



TOWN OF AMHERSTBURG DRAINAGE BOARD MINUTES

Tuesday, June 4, 2024
6:00 P.M.
Council Chambers, 271 Sandwich St South

PRESENT

Allan Major
Murray Sellars
Brian Renaud
Brad Laramie
Anthony Campigotto
Sam Paglia, Drainage Superintendent/Engineering
Coordinator
Nicole Humber, Recording Secretary
Karly Kennedy, Policy and Committee Coordinator

ABSENT

None

1. CALL TO ORDER

The Vice-Chair called the meeting to order at 6:03 p.m.

2. ROLL CALL

3. DISCLOSURE OF PECUNIARY INTEREST & GENERAL NATURE THEREOF

Board Member Brian Renaud advised he will have to excuse himself from participating in item 6.1 as he owns property on the Deslippe Drain.

4. LAND ACKNOWLEDGEMENT

We will begin by acknowledging that the land on which we gather is the traditional territory of the Three Fires Confederacy of First Nations (comprising the Ojibway, the Odawa, and the Potawatomie Peoples), and of the Huron- Wendat and Wyandot Peoples. We recognize the land as an expression of gratitude to those whose traditional territory we reside on, and a way of honouring the Indigenous people who have been living and thriving on the land since time immemorial. We value the significant historical and contemporary contributions of local and regional First Nations and all of the Original Peoples of Turtle Island.

5. MINUTES OF PREVIOUS MEETING

Brian Renaud moved, Murray Sellars seconded;

THAT:

The minutes of the previous meeting BE ADOPTED:

- 1. Drainage Board Meeting Minutes – April 30, 2024.**

Motion Carried

6. OPEN COURT OF REVISION

6.1 Appeals – Deslippe Drain

Shane Lafontaine, P.Eng from RC Spencer Associates Inc. informed the Board members that there were no requests or questions received by their firm regarding the Deslippe Drain.

Vice Chair Allan Major asked if anyone in the audience had any verbal appeals.

The Board heard from:

- **Josh Mailloux – 5025 Concession 5 N**

Mr. Mailloux advised the Board members that he had submitted a tile map to have drainage adjusted on the Deslippe Drain and wondered if the engineers have made that adjustment as he did not hear back from anyone.

Mr. Paglia indicated that coincidentally both engineers that have been appointed on both of the Deslippe Drain reports were in attendance at this Drainage Board meeting. Mr. Paglia stated that at the meeting to consider the first drainage report on the Deslippe Drain it was decided that the original watershed boundary would be left as is on the first engineer's report, and would be adjusted in the second engineer's report. Mr. Paglia invited engineer Josh Warner to speak on Mr. Mailloux's comments regarding the watershed boundaries.

Mr. Warner advised that the changes to Mr. Mailloux's property due to the tiling would be reflected in the drainage report he is currently preparing.

Mr. Mailloux asked for clarification on which report was going before the Drainage Board at this meeting.

Mr. Paglia indicated that the Court of Revision is being held at this meeting for the first report on the Deslippe Drain that deals with three bridge replacements, authored by R.C. Spencer and Associates Inc. and the second report on the Deslippe Drain for an examination of the entire drain has not been completed yet by the appointed engineer, Josh Warner, P.Eng of R. Dobbin Engineering Inc. The only report the Town has received to date is the report in front of the Board dated March 7, 2024, and when the other report is received the landowners would be notified of the meeting to consider and the court of revisions for that report.

Mr. Mailloux asked if the projects would be billed out separately.

Mr. Paglia confirmed that was the case. Landowners would be billed out separately and went over the timing process for Mr. Mailloux.

Board Member Brad Laramie asked Mr. Mailloux if he was wanting his land changed in the watershed in the first report for the Deslippe Drain.

Mr. Mailloux indicated that he was out of town and missed the meeting to consider, and when he brought it up he decided he did not want to go back and incur additional costs to the drain to have it changed as there was only a small portion of his lands along Alma Street that is no longer draining into the

Deslippe Drain, however he would like it changed on the second engineer's report.

- **Keith McGuire – 7521 Pike Rd**

Mr. McGuire asked for clarification on both assessments and if they would be on the original report or separate engineer's reports.

Mr. Paglia asked which report Mr. McGuire was referring to as "original."

Mr. McGuire stated that he was referring to the first report when three culverts were replaced. Mr. Paglia noted that was the report that was before the Board at this meeting, and for this discussion, the original report for the Deslippe Drain. Mr. McGuire asked when the next engineer's report was prepared if it would be a report on the entire Deslippe Drain. Mr. Paglia confirmed that was the case, and the Act allows landowners at the on-site meeting to provide information and request additional works. In this case it did not happen at the on-site meeting, and coincidentally the petitioner for the second report attended the on-site meeting and did not speak up at that time, which was the opportunity to bring it up in order to have the appointed engineer examine the whole drain. At the time the Town received the request from this landowner, the current (original) report was 95% complete when the request came in from the landowner at the top end of the drain. RC Spencer Associates Inc. was contacted and the Town was advised that the report was too far along. Mr. Paglia explained that through the Drainage Act (Act) process, landowners have appeal rights for delays, and by having RC Spencer add onto the scope of the current report, it would add approximately 1-2 years onto the completion of the report. It was decided a second report would be required, and therefore Council appointed Josh Warner, P.Eng from R. Dobbin Engineering Inc. to complete the second report to resolve the concern of conveyance from the upstream landowner.

Mr. Paglia explained that during the on-site meeting for the second request, the appointed engineer noted that four (4) culverts were in dire need of replacement and the Town applied to the Ministry of Agriculture to have those culverts replaced, one of which was blocked to vehicular travel. Also, the engineer noted that nine culverts in total are expected to be replaced in his forthcoming report. A preliminary examination had already been completed prior to the onsite meeting.

