



## Report to Council

Department: Infrastructure Services  
Division: Drainage  
Date: April 22, 2025  
Prepared by: Lindsay Dean, Drainage Superintendent  
Report Number: Drainage-2025-03  
Subject: Municipal Drainage Activity Report  
Number of Pages: 6

### **Recommendation(s)**

**That** Drainage-2025-03 entitled Annual Drainage Report prepared by Lindsay Dean, Drainage Superintendent dated April 22, 2025 be received.

### **Purpose**

To update Council on the activities of the Drainage Division.

### **Background and Discussion**

The Town of Essex has 276 municipal drains at a length of just over 1,800 km.

All Municipal Drainage activities are legislated by the Drainage Act and overseen by the Ministry of Agriculture, Food and Agribusiness (O.M.A.F.A.).

## **Drainage Board**

Council has delegated their authority to the Drainage Board to exercise their powers and duties under the Drainage Act with some exceptions. The term of the Drainage Board is until November 14, 2026.

The Drainage Board met 9 times in 2023 and 9 times in 2024.

## **Maintenance and Construction Activities**

The Municipal Drainage works can be split into 2 main activities: Construction and Maintenance.

Construction projects are either the creation of a new drainage works by petition (Section 4) or the improvement/alteration (Section 78) of an existing drainage works.

Maintenance (Section 74) is the repair or maintenance of an existing drainage works to original design in accordance with the by-law on record.

Construction projects are billed throughout the year as projects are completed.

Drain maintenance is typically billed the year following the completion of work. This coincides with the application to the O.M.A.F.A every April for funding for farm tax class eligible properties for drain maintenance works.

The following table outlines the construction projects completed over the last 2 years and estimates the projects for 2025.

<b>Construction Projects</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>Number of Projects Completed</b>	11	8	4
<b>Number of Projects On-going</b>	N/A	N/A	23
<b>Total Project Costs</b>	\$ 762,244.04	\$840,418.19	\$1,623,849.43
<b>Total Cost Billed</b>	\$ 762,244.04	\$840,418.19	\$130,415.54
<b>Total Cost paid by Town</b>	\$16,579.34	\$29,893.04	\$24,489.64
<b>Grant Funding Applied</b>	\$128,168.41	\$123,667.04	\$30,880.60
<b>Grant Funding Received to date</b>	\$128,168.41	\$93,731.12	\$0

One major improvement project that is intending to finish in 2025 is the Richmond Drain Bank Stabilization capital project along the 5<sup>th</sup> Concession Road. The value of this project is excluded from these statistics and was funded through the 2023 and 2024 capital budget.

The following table outlines the maintenance projects completed over the last 2 years.

Maintenance Projects	2023	2024
<b>Number of Projects Completed</b>	51	50
<b>Total Project Costs</b>	\$359,700.48	\$261,692.13
<b>Total Cost Billed</b>	\$359,700.48	\$62,128.90 Remainder to be billed June 2025
<b>Total Cost paid by Town</b>	\$57,351.58	\$39,567.92
<b>Grant Funding Applied</b>	\$63,685.64	\$0 April 2025 submission
<b>Grant Funding Received to date</b>	\$63,685.64	\$0

Most 2025 maintenance works are either scheduled or in the planning phase.

## Drainage Student

Over the last number of years, the Town of Essex has hired a GIS student to complete a linework overview for all the municipal drains. Linework updates are provided to OMAFA and ERCA to ensure all the linework is accurate to match the municipal drain by-laws.

Additionally, a review of maintenance records for the past 20-25 years allowed a map layer to be created to track maintenance activities. This mapping layer will be kept up to capture all maintenance and construction activities moving forward and be a valuable tool to the Drainage Division.

The student has also mapped the location of Phragmites along Town of Essex roadways for 2023 and 2024 as well as mapped areas that have been treated. This will assist administration determine the effectiveness of the treatment and evaluate how the spread is being controlled.

## **Great Plains Upgrade**

In the 2023 capital budget, upgrades to the Great Plains drainage module were approved to improve efficiency to administration in reviewing grant eligibility of properties for drain billing. This initiative was completed in 2025 well under the budgeted amount and will significantly decrease staff time to complete project billings.

## **New Equipment**

In the 2025 capital budget, a new GPS unit was approved. This will be purchased in 2025 and will be a valuable resource to the division with field work and capturing accurate records of drain and culvert locations and elevations.

## **Financial Impact**

Costs to complete drainage works are recovered from the owners of the lands and roads that use the drains in accordance with the assessment schedule. Any costs assessed to the Town of Essex for their share of these works are funded through the approved Municipal Drain Roads or Storm Sewer operating budgets. The Town incurred costs of \$73,930.92 in 2023, \$69,460.96 in 2024 which were both within the approved budget. Per the reserve management policy, any unspent funds for drainage works are moved to the Municipal Drainage reserve to help fund anticipated expenses related to drains as identified in the budget.

## **Consultations**

Kate Giurissevich, Director, Corporate Services

Ann Marie Unis, Manager of Finance & Business Services

Kevin Girard, Director, Infrastructure Services

Norm Nussio, Manager, Operations & Drainage

### **Link to Strategic Priorities**

- ☒ Embrace asset management best practices to build, maintain, and continuously improve our municipally owned infrastructure.
- ☐ Leverage our Town's competitive advantages to promote jobs and economic investment.
- ☐ Take care of our natural environment and strengthen the sense of belonging to everyone who makes Essex "home".
- ☐ Deliver friendly customer service in an efficient, effective, and transparent manner while providing an exceptional working environment for our employees.
- ☐ Build corporate-level and community-level climate resilience through community engagement and partnership and corporate objectives.

### Report Approval Details

Document Title:	Annual Drainage Report.docx
Attachments:	
Final Approval Date:	Apr 14, 2025

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

**Norm Nussio, Manager, Operations and Drainage - Apr 14, 2025 - 9:41 AM**

A handwritten signature in black ink, appearing to read 'N. Nussio', written over a light blue horizontal line.

**Kevin Girard, Director, Infrastructure Services - Apr 14, 2025 - 11:47 AM**

A handwritten signature in black ink, appearing to read 'K. Girard', written over a light blue horizontal line.

**Doug Sweet, Chief Administrative Officer - Apr 14, 2025 - 11:56 AM**