSH VALVE READY, CSA EX ADAPTIVE N, HARD IRON IMPELLER
1.2	1	13-56 00 16 PROMO-CASH4PUMPERS  <div> <p><b>"The Cash for Pumpers Trade in Discount can only be applied when the trade in Pump or Mixer is received in or Toronto Workshop facility within 4 weeks of receipt of new pump or mixer. If the pump or mixer is not received extra charges may be applied. PLEASE attach a LABEL indicating your quote number, contact name and number of you the client and the sales individual you dealt with" Thankyou.</b></p> </div>
1.3	4	753 53 20 SLIDING BRACKET UNIT
1.4	4	753 55 20 FLYGT CONNECTSLIDING BRACKET FORGRUNDFOS 4"DISCHARGECONNECTION
1.5	4	40-50 10 98 Mini-CAS II Pump Monitoring Relay - 120 VAC
1.6	4	13-40 02 00 11 Pin Socket Plug
1.7	4	13-40 01 87 Mounting bracket for Mini-CAS II relay - Door flush mount
1.8	4	442 18 16 SLING,CHAIN UNIT SS WIRE 10M
1.9	1	620 09 00

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Date:	2023/07/17	Quotation #	22-30-1106/1/2
Company Name:	ALL BIDDERS		

Item#	Qty	Description
		Grip Eye Unit
1.10	4	13-56 03 11 TEST FAL 2.2 PLOT"D 3045-3127+ FAL 15-906
1.11	1	13-56 03 68 TEST FAL 2.12 ADDL CERT + FAL 15-9018
1.12	1	13-56 00 24A FREIGHT CHARGES TXBL
		<b>Total Price \$ 66,980.00</b>
		<b>Total Price of Quotation: \$ 66,980.00</b>

## Terms and Conditions

This order is subject to the Standard Terms and Conditions of Sale – Xylem Americas effective on the date the order is accepted which terms are available at <http://www.xyleminc.com/en-us/Pages/terms-conditions-of-sale.aspx> and incorporated herein by reference and made a part of the agreement between the parties.

**Freight Terms :** DAP; Jobsite (per Incoterms 2020) - Prepaid & Allowed.

**Taxes:** Taxes are not included in this quotation unless specifically stated otherwise.

**Back Charges :** Buyer shall not make purchases nor shall Buyer incur any labour that would result in a back charge to Seller without prior written consent of an authorized employee of Seller.

**Shortages :** Xylem will not be responsible for apparent shipment shortages or damages incurred in shipment that are not reported within two weeks from delivery to the jobsite. Damages should be noted on the receiving slip and the truck driver advised of the damages. Please contact our office as soon as possible to report damages or shortages so that replacement items can be shipped and the appropriate claims made.

**Validity :** This quote is valid for thirty (30) days.

**Terms of Payment :** 100% Net 30 days after the end of the month in which the invoice is dated.

Xylem's payment shall not be dependent upon Purchaser being paid by any third party unless Owner denies payment due to reasons solely attributable to items related to the equipment being provided by FLYGT.

**Schedule :** Please consult your local FLYGT branch for submittal and fabrication lead-times.

**Comments and Exceptions** This proposal is in accordance with our interpretation of the plans and specifications provided to us. All equipment offered is subject to the engineers/customers acceptance, and we reserve the right to withdraw our offer if such acceptance is not granted. Should any changes be made regarding the quantities and/or construction of the equipment





Date: 2023/07/17

Quotation # 22-30-1106/1/2

Company Name: ALL BIDDERS

offered, extra charges will apply accordingly. Comments and Exceptions are part of this proposal and must be observed.

**Delivery Date  
COVID 19:**

Estimated delivery date (from date of approval): 13 WEEKS  
Delivery lead-times may be impacted by the current COVID-19 virus pandemic relative to transportation logistics.



Date: 2023/07/17

Quotation # 22-30-1106/1/2

Company Name: ALL BIDDERS

**A SIGNED COPY OF THIS PROPOSAL IS ACCEPTABLE AS A BINDING CONTRACT.**

Thank you,

Derek Godfrey  
Sales Representative  
Xylem Canada LP  
O: 416-679-1199  
derek.godfrey@xylem.com

**Accepted by: (Authorized party to bind company)**

\_\_\_\_\_  
**Company Name**

\_\_\_\_\_  
**Printed Name & Title**

\_\_\_\_\_  
**Signature          Date**

\_\_\_\_\_  
**Phone**

\_\_\_\_\_  
**Email**

**Company Address**

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SHOULD YOU PREFER TO ISSUE A PURCHASE ORDER, PLEASE MAKE IT OUT TO: XYLEM CANADA LP