Mr. McGuire asked if there would be any compensation for the landowners with regard to engineering fees as the drain was just engineered with the first report. Mr. Paglia stated that there is a cost savings as the second engineer has most of the legwork done with respect to watershed boundaries, etc. Although the

landowners will not see the cost savings monetarily, the engineering fees will likely be reduced overall since the engineer will have a very recent report to refer too and hence, less time to complete their report and bill for that time. Mr. Paglia further stated that the engineer's in southern Ontario work well together and will share information with each other.

Board Chair Anthony Campigotto joined the meeting at 6:12 p.m. and took over chairing the meeting from the Vice-Chair.

Board Chair Anthony Campigotto asked if anyone else in the gallery would like to speak.

There were none.

Allan Major moved, Murray Sellars seconded;

That:

- 1. The appeals submitted written or verbally to the Court of Revision for the Deslippe Drain BE RECEIVED; and**
- 2. The schedule of assessment as presented by RC Spencer Associates Inc. for the Deslippe Drain BE APPROVED.**

Motion Carried

7. CLOSE COURT OF REVISION

The Court of Revision closed at 6:18 p.m.

8. CONSIDERATION OF THE FINAL DRAINAGE REPORT

8.1 Jeths Drain (2024)

Josh Warner, P.Eng of R. Dobbin Engineering Inc. provided the Board with an overview of the report. Mr. Warner explained that the Jeths Drain report was prepared under Section 78 of the Act and proposes the enclosure of 23 meters of the upper end of the Jeths Drain with a 15" diameter PVC pipe, 343 meters of open channel improvements to the drain including bank re-sloping, replacement of two culverts, removal of two culverts, and flushing a portion of the tile drain and a remaining culvert. Total estimated cost of the works is \$206,340.00. Mr. Warner noted there were detailed breakdowns in the report

for allowances, assessments, provisions for maintenance, working areas, drawings, and construction specifications.

Board Chair Anthony Campigotto asked if anyone in the gallery had any questions.

There were none.

Board Chair Anthony Campigotto invited Sam Paglia to speak.

Mr. Paglia stated that if there were no landowners wishing to comment on the technical aspects of the report, then the Board can move forward with the provisional adoption and recommendation to Council. Mr. Paglia indicated if there were any landowners wishing to comment to please come forward.

Dan Huneault asked where the Jeths Drain was located in relation to the General Drain.

Mr. Paglia stated that the Jeths Drain was located north of Texas Rd and outlets into the Detroit River at municipal number 639 Front Road N.

Brad Laramie moved, Allan Major seconded;

That:

- 1. The engineer's report, prepared by R. Dobbin Engineering Inc. dated May 7, 2024 for the improvements to the Jeths Drain (2024) BE RECEIVED;**
- 2. The engineer's report for the improvements to the Jeths Drain (2024) BE CONSIDERED;**
- 3. The PROVISIONAL ADOPTION of By-law 2024-046 which appends the engineer's report for the improvements to the Jeths Drain (2024) BE BROUGHT to the next Regular Council meeting for Council's consideration; and,**
- 4. Administration BE DIRECTED to proceed with the scheduling of the Public Meeting of the Court of Revision for the improvements to the Jeths Drain (2024).**

Motion Carried

8.2 General Drain (2024)

Josh Warner, P.Eng. of R. Dobbin Engineering provided an overview of the drainage report. Mr. Warner stated that the drainage report was prepared under Section 4 of the Act, and multiple petitions were received as part of these drainage works - parcel indexes 3, 4, 5, 7, and 10 -15 to provide an adequate outlet for these properties. The report proposes the incorporation of the existing infrastructure which includes two 450 mm diameter storm sewers which outlet into the Detroit River, a Rip Rap channel from station 0+016 to 0+028, 900 mm and 750 mm pipes and catchbasins under Sandwich St N, 142 metres of open channel and 2010 x 1530 mm diameter steel pipe arch to be completed at 0+196. The report also includes 17 metres of 600 mm diameter concrete pipe at the outlet to the Detroit River, the channel adjacent to the properties with index 3 and 4 shall be moved off the properties and placed on the property index 6. As part of the move off, one private culvert shall be removed and one shall be replaced and relocated. There is forcemain to be installed from parcels indexed 10-15 to the open channel in order to service those parcels. Total estimated cost is \$492,430.00. The report includes detailed breakdowns for allowances, assessments, provisions for maintenance, working areas, drawings, and construction specifications.

Board Chair Anthony Campigotto invited Sam Paglia to speak.

Mr. Paglia indicated that because the report is under Section 4 of the Act, landowners who have not signed the petition, have the ability to sign the petition or landowners who have signed the petition can withdraw their name and can do so at this meeting. Mr. Paglia asked the Board to ask the landowners in attendance if there were any landowners present that wished to add their names to the petition or withdraw their names from the petition.

Board Chair Anthony Campigotto asked those in the gallery if anyone wanted to speak on the matter.

The Board heard from:

- **Hal Kersey on behalf of Dan Caster**

Mr. Kersey explained that they were at the onsite meeting back in August of 2023, however they received the drainage report earlier in this afternoon. Mr. Kersey indicated his client has been assessed approximately \$133,000.00 and they have not had a chance to go through the report due to the short window of receiving the report because the meeting notice and the report were sent to the previous owner, therefore they cannot comment on accepting the report as they

have not had a chance to go through it. It was noted that most of their questions would be more technical in nature rather than assessment.

