

# Township of Brock

## Drainage Superintendent Services

February 27, 2023

**Myles Douglas**  
**Drainage Superintendent**  
**R.J. Burnside & Associates Limited**

# Agenda

- Introduction
- What is a Municipal Drain
- Township's Responsibilities – Drainage Act
- Drainage Superintendent – Roles and Responsibilities
- Municipal Drains in the Township of Brock
- Findings and Recommendations

# Introduction

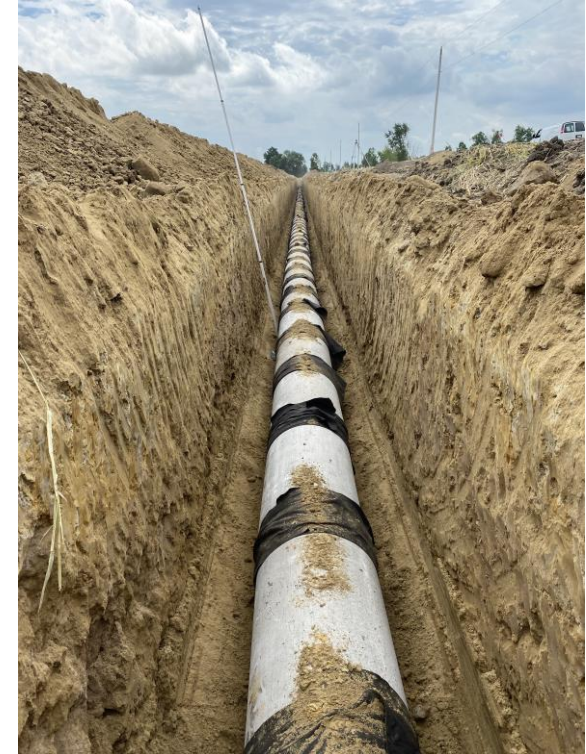
- R.J. Burnside & Associates Limited (Burnside) is a Canadian and International engineering and environmental consulting firm
- Orangeville Office Drainage Superintendent Services
  - Town of New Tecumseth
  - Town of Caledon
  - Town of East Gwillimbury
  - Town of Mono
  - Town of Grand Valley
  - Township of Adjala-Tosorontio
  - Township of Amaranth
  - Township of Melancthon
  - Township of East Garafraxa
- Burnside was appointed as Drainage Superintendent July 19<sup>th</sup>, 2021 under By-Law No. 3062-2021
- Myles Douglas – representing Burnside as of January 1<sup>st</sup>, 2023



BURNSIDE

# What is a Municipal Drain?

- A Drainage System Constructed under the Drainage Act
- Either ditches or closed systems such as pipes or tiles buried in the ground
- Most Municipal Drains were constructed to improve drainage of agricultural lands
- Also used to remove excess water collected by roadside ditches and any other properties in rural lands
- Three key elements
  - Community Project
  - Legal Existence
  - Municipal Infrastructure



# Township's Responsibilities – Drainage Act

## Section 74 of the Drainage Act states:

“Any drainage works constructed under a by-law passed under this Act or any predecessor of this Act, relating to the construction or improvement of a drainage works by local assessment, shall be maintained and repaired by each local municipality through which it passes, to the extent that such drainage works lies within the limits of such municipality, at the expense of all the upstream lands and roads in any way assessed for the construction or improvement of the drainage works and in the proportion determined by the then current by-law pertaining thereto until, in the case of each municipality, such provision for maintenance or repair is varied or otherwise determined by an engineer in a report or on appeal therefrom. ”

# Drainage Superintendent – Roles and Responsibilities

## **Section 93 of the Drainage Act states:**

- A Drainage Superintendent for a municipality shall,
  - (a) inspect every drainage works for which the municipality is responsible and report periodically to council on the condition of those drainage works;
  - (b) initiate and supervise the maintenance and repair of the drainage works for which the municipality is responsible;
  - (c) assist in the construction or improvement of the drainage works for which the municipality is responsible; and
  - (d) report to council on the superintendent's activities mentioned in clauses (b) and (c).
- Costs of employing a Drainage Superintendent are eligible for a 50% grant provided by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)

