



TOWN OF MINTO

DATE: June 15, 2018

REPORT TO: Mayor and Council

FROM: Mike McIsaac, Roads & Drainage Foreman

SUBJECT: Semi-annual Municipal Drain Update

STRATEGIC PLAN:

- 9.7 Promote environmentally friendly development through subdivision and site plan control such as naturalized stormwater management, low maintenance landscaping using native species, and energy and water preservation techniques that enhance design and improve the cosmetics of the community.
- 10.0 Support programs that maintain Minto's strong agricultural identity, enhance agricultural work, and protect and restore the natural environment given Minto's location in the heartland of Ontario surrounded by farmland and acknowledging that farming and a healthy natural environment are inextricably linked,

BACKGROUND:

- August 1, 2017 was the first municipal drain update to Council. A resolution was passed receiving the update and approving an application under the National Disaster Mitigation Program to complete mapping and mitigation planning analysis for the entire Maitland watershed.
- December 19, 2017 a second municipal drain update was provide and the following resolution passed:

MOTION: COW 2017-308

That Council receive the Road and Drainage Foreman and C.A.O. Clerk's December 13, 2017 report Municipal Drain Update as information, that the Town pursue Federal and Provincial authorities to ensure approvals from Department of Fisheries and other agencies are expedited for municipal drains and request delegations at future conferences on this topic, that Council request Dietrich Engineering and staff to move forward in 2018 with any drain work that can be accommodated and report back to Council every six (6) months on drain status.

- February 25, 2018 Mayor, Council representatives, staff and Dietrich Engineering delegation with Ministry of Agriculture officials about delayed municipal drain approvals.
- April 2018 Dietrich Engineering meets with various officials about municipal drain approvals across this area
- June 19, 2018 Public Meeting and Reports on Municipal Drain 39 and also on Municipal Drain 60.

Semi Annual Municipal Drain Update



The Drainage Act is one of the oldest laws in Ontario. Municipal Drains are not owned by the Town, but are owned by landowners' subject to a drain assessment which is predetermined in each individual Drain Report. When maintenance or repairs are needed, the Drainage Act is designed to bring this forward in a fair way allowing input by owners who pay for the work. Agencies like the Conservation Authority and Department of Fisheries also have permit and approvals processes to be followed. The Town is required to follow procedures set in the Act, and to abide by the advice of its Engineer.

The following summarizes the status of current active municipal drains in Minto with an updated status in red:

- **Drain 11/Fischer Drain (Dredge Creek and Maitland River south of Harriston)** This project has previously been put on hold due to major improvements required at the bottom end (Maitland River) of Drain 11. The required improvements to the lower end of Drain 11 should be coordinated with the Harriston Flood Investigation project. Improvements to the river (Drain 11) “below” Harriston that are beyond the scope of normal drain maintenance could help move significant amounts of water out of Harriston sooner. However, this work cannot occur without a full understanding of the impact on downstream properties. These improvements to the “bottom end” of Drain 11 will help performance of the upper part of the drain.

Pending the results of the flood plain mapping staff suggests going ahead with the new branch of Drain 11 that will service Fischer, Tarr, Gray and MTO properties making them aware the new system will not function properly until the “bottom end is corrected”. The decision as whether the upper part of the system is improved first, before the “bottom end” should be left up to the property owners. If the landowners agree the branch would be tendered and constructed in 2017, leaving the “bottom end” on its own with a possibility of funding through National Disaster Mitigation funding or other sources.

The drainage engineer has not proceeded with the report. NDMP funding is approved and the LIDAR mapping has been flown. The LIDAR provides a very accurate base map for the Conservation Authority to map flood plains for the entire Maitland River Watershed, and for the drainage engineer to model improvements for this drain which is downstream of Harriston. Improvements to this municipal drain will likely help water move more quickly out of Harriston. The Conservation Authority will work with the Town and drainage engineer on this municipal drain.

- **Drain 24 (CR 109 2nd Line to 4th Line and beyond)** petition submitted March 2012, and last information meeting held June 10, 2014. Changes to the preliminary design were requested at this meeting and ongoing conversations with property owners have taken place. Edits to the design are underway and an information meeting will be needed this year to update landowners with costs and design.
The drainage engineer advises Municipal Drain No. 24 report is expected to be filed with the Clerk by June 15, 2018.
- **Drain 69 (13th and 14th Concessions; from Ayton Road to Road 6 North)** The draft design was submitted for review on November 17, 2017 to the Department of Fisheries and Oceans Canada and to the Ministry of Natural Resources and Forestry on November 22, 2017. The draft report is complete – pending DFO and MNRF response.

The drainage engineer's staff met with DFO biologists on June 6 to evaluate habitat in the drain and survey the existing fish communities. The drainage engineer is awaiting written

response regarding information collected during the site visit from the DFO. MNRF has been contacted and direction provided – activities are eligible for registration under Ontario Reg 242/08, s. 23.9.