Mr. Paglia stated that this meeting is to discuss the technical aspects of the report and the next meeting was the Court of Revision which would discuss the assessment portion / financials of the report and how the engineer has assessed the lands fairly. Mr. Paglia noted that hearing the questions that Mr. Caster is asking, seem to be more technical in nature and that now was the time to present them to the engineer. Mr. Paglia added that the mailouts for the meeting were all sent out together to the registered landowners per information provided by the County of Essex. If property changes hands, sometimes it is 3-4 months before the Town receives an update. Mr. Paglia asked Mr. Caster to confirm if the questions he had were in relation to his lands and the forcemain. Mr. Caster indicated that he just wanted to be up to speed on the project and that he was not there to object to the project as the cost is the cost. Mr. Caster stated that he took possession of the property back in August of 2023, however the mailout went to the previous owner Frank Binder who delayed providing the mailout to him by about three or four weeks, so he has not had a chance to look anything over as he just received the documents a few hours prior to the meeting.

Mr. Paglia added that the forcemain has been designed in consultation with the engineers that are representing Mr. Caster for his development. Mr. Paglia stated that with regard to technical aspects of the project he did not see an issue as Mr. Warner has been working with Mr. Caster's engineers to include what Mr. Caster needs is included in the report. Mr. Paglia noted that if there was anything downstream of his property he could certainly talk about it at this meeting, and if Mr. Caster needs to meet he is available at any time. Mr. Caster advised that he was alright with the information he has heard so far. Mr. Paglia advised that the engineers report could get referred back to the engineer at any time by Council.

- **Dan Huneault – Jones Realty representing the Amherstburg Yacht Club**

Mr. Huneault advised that the Amherstburg Yacht Club (AYC) has concerns with the drainage and possibly added volume of water with the proposed works in the engineer's report. Mr. Huneault asked for clarification on landowners adding their names to the petition, and if that it meant you agree with the proposed works. Mr. Huneault also wanted to know if he would still be able to ask questions if his name was not on the petition.

Board Chair Anthony Campigotto asked Mr. Paglia to speak on the matter.

Mr. Paglia explained that the idea of the petition under Section 4 of the Act allows for a legal statute outlet for lands that it serves. The Act has existed for approximately 150 years and there are engineer's reports that are attached to drains that go through the Act process and are adopted by community of landowners with Council and become bylaw, or the mechanism for the Town to do the recommended work and also bill out those costs. It is a user pay system. Mr. Paglia stated that this particular section of the Act, is when a landowner requests a new drain, and forming a new statute outlet for the petitioner. Anyone in Ontario can petition under the Act for a new drain, by their Council, who would then appoint an engineer. Mr. Paglia further stated that the names on the petition are significant mainly if the project fails, and if the project fails the engineer will usually distribute those costs to those landowners on the petition. Mr. Paglia explained that it is more to the process, however the landowners are afforded the opportunity to add their name to the petition if they feel they need drainage, and the ability to remove their name from the petition if they do not feel they need drainage, and allows for the communal process to play out. There is a potential financial aspect by signing the petition, however names can come and go off the petition during the process. Mr. Paglia added that once a petition is filed, depending on where the petitioner is located or the area requiring drainage is located, other lands are pulled into the project if their water uses the drain. The drain as it was prior to the petition is a private drain under Common Law, and someone has petitioned Council to make this a legal drain under Statute Law. It gives the water that flows within the drain the legal right to unobstructed flow. The new municipal drain will be a user pay system, and all landowners who use the drain share in the cost through the Council appointed engineer and bylaw. A legal outlet is being created for someone, and all of the properties who use the drain will be in the watershed. Landowners have appeal rights that are technical matters (engineer's recommendations), and financially (regarding assessments and if they are assessed fairly in relation to other lands).

Mr. Huneault mentioned that there is a small sliver of land at AYC and there are concerns of disruption of the operation of the marina, open cut, increased pipe and water flow, and any impacts to the marina.

Mr. Paglia asked engineer Josh Warner to address Mr. Huneault's concerns.

Mr. Warner indicated there are some increased flow from some upstream lands joining the watershed, however there will be an additional pipe on the yacht club property to handle those flows, and flows from the upstream watershed. The existing watershed piping on the yacht club property is not sufficient enough to handle the required storm events, therefore an additional pipe will be installed to handle to existing watershed and additional water that will be added to the drainage area. Mr. Warner explained that in terms of disruption, there

will be a short duration of disruption for approximately one day to install the pipe. Once the construction phase is reached, a pre-construction meeting will be held to try to co-ordinate any disruptions with any landowner.

Mr. Huneault asked if Mr. Warner could clarify where index properties 10-15 outlet.

Mr. Warner advised that currently there is no legal outlet for the property's water, and initially utilizing the existing storm sewers in the westerly subdivision was looked into, however there was not enough capacity.

Mr. Huneault asked about the design work and if it would be on the individual property owners as far as oil grit separators, pollution controls and what would be added to the mix at the outlet into the Detroit River.

Mr. Warner advised that a quantity and quality control will be completed on that specific property, and they will likely have a SWM pond and a pump station to the forcemain, similar to the other properties being developed upstream, they will be restricting their flows to pre-development rates and will be responsible for all quality control on site by permit.

Mr. Huneault asked about the additional acreage being added to the outlet pipe.

Mr. Warner indicated that the additional water would be included, however a release rate has been set up so the flow is restricted for the downstream drainage structure to accommodate those flows.

Mr. Huneault asked when further concerns can be addressed, and if there is any chance for the owner to appeal.

