



**Village of Point Edward**

**Storm Water Management System**

**Annual Performance Report**

**2024**

**ECA # 036-S701**

**Owned and Operated**

**by**

**The Village of Point Edward**

**Prepared by:**

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**Manager of Environmental Services**



# 1 Stormwater Collection Facilities

## 1.1 General Information

The Village of Point Edward Storm Water Management System works for the collection and transmission of storm water, consisting of storm sewers and two (2) storm water pumping stations. The Village of Point Edward is required to report annual performance of the facilities as per the Village of Point Edward Storm Water Management System ECA # 036-S701.

This report covers the authorized system consisting of storm sewers and the following two (2) pump stations:

<b>Asset ID</b>	<b>Pump Station</b>	<b>Location</b>
454036	Bayview Storm Pump Station	1351 Venetian Blvd.
454035	Alexandra Storm Pump Station	92 Alexandra Ave.

The Village of Point Edward Stormwater Management system serving the Village of Point Edward drainage area, is a separate system for Stormwater (i.e. designed not to transmit sanitary Sewage and/or Combined Sewage) within the Lake Huron/St Clair River and the Great Lakes watersheds. The Municipal Stormwater Management System consists of Storm Sewers, Stormwater Management Pumping stations and outlets.

The current configuration of the storm sewers and two (2) pump stations conveys all the flow from the Village of Point Edward indicating that each pump station has adequate capacity.

<b>Asset ID</b>	<b>Pump Station</b>	<b>Location</b>	<b>Equipment Capacity</b>
454036	Bayview Storm Pump Station	1351 Venetian Blvd.	3 pumps (1 duty electric, 2 standby diesel driven) 1 electric pump rated @ 5,650 US GPM @ 20 ft TDH.



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			2 Diesel driven pumps each rated @ 12,000 US GPM @ 26 ft TDH. All 3 pumps operating together shall be capable of delivering 24,000 US GPM against 30.7 ft TDH. 1 wet well of approx. 275m3 capacity.
454035	Alexandra Storm Pump Station	92 Alexandra Ave.	2 - vertical hollow shaft pumps rated @ 357 L/s 2 – vertical hollow shaft pumps rated @ 757 L/s Pumps are in a configured lead lag and standby mode. Isolation valves and check valves are installed in discharge piping. 350 m3 wet well with tubular grid screen

### 1.2 Operations / Monitoring Data / Trending

The stations are controlled by all necessary equipment and controls to operate. PLC (programmable logic controllers) / HDMI programming to control and monitor station equipment, level and alarms as well as trending. Level monitor devices consist of all or some ultrasonic, hydrostatic and floats.

Weekly inspections are conducted and data from trending is reviewed. Pump run hours are recorded in the station check logbook to track pump run times to determine if there are any non-normal operating trends. With no excessive run times and no flooding or backing up of the system it has been determined that the system is operating as designed and that no adverse environmental effects are being placed on the Natural Environment.

### 1.3 Summary & Interpretation of Environmental Trends

The pump run hours are consistent with the hours from the 5 previous years and show no sign of any significant change in the environmental trends for the storm water management system.

### 1.4 Summary of Operating Problems & Corrective Actions

There have been no operating problems with the storm water management system. The system continues to operate as designed.



## **1.5 Inspection, Maintenance, Repairs**

Currently the pump stations do not have equipment that requires calibration. Regular inspections and maintenance are performed by operations staff and tracked using a maintenance system (MESH GO Evo). MESH records routine and preventative maintenance scheduling. Larger or specialized maintenance activities such as CCTV work has been completed by a third-party contractor. Maintenance on the back up diesel pump engines is performed by Toromont Cat and is documented with reports provided by Toromont Cat.

### **Storm Water Pump Stations**

- Storm Water Pump stations have weekly operational checks, annual inspections and pump maintenance. Wet well cleaning is performed as a capital expense & typically planned for a 3–5-year cycle.
- Alarms are installed to notify operations staff of any equipment failures or high- or low-level situations.

### **Storm Sewer Main Inspection and Flushing**

Badger Daylighting was contracted to complete sewer main flushing and perform CCTV inspection with video footage and findings reported to Environmental Services Manager. This work will be used for the ongoing creation of a new updated asset management plan and to aid with future improvements or upgrades to the system.

## **1.6 Calibration of Monitoring Equipment**

There is no equipment that requires calibrations.

## **1.7 Complaints**

Currently there have been no documented written or verbal complaints related to the Storm Water Management System received by the Environmental Services Department.

## **1.8 Alterations to the Authorized System**

No Alterations have taken place in the reporting period.



### **1.9 Summary of Spills & Abnormal Discharge Events**

No spills or abnormal discharges occurred during the reporting period.

### **1.10 Summary of Actions, Timelines to Improvement or Correct Performance**

The Village has been working with a P. Eng firm to review the system's current capacity and identify any future bottlenecks etc. within the system that could slow or prevent future development in the municipality. This work started in 2023 and is continuing into 2024/2025.

The replacement of the diesel engines that power the 2 pumps as backups to the electric pump is being planned for 2025/2026 as a capital project.

A request to install a backup generator for powering the station controls, lighting and heat is being prepared and will be listed as a capital project for approval in 2025/2026 Capital budget.

### **1.11 Summary of Previous Action Items**

There are no previous items to report status on.