

Meeting Date: September 5, 2023
Department: Engineering & Public Works
Report No.: EPW-2023-47
Prepared by: Steve Morriss, Drainage Superintendent
Submitted by: Jake Straus, Director, Engineering and Public Works
Approved by: Trisha McKibbin, Chief Administrative Officer

SUBJECT: Funk South Drain 2023 – Engineers Report Consideration Meeting

RECOMMENDATION: THAT: Council adopt the Engineers Report for the Funk South Drain 2023, and give first and second reading to provisional By-law #56-23 for the project.

STRATEGIC PLAN ALIGNMENT:

This matter is in accord with the following strategic priorities:

- Households and businesses in Strathroy-Caradoc are supported by reliable, financially responsible and well-maintained infrastructure networks.

BACKGROUND:

A Request for Major Drain Improvement was received by the Municipality of Strathroy-Caradoc for the Funk South Drains 1974 on May 16, 2022. Council accepted the request on February 7, 2022 and appointed Spriet Associates Ltd. to prepare the Engineer's Report.

The Funk South Drains were originally constructed pursuant to a report submitted by J. P. McIntyre, P. Eng. dated October 8, 1974 as part of a larger report entitled "The Campbell Drain Extension". This report provided for the extension of the existing Campbell Drain open ditch to function as an outlet for various tile drains, including the Funk South Drains. The Funk South Drains consist of a Main Drain and two Branch Drains with a total of approximately 755 meters of 150mm to 350mm farm tile.

Investigations discovered that the existing drain is in poor working condition and requires frequent repairs. It was determined that the main drain and branches are undersized for today's standards. It was further noted that a cleanout of the Campbell Drain Extension 1974 open ditch had recently had maintenance performed on it in late 2022. Due to the sandy soil conditions in this area, the open ditch portion would benefit from a follow up clean out.

On June 26, 2023 the municipality held an informal public meeting to present the preliminary design and cost distribution prepared by the engineers to the assessed landowners where further input by the landowners was provided at that time.

COMMENTS:

Municipal drains have been a fixture of rural Ontario's infrastructure since the 1800's. Most municipal drains were constructed to improve the drainage of agricultural land by serving as the discharge point for private agricultural tile drainage systems. However, they also remove excess water collected by roadside ditches, residential lots, institutions, industrial lands, commercial lands and any other properties in rural areas. Drains are a vital component of the local infrastructure. Without them, many areas of the rural area would be subjected to regular flooding, reduced production from agricultural land and increased public health risks.

Most municipal drains are constructed on private lands and each drain is adopted under a By-Law when established. The Drainage Act provides access for drainage to have a legal outlet. Downstream landowners must accept flow of water from upstream landowners and must not impede or block the flow of water. As a result, downstream drains are larger and deeper on abutting property owners. Upstream landowners must contribute to the costs of downstream landowners for the allowance of a legal outlet. The landowners including road authorities (municipalities) and public utilities (Hydro One, Union Gas), within the defined drainage watershed, contribute for the construction of the municipal drain and the on-going maintenance of the drain.

CONSULTATION:

This report was reviewed in consultation with:

- Director of Engineering and Public Works
- Manager of Public Works
- Drainage Superintendent – Municipality of Strathroy-Caradoc
- Spriet Associates Ltd.

FINANCIAL IMPLICATIONS:

- Funk South Drain 2023 - Schedule of Net Assessment

ATTACHMENTS:

- Spriet & Associates Engineering Report and Plans on the Funk South Drain 2023
- Provisional By-Law 56-23 – Funk South Drain 2023