Mr. Paglia explained that all landowners have the right to appeal, however he stated that we do not want to move the project ahead if the community of landowners is not ultimately going to adopt it. The issue of the predeveloped flows and design overall, is creating some confusion. Mr. Paglia clarified that they are adding area to the watershed therefore the design of the drain has to be designed to a certain level of service for the watershed which is governed by provincial standards and also approved by ERCA as far as quantity of flows etc. Mr. Paglia stated that no one is adding anything because currently nothing exists, as we are creating a drain to drain a certain sized watershed. If the technical aspect is the watershed boundary, then the Board has to discuss that and there are appeal forms that can be signed to appeal the technical matter on the report, if the Board feels it is warranted, they could refer the report back to the engineer and a second meeting to consider would be held. Mr. Paglia

indicated that if there was a specific problem with the technical aspects, now is the time to discuss.

Mr. Huneault added that he did not believe there was representation from the Jones Group at the on-site meeting, and there is some push back agreeing with the project.

Mr. Paglia clarified that the owner of lands that are brought into a project are involved in the project, and have an appeal right on the technical aspects or the financial aspects with respect to the assessment (fairness), however there is no choice whether to be part of the project or not. Someone has applied for a legal outlet and a process is in place to provide them that outlet. Mr. Paglia asked Mr. Huneault to be more specific with his concerns.

Mr. Huneault explained that he is not fully understanding the effects of the additional water and even though there is restricted flow, there are additional properties in the proposed watershed, and he would like to know the impact to the boat slips that are in the discharge area.

Mr. Paglia noted that was a very good question and he would ask Mr. Warner to speak on the requirements that ERCA has asked regarding flows, pre-development, and the outlet specifically.

Mr. Warner indicated that ERCA had the requirement that the system be designed to the 100 year storm event - the storm event that the lower end is designed to and if there is current overland flow now, there will be less over the rock swale and the addition of this pipe will solve that for the 100 year storm event even considering the additional watershed as those properties have flows restricted and the release rate are even less than a two year pre-development if it were to be draining there now.

Mr. Huneault inquired if there was recent work done to the rock chute along Sandwich St N to the river, as sometimes water goes over the rock chute, and it seems that the volumes of water are excessive at times causing over land flow at the yacht club and now we are proposing adding more water to it. Mr. Huneault asked if the rock chute was designed properly with the high slope, and if the additional water flow through properly and not cause any issues for AYC.

Mr. Warner advised that the project has been designed for the 100-year storm event even with the increased area, as the flows for the increased area have been restricted to lower than predevelopment rate.

Mr. Huneault reiterated his concerns with water at the outlet flowing over the gabion stone, questioned whether it is possible the pipe is plugged or possibly not large enough, and if any work was recently completed to the area.

Mr. Warner advised he was not aware of any work recently done, but the plan is to add the additional pipe to convey the flows safely downstream.

Mr. Paglia stated that the current drainage system in place is a private drain, and the Town does not have any record of work done on private drains. The obligation of the engineer is to design the drain to a standard level of service, and since 1995, to convey the two-year rain event and contain the 1:100 rain event. This project was presented to ERCA and ERCA's response was that the project is acceptable, in agreement, and have no comments. Mr. Paglia indicated that the drain that is currently in place was not engineered and the report before the Board is engineered, the hydrology has been studied, and it is for a certain level of service. Should there be a storm that is more than 1:100 than there will be some flooding as the drain is not designed for that, but the drain is designed to the Provincial standard of a two-year conveyance and a 100-year containment.

Mr. Huneault asked why the rock chute was not enclosed in one solid conduit.

Mr. Warner indicated that his obligation under the Act was to provide sufficient outlet for the properties upstream, and modelling the rock chute Mr. Warner did not feel enclosing the chute was necessary. Mr. Warner added that if the landowner felt it was necessary, it could be accommodated however there would be additional costs to do so. Mr. Warner advised that if the pipe was enclosed it could spill over top at a certain point, possibly at the connection which would be possibly be a basin and would likely spill over, even if it were an enclosed system.

Mr. Campigotto asked if anyone in the gallery had any further comments or questions.

There were none.

Mr. Campigotto asked if any of the Board Members had any comments or questions.

Vice-Chair Allan Major asked if Jones Realty intended to add their name to the petition.

Mr. Huneault indicated that at this point they would not be adding their name to the petition.

Board Member Brian Renaud stated that it appeared as if the drain was going to be constructed right through the yacht club's property, and asked if it was possible to construct the drain with it re-routed north of AYC and then outlet into the river, or if maybe that option was too costly.

Mr. Huneault asked if an alternate design had been looked at.

Mr. Warner indicated that at this point an alternative design had not been looked at.

Mr. Paglia explained to the Board Members that although the rock chute is visible in the profile but not in the plan, the chute Mr. Huneault is referring to is on the west side of County Rd 20 where the 36" outlet pipe comes through the road and drops 10-15 feet to the rock chute where there are two conveyances recommended in this report to handle the flow. Mr. Paglia agrees that if there is a concern that the Yacht Club has on managing the overflow, as it will overflow in certain events similar to what it does now, we can't assume that it will never overflow the rock chute. If the Board feels the report should be looked at for technical merit than it should be looked at.

Board Member Brad Laramie said it looked like if the water was rerouted to the north as Mr. Renaud suggested it the water has a lot further to travel before it outlets into to the Detroit River. Mr. Laramie asked why the outlet was in the location that it was in the report.

Mr. Warner stated that currently the properties outlet through this private channel across County Rd 20 into the Rip Rap channel and there are two pipes that outlet into the river. Mr. Warner further stated that they were utilizing the existing system. Mr. Warner advised that if they were to investigate other options now there would be significant increases in costs.

Board Member Brad Laramie asked if there were currently two pipes existing on the private outlet.

Mr. Warner clarified that there were two pipes existing, and a third pipe would be added.