- **Drain 39 (6th Line at Road 1N)** Onsite meeting was held on November 4, 2016 with impacted landowners. A survey of the drain was completed spring of 2017 and preliminary design is started. An information meeting will be held in early 2018.
Report was filed by the drainage engineer with the Town June 8 and will be considered by Council June 19.
- **Drain 116 (Part Lot 23, Concession 18)** Construction of the Drain was completed in the fall of 2017. After the final costs have been received, the engineer will complete a final actual assessment schedule for the Town as well as a grant application to be signed by the treasurer and send it to OMAFRA.
Deficiencies have been fixed by contractor. Completion certificate to be issued in June 2018. Final assessments and grant application to be completed by engineer June 2018.
- **Drain 2 (Road 3 North, 12th Line to 12th Line, Ayton Road)** A survey of the drain was completed in the summer/fall of 2017 and a preliminary design is started. An information meeting will be held early in 2018.
Drainage engineer's staff met with DFO biologists on June 6 to evaluate habitat in the drain and survey the existing fish communities. The drainage engineer is awaiting written response regarding information collected during the site visit from the DFO. MNRF has been contacted and direction provided – activities are eligible for registration under Ontario Reg 242/08, s. 23.9.
- **Drains 6, 13 and 54 (County Road 5 to School Road 7; 7th Line to County Road 87):** A public meeting was held summer 2017 after the decision was made to proceed with a Section 78 report rather than do works under the maintenance program. This will better address current issues and ensure a fair assessment of the costs for such works. It was stated at the meeting a field survey was needed in the fall once the leaves had come off the trees as there are sections that go through bush land. Despite waiting until the leaves had come off the trees, parts of drain 13 and 54 require brushing and clearing before they can be surveyed. This clearing will occur before the end of 2017. Drain 6 survey is complete.
The clearing has been completed as of the week of June 3-8, 2018. The survey is partially complete. Final areas will be surveyed in the summer of 2018.
- **Drain 9 (Dietrich reference number 1718):** Onsite meeting was held May 4, 2017 with landowners. A survey of the drain will be completed in the winter of 2017 or spring of 2018, pending clearing of parts of the bush along the drain. A preliminary design and information meeting will follow.
The clearing and survey of this drain is complete. Design is in the drafting phase.

- **Drain 52/Shannon Drain:** Onsite meeting was held on November 13, 2015 with the affected landowners. A survey was completed in August 2016 after cleanout of the ditch in June 2016. A preliminary design is underway. An information meeting will be held in the early summer of 2018.
There is no further update at this time.
 - **Drain 117/20:** Onsite meeting held May 19, 2017 with landowners. This project will include a new branch, a clean out of an existing drain, incorporation of a crossing, and multiple apportionments as a result of a developed subdivision in the upper part of the Drain 20 watershed. A survey of the proposed drain and the existing drain will be completed in the winter of 2017 or the spring of 2018, pending clearing of parts of the bush along the drain. A preliminary design and information meeting will follow.
The clearing has been completed as of the week of June 3-8, 2018. The survey is partially complete. Final areas will be surveyed in the Summer of 2018.
 - **Drain 23** -An onsite meeting was held on October 13, 2017 with the affected landowners. A survey was completed in November 2017. A preliminary design is underway. An information meeting will be held in the summer of 2018.
The drainage engineer's staff met with DFO biologists on June 6 to evaluate habitat in the drain and survey the existing fish communities. The drainage engineer is awaiting written response regarding information collected during the site visit from the DFO. MNR has been contacted and direction provided – activities are eligible for registration under Ontario Reg 242/08, s. 23.9.
 - **Drain 60** - An onsite meeting was held on October 13, 2017 with the affected landowners. A survey was completed in October 2017. A preliminary design is underway. An information meeting will be held in the summer of 2018.
The drainage engineer's staff met with DFO biologists on June 6 to evaluate habitat in the drain and survey the existing fish communities. The drainage engineer is awaiting written response regarding information collected during the site visit from the DFO. MNR has been contacted and direction provided – activities are eligible for registration under Ontario Reg 242/08, s. 23.9.
- Report was filed by the drainage engineer with the Town June 8 and will be considered by Council June 19.
- **Harriston Flooding Investigation** - Survey has been completed for approximately 15.5 km of the upper end of the watercourse, data from the 17 level loggers has been obtained that were installed in various locations of the watershed. A hydrologic model is in progress for this watershed using PCSWM (Personal Computer Storm Water Management).

The next step is to calibrate it to the storm event of June 23rd. A summary report is being prepared. A meeting with Dietrich Engineering, Minto Staff and Maitland River Conservation Authority is recommended in the New Year. This information will be presented to the public and would tie in with the flood plain mapping grant request through the National Disaster Mitigation Program.

Photomap Limited flew LIDAR over the area. The drainage engineer is waiting for the data – should be available at the end of June 2018. Steve Brickman has completed a model and calibrated the storm event of June 23. A draft summary report is partially complete.

The following is a new section on Drain Maintenance which occurs under Section 74 of the Drainage Act. Previous reports had not specifically noted maintenance work.

- Drain 46 is scheduled to be cleaned/brushed in Summer 2018 (between July 15 to October 1). DART forms have been completed and permitting/authorizations have been received.
- Drain 64 will be leveled this year – no timing window restrictions. DART forms have been completed and permitting/authorizations have been received.
- Drain 93 has a Letter of Advice from the DFO, scheduled for cleaning/brushing in Summer 2018. DART forms have been completed; waiting for SVCA permit.
- Drain 115 is scheduled for leveling (earth moving) this year – no timing window restrictions.
- Drain 6 has had CCTV, been surveyed, and has had roots removed. Open ditch cleanout is proposed for this summer. DART forms and letters to landowners are in draft stage.
- Drain 51 will be maintained Summer 2018. DART forms have been completed and CA permit has been received. Awaiting DFO permit/authorization/LOA.

FINANCIAL CONSIDERATIONS:

The 2018 operating budget is \$33,306. The level of activity in this area is the highest in the last seven years as per service measures below:

Service Measures	2011	2012	2013	2014	2015	2016	2017
Tile repairs	10	6	4	7	9	9	11
Ditch repairs, clean out	7	5	2	1	3	4	9
New petitioned drains	3	4	2	2	3	2	7
Totals	23	15	8	10	13	15	27

RECOMMENDATION:

That Council receives as information the Roads and Drainage Foreman's June 15, 2018 report Semi-Annual Municipal Drain Update.

Mike McIsaac Roads & Drainage Foreman