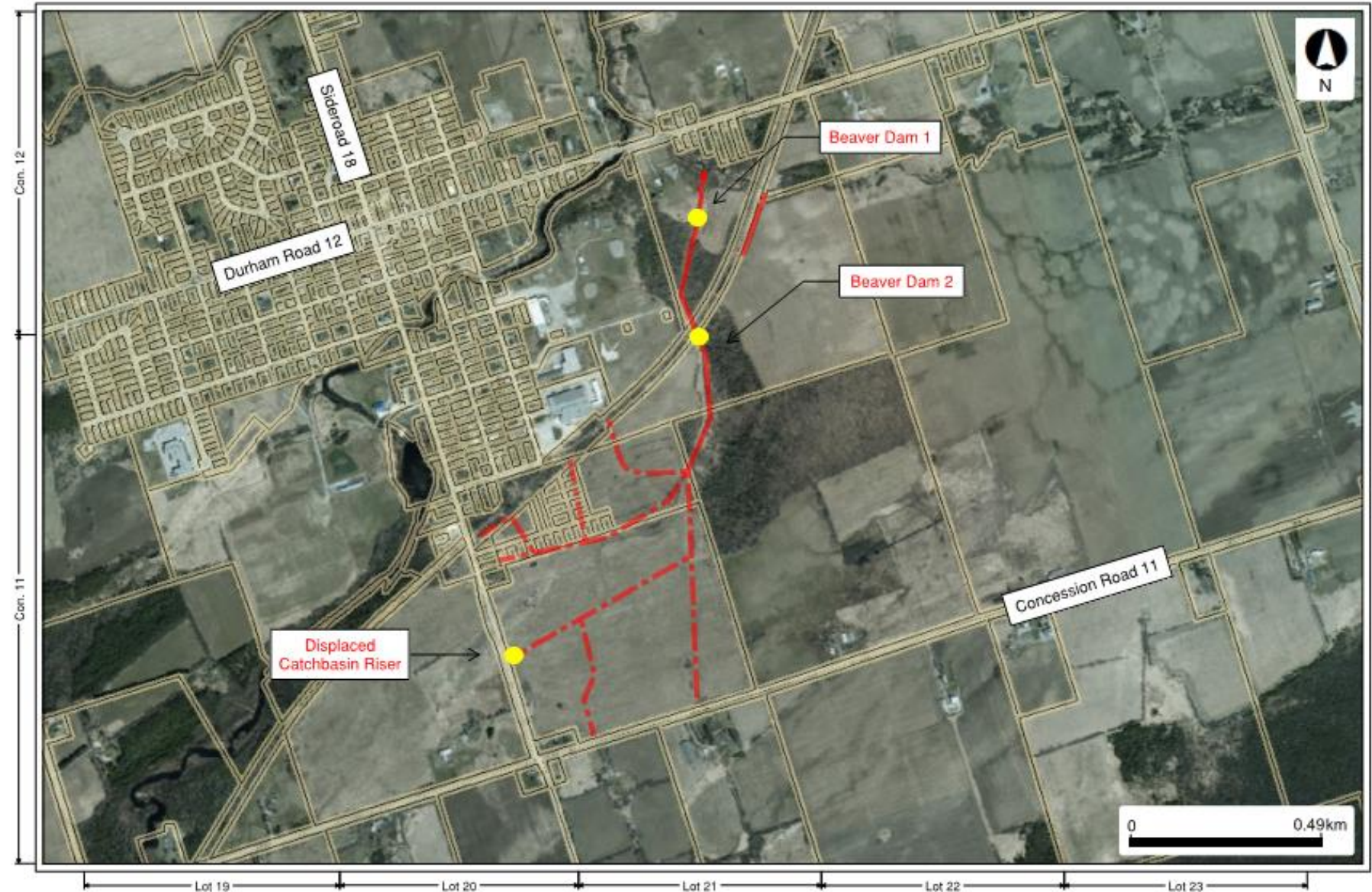
# Municipal Drains in the Township of Brock

- On May 16<sup>th</sup>, 2022, the Township authorized the inspection of the three Municipal Drains within the Township
- The Municipal Drains Inspected were:
  - McFeeters Drain
  - Gordon Drain
  - Mulock Drain

# McFeeters Drain

## McFeeters Drain

- Engineer's report dated May 31<sup>st</sup>, 2012
- Adopted by Municipal By-Law 2426-2012-PW
- Inspected on July 19<sup>th</sup>, 2022
- Three Deficiencies ●
  - Two beaver dams
  - One catch basin riser requiring reinstallation



Open Drain   
Closed Drain 



# McFeeters Drain - Deficiencies

- **Beaver Dam 1**

- Located in N1/2 Lot 22, Con. 11
- Recommend a trapper remove the beavers
- Subsequent removal of the dam



- **Beaver Dam 2**

- Located in N1/2 Lot 22, Con. 11 in the upstream end of the 1200mm CSP under the former railway (Beaver River Wetland Trail)
- Recommend a trapper remove the beavers
- Subsequent removal of the dam



# McFeeters Drain – Deficiencies Cont.

- **Displaced Catch Basin Riser**
  - Located in S1/2 Lot 21, Con. 11
  - Recommend a Contractor be retained to investigate and complete the required work including filling the washout
  
- **Cost Recovery**
  - Upon completion of recommended work for the three deficiencies, costs will be levied to the watershed



# Gordon Drain

## Gordon Drain



- Engineer's report dated February 12th, 1980
- Adopted by Municipal By-Law 381-80-PW
- Inspected on August 19<sup>th</sup>, 2022
- Deficiencies ●
  - A Beaver dam
  - Restricted culverts

# Gordon Drain - Deficiencies

- **Beaver Dam**
  - Located in N1/2 Lot 14, Con. 12
  - Recommend a trapper remove the beavers
  - Subsequent removal of the dam