Board Member Brad Laramie stated that as the current drainage area has now been engineered, it should perform better than it currently does.

Mr. Warner confirmed the area would definitely perform better than it currently does, and that ERCA approval required hydrology and a hydraulics report be performed on the entire system, specifically the downstream portion as they

knew there had been concerns of the area over topping. The report was designed to the highest quality and thoroughly reviewed by ERCA.

Mr. Paglia asked Mr. Warner to expand on the study, specifically as it relates to the yacht club property.

Mr. Warner explained that the storm sewer downstream, and the entire system was designed to the 1:100 year storm event, and is designed to maintain all the water within the rock chute and storm pipes now that there will be three pipes, so that the water doesn't over top during severe storm events.

Mr. Huneault asked if the 450 mm pipe would be replaced with a 600 mm pipe.

Mr. Warner stated that the plan is to utilize the existing pipes for their capacity and add an additional 24" pipe.

Mr. Huneault questioned the impact on the boat slips and boat owners, if the outflow would cause one or two of the slips to be unusable, and had concerns about boats moving etc from storm events. Mr. Huneault asked what the litres per second would be.

Mr. Warner did not believe the additional outflow would be an issue as the additional pipe would be approximately 1.8 metres north of the existing outlet and he believes the slip could be utilized. Mr. Warner advised he did not know the litres per second would be off the top of his head, however those figures were all calculated and provides to ERCA. Mr. Warner explained that the velocities would be less than they currently are due to the additional pipe, therefore he did not anticipate any negative impacts.

Mr. Huneault asked Mr. Paglia if the engineer's report could be looked at again, and if another site meeting with the engineer could be arranged.

Mr. Paglia indicated that would be a question for the Drainage Board to deliberate and if they feel the engineer's report needs to be sent back for revisions, a motion will be made to do so. Mr. Paglia mentioned that a site meeting with the engineer could be made at any time.

Board Member Brad Laramie stated that with the concerns Mr. Huneault had regarding the yacht club property, and now that a site meeting with the engineer would be scheduled, it would be best to send the report back to the engineer. Mr. Laramie further stated that with the new retention pond and the additional pipe it looked to him that the drain would work better than it currently does. Mr. Laramie asked Mr. Warner to correct him if he was wrong.

Mr. Paglia explained that the drain is currently a private drain, and the Town will be taking it over as a Municipal Drain through the Act making it a legal outlet under Statute Law.

Mr. Warner agreed that the intent of the improvements downstream that the drain would work better than it currently does. Mr. Warner added that the storm water pond is not proposed as part of the drain as it will be for the private development to restrict their flows back for properties indexed 10-15.

Mr. Paglia explained that the pond was a storm water management pond that would be approved by the Infrastructure Services Department and Planning Department when the site plan control is completed, and before the development is allowed to proceed. Mr. Paglia added that all developments with storm water management are restricted to pre-development flows. The pond is utilized to catch the water and release through the forcemain at a given rate (litres per second), which has already been designed and approved by ERCA. Mr. Paglia noted there are no extra flows, and that the addition of the land mass the drain was designed for and include the pre-development flows from those lands.

Mr. Huneault added that if an onsite meeting is held with the engineer to discuss the project and concerns, a lot of the concerns would likely be resolved.

Mr. Laramie suggested making a motion to have the engineer's report referred back to the engineer, and an onsite meeting be held with the landowners to go over their concerns before adopting the report.

Brad Laramie moved, Brian Renaud seconded;

That:

- 1. The engineer's report, prepared by R. Dobbin Engineering Inc. dated May 7, 2024 for the construction of the General Drain (2024) BE REFERRED BACK to the engineer for future consideration.**

Motion Carried

9. NEW BUSINESS

9.1 Authorizing Bylaw – Sucker Creek Drain

Board Chair Anthony Campigotto asked if anyone in the gallery had any questions or concerns.

There were none.

Mr. Paglia stated that the authorizing bylaw is an administrative bylaw held as it is due to drainage work being done by a neighbouring Municipality under Section 78 of the Act that traverses through the Town of Amherstburg. The work is completed and then scheduled under that Municipality's bylaw. In order to levy the costs, each municipality must have their own bylaw. Mr. Paglia used the example of taking the Town of Essex's report and bylaw, and this authorizing/giving it a Town of Amherstburg bylaw in order for the Town of Amherstburg to levy any costs.

Brian Renaud moved, Allan Major seconded;

That:

1. **The report from the Drainage Superintendent and Engineering Coordinator dated May 27, 2024 regarding Authorizing By-Law for the Sucker Creek Drain BE RECEIVED;**
2. **The drainage report dated March 19, 2018 by Gerard Rood, P.Eng., of Rood Engineering Inc. BE RECEIVED;**
3. **That Essex Council's decision to proceed with the drainage works under Essex By-Law No. 1734 BE RECEIVED;**
4. **That By-Law No 2024-048 BE READ 3 TIMES to become the Authorizing By-Law for the future repair and maintenance of the Sucker Creek Drain for the portion of drain within the limits of the Town of Amherstburg.**

Motion Carried

9. NEXT MEETING DATE

July 9, 2024 at 6:00 p.m.

10. ADJOURNMENT

Allan Major moved, Murray Sellars seconded;

THAT:

The Board rise and adjourn at 7:06 p.m.

Motion Carried

Chair – Anthony Campigotto

Staff Liaison – Sam Paglia

Information will be gathered in accordance with the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA). All comments and communications received will become part of the public record unless you expressly request the Town to remove it. If you want to learn more about why and how the Town collects your information, write to the Town Clerk's Office, 271 Sandwich Street South, Amherstburg, ON N9V 3R2 or call 519-736-0012.

