



PORT COLBORNE

Subject: Meeting to Consider the Oil Mill Creek Municipal Drain Report

To: Council - Public Meeting

From: Public Works Department

Report Number: 2024-164

Meeting Date: September 3, 2024

Recommendation:

That Public Works Department Report 2024-164 be received; and

That the Mayor and Acting Clerk be directed to execute a by-law to provisionally adopt the Oil Mill Creek Engineer's Report, dated June 20, 2024, prepared by Paul Marsh, P. Eng of EWA Engineering Inc. under Section 4 and Section 78, Chapter D. 17 of the Drainage Act R.S.O. 1990; and

That Councillor _____, Councillor _____, and Councillor _____ be appointed to sit on the Court of Revision and that Councillor _____ be appointed as alternate.

Purpose:

At the July 23, 2024 Council Meeting, Council approved Report 2024-141, which allowed staff to proceed to the Meeting to Consider for the Oil Mill Creek Municipal Drain. The purpose of this report is to present the findings of the Oil Mill Creek Engineer's Report at the Meeting to Consider and obtain approval to further move the report to the next step, which is the Court of Revision.

Background:

Council Report 2024-141 provided the history and background of the Oil Mill Creek Municipal Drain. In the report, staff informed Council of the receipt of the Oil Mill Creek Municipal Drain Engineer's Report, which was then filed with the Clerks Division on July 17, 2024 and Council directed staff to proceed to the Meeting to Consider.

The *Drainage Act, R.S.O. 1990*, requires the Clerk to send a copy of the Oil Mill Creek Municipal Drain Engineer's Report to all assessed landowners within 30 days of receipt. To meet this requirement, a notification was mailed on July 26, 2024 which provided instructions on how to review the Engineer's Report on the City's website, at City Hall or the City Library. If there were any issues encountered, the Drainage Superintendent could be contacted for a hard copy of the report.

Discussion:

The Oil Mill Creek Municipal Drain Report findings will be presented by the appointed engineer, Paul Marsh, P. Eng., of EWA Engineering Inc.

Property owners who were notified under Sections 41(1) and 41(2) and choose to attend the Meeting to Consider are given the opportunity to ask questions to the Engineer or express any concerns identified in the Engineer's Report related to design or gross errors in the written report. Should the Meeting to Consider reveal any errors in the Engineer's Report, Council may refer the report back to the Engineer for reconsideration. However, under no circumstances is Council to refer the report back to the Engineer regarding assessments. Concerns related to assessments are a function of the Court of Revision.

Additionally, at this meeting, as per Section 42 of the Act, anyone wishing to remove or add their name to a petition for further drainage, may do so at this time.

At this meeting, the City's representatives on the Court of Revision are to be appointed. As per Section 97(3) of the Act, Council is required to appoint three members, with one of the members acting as chair of the Court of Revision. An alternate is also required during the selection.

An agenda to guide the selected Council members through the Court of Revision, along with key notes will be provided prior to the Court of Revision, which is tentatively scheduled for October 7, 2024.

As per the Drainage Act, it is the requirement of the Municipality to keep the Engineer's Reports up to date for all Municipal Drains. When changes through development occur, the need for a revised assessment schedule is required. In addition to the assessment tables, Staff have received various concerns from residents throughout the assessed area that the drainage is insufficient. Therefore, to investigate possible solutions the appointment of an engineer is required.

In conjunction with the final Engineer's Report, a Baseline Report and a Hydraulics' and Hydrology Report were also completed and serve as supplement documents. Through the three reports, the following drainage issues were reviewed:

- Concerns of excess flooding for the landowners of the West Branch Drain
 - Two possible outlet locations were investigated to address the concerns of the west branch. The first option considered was from the intersection of Vimy Ridge Road and the West Branch Drain southeast to the lake. However, this option was not viable because the proposed location would have been cost prohibitive. The second potential outlet was at the Pinecrest Road allowance. However, due to the rock elevations present in this area, the engineer determined this was not a viable solution. Additionally, another concern with this outlet is the location on the point, rather than being in the bay of the lake, leaving it unprotected from the prevailing winds.
- Installation of a pump system
 - In the Oil Mill Creek Municipal Drain Preliminary Design Report for Pumping System, dated October 15, 2022, which was prepared in conjunction with the Engineer's Report, a pump analysis indicated that when the gate is closed, a benefit of 18% reduction in the flood depth would be recognised for a 1:5 year storm (which is equivalent to a rain fall of 68.9mm or 2.71 in over a 24hr period). The estimated cost for a pump, electrical servicing and minor upgrades to the existing infrastructure was approximately \$135,000, with a cost breakdown of roughly \$453/Ha. If a petition is received for the installation of a pump system for half of the area requiring drainage, the municipality can appoint an engineer to review the preliminary design and finalize a report for installation.
- Creation of storage since a secondary outlet option was not a possibility
 - A wetland/storage facility within the municipally owned park was identified as a viable option. Under the Act, when new land is used for drainage purposes, the property owner is compensated with an allowance. However, since the land is a municipal park, the City has waived this allowance. The retention pond serves a dual purpose: providing storage when needed and improving water quality. Although the Drainage Act focuses solely on drainage and not water quality, concerns have been raised about the lack of measures addressing water quality.
 - The wetland helps mitigate the 1:5-year design standard, and without it, the level of service would be reduced to a 1:2-year storm. To compensate, the channel through the park could be widened to increase capacity, but the culvert/pipe section closest to the lake would still pose a restriction.
 - The channel to the wetland from the main drain is designed with a gentler slope than the West Branch Drain, allowing the wetland to flood before the

West Branch does. This design reduces the impact on both the West Branch and on the downstream drain.

- A potential new flow path for the East Branch #1 drain
 - A new location directly south from the southwest corner of Bell Acres was investigated to provide a more direct flow path to the main branch. Site meetings were held with the property owner to discuss the proposed locations and it was revealed that a rock outcrop in the flow path, made this location unsuitable.

- Alternate outlet for residents along the west side of Cedar Bay Road
 - Surveys were conducted to determine if extending E2 to the north would be beneficial. However, the findings indicated that this would result in little to no improvement. At the public meeting in February 2022, Mr. Marsh suggested that a petition for drainage for the back sides of the Cedar Bay parcels between 646 and 694 Pinecrest could provide some minor improvements to property drainage. However, no petitions for local improvements were received.

- Petition by the municipality for the branch drains to outlet Tammy and Richard Avenue
 - The Engineer investigated solutions to provide an improved outlet to the Bell Acres subdivision. They determined that lowering the existing E1 Branch would allow for improved flow.
 - Through the investigations and scenario's that were considered for this drain, the Engineer's Report has described the most cost-effective solution at this time.

Financial Implications:

All upfront administration and financing have already been borne by the City of Port Colborne and all construction costs will additionally be borne by the City of Port Colborne. Once the report is adopted and the construction is completed, the financing and cost of the project will then be expensed to the affected landowners according to the assessment schedule contained in the report upon final adoption of the by-law.

Eligible drainage works costs will be recorded to a drainage account established for the drainage set out in this report. That account will continue to be charged interest at the

City's Bank Prime Rate + 2% to temporarily finance the drainage works until the Engineer's certificate of final completion.

The total estimated cost of the project is \$611,601 as indicated in the assessment summary schedule. Additionally included in the report is one maintenance schedule with 6 intervals. There are four branch drains which are assessed through intervals 2-5 and intervals 1 and 6 are variations of the main drain depending on what work is completed along the drain.

The following provides a quick summary for the estimated assessments for all works considered through this report:

Privately owned lands – \$486,936

Municipal Parcels – \$37,181

Municipal Roads and Friendship Trail - \$87,484

The Oil Mill Creek Municipal Drain is completely outside the limit of the urban storm sewer so there will be no charges funded through the urban storm sewer funds.

Public Engagement:

The process of the Drainage Act is a public process and adhering to the Act, public meetings were held. The first was via Zoom on February 23, 2022, and the second was at City Hall November 27, 2023. Many additional meetings with individual assessed landowners also took place.

As per the *Drainage Act*, following the Meeting to Consider, a copy of the provisional by-law and notices for appeals will be mailed to all parcels assessed.

Strategic Plan Alignment:

The initiative contained within this report supports the following pillars of the strategic plan:

- Environment and Climate Change
- Sustainable and Resilient Infrastructure

Conclusion:

That Council approve this report and attached bylaw for the Oil Mill Creek Municipal Drainage works to proceed to the next step of the Drainage Act, the Court of Revision.

Appendices:

- a. Drain Options Investigations
- b. Engineer's Report containing plan and profile of the Oil Mill Creek Municipal Drain

Respectfully submitted,

Alana Vander Veen
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Report Approval:

All reports reviewed and approved by the Department Director and also the City Treasurer when relevant. Final review and approval by the Chief Administrative Officer.