The Corporation of the Township of Huron-Kinloss



Staff Report

Report Title: Bruce Beach Municipal Drain Phase 1 - Tribunal Hearing and

Construction Update (4), Bruce Beach Municipal Drain – Phase II

Prepared By: Grant Collins, Drainage Superintendent, Emily Dance, Clerk

Department: DRAIN

Date: Mar. 7, 2022

Report Number: DRAIN-2022-03-4 File Number: E09-BRU Ph1

L09 BRU Ph1, E09 BRU Ph2

Attachments: February 5, 2022 Bruce Beach Ph II Meeting Presentation, Bruce Beach Municipal Drain Ph II Draft Assessment, February 5, 2022 Meeting Notes, Tribunal Order and Amended Notice of Electronic Hearing; photos of outlet at 98 Bruce Beach Rd.

Recommendation:

THAT the Township of Huron-Kinloss Committee of the Whole hereby receives for information Report DRAIN-2022-03-4 prepared by Grant Collins, Drainage Superintendent and Emily Dance, Clerk.

Background:

Appeals

Gary and Karen Pollock, Mark and Samira Gancevich submitted appeals to Agriculture, Food and Rural Affairs Appeal Tribunal under Section 54 of the Drainage Act, with respect to the Bruce Beach Municipal Drain, Phase 1.

<u>Construction - Bruce Beach Municipal Drain - Phase I</u>

Bruce Beach Municipal Drain – Ph 1 report includes the pond, ravine work of the Bruce Beach Municipal Drain Project. The report received provisionally approval on July 19, 2021

<u>Bruce Beach Municipal Drain – Phase II</u>

The Phase II report will finalize a legal outlet to the lake for this water course.

Discussion:

<u>Appeals</u>

The electronic hearing was scheduled for Thursday March 3 and Friday March 4, 2022; however due to an error with the Notice of Electronic Meeting, the hearing is now rescheduled to March 23 and March 24, 2022.

<u>Construction Bruce Beach Municipal Drain – Phase I</u>

Below is a list of construction activities recently completed.

- The grading of the detention centre is 99% complete (should be done by the end of day March 2, 2022)
- All the fill has been placed and compacted in the ravine
- The pond outlet structure with the orifice plate has been installed
- Rip rap has been placed around the pond outlet structure and the outlet pipe at Bruce Beach Road

Upcoming activities.

- Construct rip rap lined swale through the ravine
- Install guardrail (Monday)
- Rip rap rock chutes in the detention centre
- Cable concrete spillway
- Place 'A' gravel on the berm
- Place topsoil in the ravine and detention centre

Lake Range Road is now open to local traffic, there will be a partial road closure when they are installing the guiderail tentative for Monday March 7, 2022 which there could be a lane closure with flagmen while that work is in flow.

Weather Events

There were two weather events in February, 2022 which have had an impact on the project. The first consisted of mild temperatures with some rain on February 16, 2022 followed by a storm event on February 22, 2022.

Regarding the Feb. 16th event, the Drainage Superintendent checked the drain in the morning and everything was functioning properly. With the rain continuing throughout the day the flow was increasing to the point that the newly installed tile as part of the current drainage project was flowing at rates above the design capacity. The Engineer contacted the Drainage Superintendent about 3.30pm to advise that the water levels were rising and asked me to check the situation. Grant arrived on site shortly after and found that there was debris on the grate of the private culvert which he was able to clean off and the water started to recede immediately, Grant remained onsite for several hours until the flow began to moderate and felt everything was under control. Bruce Beach Road did not flood.

The Feb. 20th 2022 event began in a similar manner. The flow was the same as the previous event and the private drain was accommodating it initially. There was not much debris that could be cleaned off the grate of the private drain. However, the water level continued rising. After speaking with the Engineer, a contractor was

called to bring a hyhoe and a load of gravel to create a berm to re-direct the water to the south rather than to the north where it would normally flood to in these instances. By the time they arrived, some flooding had occurred to the north. After re-directing the water, we then went above the hill to try and restrict the flow entering the tile drain. We were able to do this and the water level below the hill began to recede rapidly. After the event was over, it was evident that the lower third of the grate on the private drain was obstructed with stones and gravel. Had the grate not been there, this material would have carried on with the water flow to the lake and there would not have been any flooding. The attached photo of the outlet at 98 Bruce Beach Rd was taken as the road began flooding and it shows that the culvert was flowing far below its capacity.

Due to the water the Director of Public Works closed Bruce Beach Road.

The contractor returned on March. 3, 2022 with the hydrovac and cleaned out the debris so that the full front and sides of the grate are exposed again. Along with this, the restrictor has been placed in the tile in the riser on the inlet structure in the detention pond so that the maximum flow will be significantly reduced going forward. Larger rip-rap material has been placed at the lower end of the ravine to further mitigate sediment transport downstream.

While there is still some finishing work to do the construction project is completed to the point that it should function as designed by the Engineer for most events.

Bruce Beach Municipal Drain - Phase II

A virtual information meeting was held on Saturday February 5, 2022, at 9:00am. The meeting reviewed the type and design of the drainage system, the estimated costs, and the proposed assessments.

All the property owners within the watershed were sent an invitation and the information is posted on the "Have your say HK" website.

Approximately 63 members of the public attended the virtual meeting. The materials provided at the meeting and the meeting notes are attached to the report.

Below is a chart that gives a tentative schedule of Phase II. However please note there are many opportunities for the timeline to change due to comments from commenting agencies and appeals.

Next Step	Start Date	Duration
Landowner	Feb 5	4 to 8 weeks
Input/Feedback		
Environmental	Feb 9	8 to 10 weeks
Consults / approvals		
(SVCA)		
Environmental	Feb 28	6 weeks

Consults / approvals (DFO) (Fisheries)		
Utility daylighting and other design details	February 4	6 weeks
Drainage report prep	Feb 14	Four weeks after the last completed item above
Processing the report	Mid May	Four months (with no appeals)
Tendering	Mid September	6 weeks
Earliest Construction	Mid November is absolute earliest under this timeline.	
	Far more likely to start 3 to 6 months after tendering is complete	

If there is an appeal to the Tribunal during the 'processing the report' step, then Tendering and Construction will be bumped by 3 to 7 months.

Financial Impacts:

Associated costs for the drain are indicated in the assessments, legal costs are unknown at this time and will be apportioned to the drainage project.

Strategic Alignment / Link:

We are an accessible community by being open and transparent.

Respectfully Submitted By:

Grant Collins, Drainage Superintendent Emily Dance, Clerk

Approved By:

Mary Rose Walden, Chief Administrative Officer