May 7, 2024

The Mayor and Council
Town of Amherstburg
271 Sandwich Street South
Amherstburg, Ontario
N9V 2A5

Gentlemen and Mesdames:

Re: Jeths Drain (2024)

In accordance with your instructions, R. Dobbin Engineering has undertaken an examination with regards to improving the Jeths Drain in the Town of Amherstburg.

Authorization under the Drainage Act

This is an Engineer's Report that has been prepared under Section 78 of the Drainage Act. R. Dobbin Engineering Inc. was appointed by council on June 5th, 2023.

Section 78 of the Drainage Act states that, where, for the better use, maintenance or repair of any drainage works constructed under a bylaw passed under this Act, or of lands or roads, it is considered expedient to change the course of the drainage works, or to make a new outlet for the whole or any part of the drainage works, or to construct a tile drain under the bed of the whole or any part of the drainage works as ancillary thereto, or to construct, reconstruct or extend embankments, walls, dykes, dams, reservoirs, bridges, pumping stations, or other protective works as ancillary to the drainage works, or to otherwise improve, extend to an outlet or alter the drainage works or to cover the whole or any part of it, or to consolidate two or more drainage works, the Council whose duty it is to maintain and repair the drainage works or any part thereof may, without a petition required under Section 4 but on the report of an Engineer appointed by it, undertake and complete the drainage works as set forth in such report.

Existing Drainage

The drain commences in the south part of the lot with the Landowner Index Number (L.I.N.) 2, and the drain extends 1,160m west through Lot 10, Concession 1 to an outlet in the Detroit River. The drain is closed from Station 0+000 to Station 0+120. At Station 0+120 the drain outlets to an open channel. The open channel extends 922m west where

it outlets to a closed drain on the east side of County Road 20. The closed drain extends 118m west where the drain outlets to the Detroit River.

The last Engineer's Report on the Jeths Drain was prepared by M.R.M. Gerrits and is dated August 12, 2022. Under this report the Jeths Branch Drain was constructed, channel improvements were completed on the property with L.I.N. 25 and future specifications were developed for the remainder of the drainage works.

Drain Classification

The Jeths Drain is currently classified as a class "F" drain according to the Department of Fisheries and Oceans (DFO) classification as presented by the Ontario Ministry of Agriculture, Food and Rural Affairs' Agricultural Information Atlas.

Class "F" drains are intermittent or ephemeral (dry for more than two consecutive months).

Approvals

The drain will require approval from the Essex Region Conservation Authority and the Department of Fisheries and Oceans. Construction cannot commence without necessary approvals.

Site Meeting

A site meeting for this drain was held on October 10th, 2023. The following were present:

- Josh Warner (R. Dobbin Engineering)
- Sam Paglia (Drainage Superintendent, Town of Amherstburg)
- Frank Simone (Landowner)
- John Hindi (Landowner)
- Lorraine Bortolin (Landowner)
- Adam Thompson (Landowner)
- Nick Martin (Landowner)
- Graeme Fawcett (Landowner)
- Casey Martin (Landowner)
- Sarah McLellan (Landowner)
- Mike McLellan (Landowner)

The following is a brief summary of the meeting:

- General discussion of the Drainage Act and Landowners rights under the Drainage Act.
- Landowners were made aware that there has been a request for improvements on the Jeths Drain to close the channel in the property with L.I.N. 9A.
 - As a result of this request the project will need to be brought to a sufficient outlet
 - With the current state of the drain this will involve channel improvements and culvert replacements that were originally a part of the 2022 Jeths Drain report, but were removed following the Meeting to Consider the Report.
- It was requested that the existing closed section of the drain at the upper end be videoed to see its condition.

Video of Storm Sewer (December 2023)

A video was completed of the existing storm sewer portion of the Jeths Drain to evaluate if any work should be completed under this report. Below is a summary of the findings:

MH2-MH1: Point Repair Patch at 0+011

Point Repair Patch at 0+013

MH2-MH3: Good

MH3-Outlet: Good. Debris near outlet.

Based on the above, R. Dobbin Engineering Inc. recommends that following the completion of the channel improvements, the storm sewer portion of the Jeths Drain be cleaned near the outlet to ensure the sediment is moved downstream once an improved outlet is achieved.

Existing Conditions of Culverts

The culverts within the upstream portion of the drainage works are generally $\frac{1}{2}$ to $\frac{3}{4}$ full of sediment. We were therefore unable to investigate the condition of the culverts. In order to provide freeboard for the upstream tile drain and extended enclosure the pipes require to be lowered and/or increased in size, with the exception of Culvert #3.

Discussion

Following the site meeting, surveying and preliminary design work, the Landowners with culverts were contacted to discuss the particulars of their culvert.

The Landowner with L.I.N. 13 (Culvert No. 1) requested that their culvert be sized and lengthened in order to support a road standard design and that the location be near the east limit of the property.

The Landowner with L.I.N. 14 (Culvert No. 2) requested that their culvert be reduced in length to provide a 6m top width and that it be located at the easterly edge of their property. It was discussed that the Landowner will have the electrical wire relocated once the culvert is removed.

The Landowner with L.I.N. 15 (Culvert No. 3) requested that their culvert be removed if it is determined to be in poor shape once it is flushed.

The Landowner with L.I.N. 19 (Culvert No. 4) requested that their existing culvert be removed.