# Gordon Drain – Deficiencies Cont.

- **Restricted Culverts**

- Located in S1/2 Lot 9, Con. 12
- **Burnside has been appointed under Section 78 of the Drainage Act to make improvements to the Gordon Drain**
- This report will incorporate several private crossings, replace one existing crossing and develop a new maintenance assessment schedule

A full drain cleanout should be considered including addressing the restricted culverts subsequent to the completion of the Section 78 report

- **Cost Recovery**

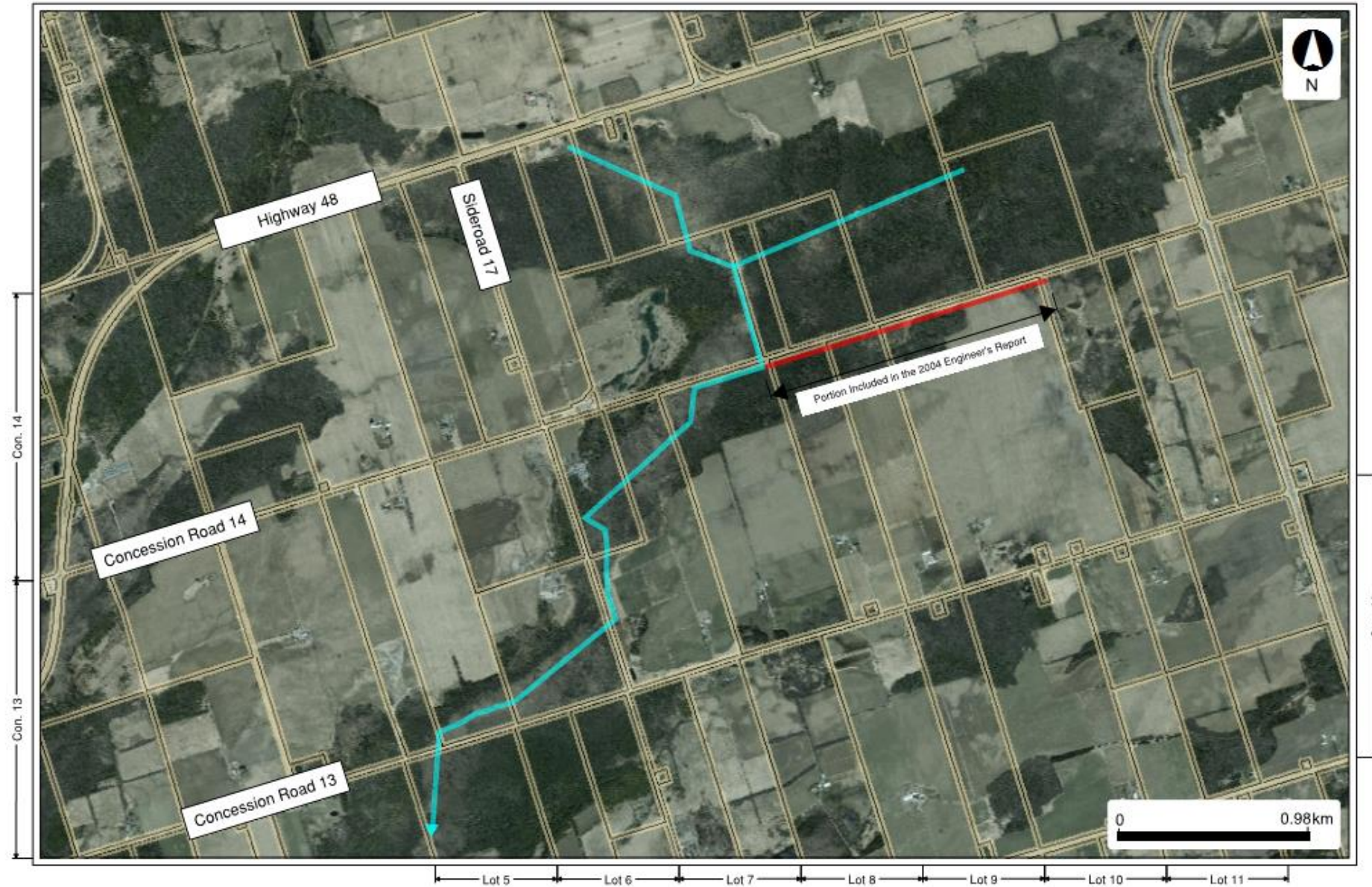
- The cost for trapping and removal of the beaver dam should be levied subsequent to the adoption of the Section 78 report
- Section 75(3) allows for costs to be held up to five years (not exceeding \$5,000)



# Mulock Drain

## Mulock Drain

- Engineer's report dated July 28th, 2004
- Adopted by Municipal By-Law 1927-2004-PW
- Inspected on October 12<sup>th</sup>, 2022
- Good condition
- No known by-law supporting the receiving watercourse as a Municipal Drain constructed under the Drainage Act



# Thank You for Your Time

## Drainage Superintendent

Myles Douglas

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