



TOWN OF MINTO

MEETING DATE: April 2nd, 2024
REPORT TO: Mayor and Council
SERVICE AREA: Public Works – Wastewater Services
SUBJECT: PW 2024-010 - Inflow & Infiltration Report for Harriston & Palmerston Wastewater Collection Systems

RECOMMENDATIONS:

THAT Council of the Town of Minto receives report PW 2024-010 regarding the Inflow & Infiltration Report for Harriston & Palmerston Wastewater Collection Systems for information.

BACKGROUND:

Council has been supportive by allocating funding to continue this work. A number of projects have been completed since the last Inflow & Infiltration (I&I) studies were completed in Palmerston (2004) and Harriston (2007). The Servicing Strategy indicates that current reserve capacities will be exceeded in Palmerston between 2031 and 2036 based on growth projections provided by the County. Therefore, it was recommended to move forward with an updated I&I Study to support the upcoming Municipal Class Environmental Assessment (Class EA).

Typically, when initiating an I&I Study a few flow monitors are rented and placed strategically throughout the collection system looking for spikes in the flow that corresponds with weather events allowing the consultants to identify the cause of the increase. In this study Town Staff were able to negotiate the purchase of 4 SmartCovers and a reasonable rental of 3 more allowing both Harriston and Palmerston studies to be completed at the same time for a similar cost as traditional methods with the added benefit of ownership of the 4 flowmeters. This allowed the Town and its consultant Triton Engineering to look at a much wider range of weather over a longer time period creating a more representative dataset. These 4 flowmeters were moved to several locations throughout the study.

COMMENTS:

Palmerston has shown an overall improvement in the system since previous studies most notably on inflow.

There are 4 areas of concern identified in the study:

1. Clarke Street Unopened Right-of-Way and Minto Road – P112C (addressed through a future subdivision)
2. Henry Lane, North of Main Street – P114
3. Main Street, Downtown Core – P302 (Main St, road reconstruction)
4. Mary Street and Jane Street – P115

Harriston has shown lower impact from inflow than Infiltration. This indicates that previous capitals works have been effective. However, there are 3 main areas of concern:

1. Lorne St. Pump station collection area
2. William St. Pump Station – North collector
3. Young St. SPS – Former Trailer Park and RV Dump Station

Next steps:

Town staff will continue to monitor flow meters and relocate as required.

Town staff are currently completing maintenance hole inspections throughout Minto, repairing structural deficiencies and continue to work with contractors to repair any infiltration noted.

Work will continue with contractors to complete more smoke testing in identified areas of concern.

FINANCIAL CONSIDERATION:

Funding for this work is included as part of the Wastewater Services 2024 approved budget.

STRATEGIC PLAN:

Goal 1: Manage Our Infrastructure

Maintain, renew, and expand our municipally owned infrastructure to enhance healthy growth and our environment.

PREPARED BY: Mark Robertson, Wastewater Services Manager

RECOMMENDED BY: Chris Harrow, Interim Chief Administrative Officer

Attachments:

Aug 2023 Harriston I&I Study

Feb 2024 Palmerston I&I study