Draft Report

A draft report, dated April 11, 2024 was sent to all the affected Landowners and a meeting was held on April 30, 2024 to go over the report and address any questions and concerns related to the draft report. The following were present at the meeting:

- Josh Warner (R. Dobbin Engineering)
- Sam Paglia (Drainage Superintendent, Town of Amherstburg)
- Nicole Humber (Public Works Clerk, Town of Amherstburg)
- John Hindi (Landowner)
- Frank Simone (Landowner)
- Adam Thompson (Landowner)
- Laura Simons (Landowner)
- Lorraine Bortolin (Landowner)
- Nick Martin (Landowner)
- Rick Meloche (Landowner)

The following is a brief summary of the meeting:

- General discussion of the Drainage Act.
- Landowners had questions regarding the past report and when it would be invoiced.
- No major concerns were brought forward.

Design

The proposed culverts have been designed to provide outlet for a 1 in 2-year storm event.

Culvert No. 1 has been designed to provide outlet for a 1 in 25-year storm event as it will potentially serve as a road culvert in the future.

Recommendations

It is therefore recommended that the following work be carried out:

1. The Jeths Drain shall be enclosed from Station 0+120 to 0+143.
2. The Jeths Drain shall be cleaned from Station 0+143 to 0+486 in order to provide a sufficient outlet for the upstream watershed.
3. Culvert No. 1 and 2 shall be replaced. Culvert No. 1 shall be relocated to the east side of the property and shall be designed to a road standard. Culvert No. 3 shall be cleaned and if determined to be in poor shape shall be removed. The culverts at Station 0+315 and 0+341 shall be removed from the drainage works.
4. After the completion of construction, the lower end of the tile drain shall be flushed from Station 0+105 to 0+120.

Estimate of Cost

It is recommended that the work be carried out in accordance with the accompanying Specification of Work and Profile that forms part of this Report. There has been prepared an Estimate of Cost in the amount of \$206,340.00, including preparation of the report, attending the Meeting to Consider the Report, attending the Court of Revision and estimates for tendering, construction inspection, permitting and contract administration. Appearances before appeal bodies have not been included in the cost estimate.

A Plan has been prepared showing the location of the work and the approximate drainage area. A Profile is included showing the depths and grades of the proposed work.

Assessment

As per Section 21 of the Drainage Act, the Engineer in his report shall assess for benefit and outlet for each parcel of land and road liable for assessment.

Lands, roads, buildings, utilities, or other structures that are increased in value or are more easily maintained as a result of the construction, improvement, maintenance, or repair of a drainage works may be assessed for benefit. (Section 22)

Lands and roads that use a drainage works as an outlet, or for which, when the drainage works is constructed or improved, an improved outlet is provided either directly or indirectly through the medium of any other drainage works or of a swale, ravine, creek, or watercourse may be assessed for outlet. The assessment for outlet shall be based on the volume and rate of flow of the water artificially caused to flow into the drainage works from the lands and roads liable for such assessments. (Section 23)

The Engineer may assess for special benefit any lands for which special benefits have been provided by the drainage works. (Section 24)

A Schedule of Assessment for the lands and roads affected by the work and therefore liable for the cost thereof will be prepared as per the Drainage Act. Also, assessments may be made against any public utility or road authority, as per Section 26 of the Drainage Act, for any increased cost for the removal or relocation of any of its facilities and plant that may be necessitated by the construction or maintenance of the drainage works. Items outside those identified in this report shall be assessed to the utility or road authority as per Section 26 of the Drainage Act plus a portion of the engineering (25% of the construction cost).

The cost of any fees for permits or approvals or any extra work required by any affected utility or road authority shall be assessed to that organization requiring the permit, approval, or extra work.

The proposed work has generally been assessed in the following manner, including all estimated fees, taxes and disbursements:

1. The additional cost, beyond a standard cleanout, to enclose the drain on the property with L.I.N. 9A has been assessed to the requesting property as a benefit assessment. These costs shall be pro-rated with the remainder of the drainage works.
2. The open channel cleanout from Station 0+143 and 0+486 has been assessed in accordance with Section 2 of the Schedule of Maintenance contained in the Engineer's Report dated August 12th, 2022 with some revisions for severances and the reduction in length.
3. The installation/replacement of Culverts has been assessed based on the culvert length required to provide a 6m top width to a 2-year design standard (standard

culvert). This standard culvert has been assessed with 50% of the cost applied as benefit assessment to property and the remainder of the cost assessed as an outlet assessment on upstream lands and roads based on equivalent hectares. The additional cost to provide a wider or increased size access has been assessed to the requesting property as a benefit assessment. The additional cost to work around the electrical wire on Culvert No. 2 has been assessed to the property with L.I.N. 14.

4. The cost of removing the culvert at Station 0+315 has been assessed to the property as a benefit assessment as it is a secondary access.
5. The remaining cost has generally been assessed with approx. 50% of the estimated cost assessed as a benefit assessment and the remainder assessed as outlet assessment to the upstream lands and roads based on equivalent hectares.

All final costs included in the cost estimate of this report shall be pro-rated based on the Schedule of Assessment. Any additional costs shall be assessed in a manner as determined by the Engineer.

Allowances

Under Section 29 of the Drainage Act, the Engineer in his report shall estimate and allow in money to the Owner of any land that it is necessary to use for the construction or improvement of a drainage works or for the disposal of material removed from drainage works. This shall be considered an allowance for right-of-way.

Under Section 30 of the Drainage Act, the Engineer shall determine the amount to be paid to persons entitled thereto for damage, if any, to ornamental trees, lawns, fences, land and crops occasioned by the disposal of material removed from a drainage works. This shall be considered an allowance for damages.

Allowances have been made, where appropriate, as per Section 29 of the Drainage Act for right-of-way for the potential re-sloping that would increase the area occupied by the drain and as per Section 30 of the Drainage Act for damages to lands and crops. Allowances for right of way are based on a land value of \$50,000.00 per hectare (approximately \$20,000.00 per acre). Allowances for crop loss are based on \$2,000.00 per hectare for the first year and \$1,000.00 for the second year (\$3,000.00 per hectare total).

Access and Working Area

Access to the work site for construction and future maintenance of the drain shall be from roadways. From Station 0+105 to 0+486 access shall be from Easy Street and through the

property with L.I.N. 9B and 9A or from Marsh Court and through the property with L.I.N. 9A. Access may also be gained through the property with L.I.N. 15 from Texas Road. All accesses shall be restricted to a width of 6m.

Access to the work site for future maintenance of the drain from Station 0+000 to 0+105 shall be from Marsh Court and through the individual properties on which the drain is located. All accesses shall be restricted to a width of 6m.

Any damage caused to gain access to the site shall be restored to its pre-construction state at the expense of the Contractor.

The working area for the construction and future maintenance of the tile portion of the Jeths Drain (Station 0+000 to 0+143) shall be restricted to a width of 10m along the length of the drainage works normally centred on the proposed tile drain. The working area for the channel (Station 0+143 to 0+486) shall be 10m wide and shall generally be along the north side of the channel. For construction only, the working area shall extend 10m past the banks of the channel on both sides from Station 0+120 to 0+143.

The remainder of the drainage works shall be maintained in accordance with the Engineer's Report dated August 12th, 2022

Restrictions

No trees and shrubs shall be planted nor shall permanent structures be erected within 10 metres of the proposed drain without prior written permission of Council.

Attention is also drawn to Sections 80 and 82 of the Drainage Act, which refer to the removal of obstructions in a drain and damage caused to a drain.

Agricultural Grant

If available, it is recommended that application for subsidy be made for eligible agricultural properties. Any assessments against non-agricultural properties are shown separately in the Schedule of Assessment.

Maintenance

The Jeths Drain from Station 0+120 to 0+486 shall be maintained and repaired with the specifications and drawings contained in this Engineer's Report. The drain from Station 0+000 to 0+120 shall be maintained and repaired in accordance with the specifications and drawings contained in the 1993 Engineer's Report.

The Jeths Drain from Station 0+000 to 0+486 shall be maintained and repaired in the same relative portions as contained in the applicable Schedule of Maintenance contained in this report.

The culverts shall be maintained and repaired with a culvert length required to have a 6m top width and designed to a 2-year storm event. With the culverts shown on the profile, including rip rap end walls for Culvert No. 2 and concrete blocks for Culvert No. 1, they shall be assessed in the following manner:

Culvert Number	Benefiting Lands	Upstream Properties Based on Equivalent Hectares as Contained in SoA
1	79%	21%
2	50%	50%

If in the future Culvert No. 3 is deemed to require replacement, at the discretion of the Engineer or Drainage Superintendent, it shall be removed from the drainage works and the costs shall be assessed to the abutting property (L.I.N. 15).

If any owner requests an additional length of culvert beyond that required to have a 6m top width or an asphalt travel surface the extra cost shall be borne by the Landowner making the request including the future maintenance and repair. The location of the 6m top width shall be determined by the Drainage Superintendent and shall generally be in the primary access location.

The additional costs as a result of a road or utility shall be assessed to the owner of the road or utility as per Section 26 of the Drainage Act.

A secondary access on a property shall be constructed, maintained and repaired with 100% of the cost assessed to the benefiting property.

The remainder of the drainage works shall be maintained in accordance with the Engineer's Report dated August 12th, 2022

Yours truly,



Josh Warner, P. Eng.
R. Dobbin Engineering Inc.



Jeths Drain
 Town of Amherstburg
 May 7, 2024

ALLOWANCES

Allowances have been made as per Sections 29 & 30 of the Drainage Act for Right of Way and damages to lands and crops.

Conc.	Lot or part	Landowner Index Number	Owner	Section 29 (\$)	Section 30 (\$)	Total (\$)
1	Pt. Lot 10	9A	F. & A. Simone	200	400	600
	Pt. Lot 10 & Lot 11	9B	C. & N. Martin	200	600	800
	Pt. Lot 10 & Lot 11	13	P. McAllister	900	700	1,600
	Pt. Lot 10 & Lot 11	14	S. Reaume	300	200	500
	Pt. Lot 10 & Lot 11	15	J. & K. Hindi	400	300	700
	Pt. Lot 10 & Lot 11	19	N. & E. Martin	1,800	1,400	3,200
TOTAL ALLOWANCES				\$3,800	\$3,600	\$7,400

Estimate of Cost

<u>Item Description (Supply and Install New)</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost (\$)</u>	<u>Total (\$)</u>
Pre-Construction Meeting	1	LS	200	200
Brushing and Tree Removal (Station 0+143 to 0+486)	1	LS	12,000	12,000
Open Channel Excavation (Station 0+143 to 0+486, Less Culverts)	282	m	40	11,280
Trucking of Excess Excavated Material	282	m	20	5,640
Restoration/Seeding	1	LS	10,000	10,000
Flushing Existing Storm Sewer From Station 0+120 to 0+105	1	LS	800	800
Reconnect Existing Tiles to Open Channel	5	each	150	750
Provisional: Additional Rip Rap as required	20	tonne	100	2,000
Silt Fence	1	LS	300	300
Enclosure of Open Channel (Station 0+120 to 0+143)				
Brushing and Tree Removal	1.0	LS	2,000	2,000
Stripping Topsoil in Channel	23.0	m	20	460
Manufactured Coupling to Existing 375mmØ PVC	1.0	m	300	300
Supply and install 375mmØ PVC SDR 35 c/w Bedding	23.0	m	300	6,900
Fill in Open Channel with Excavated Material	1.0	LS	5,000	5,000
Rodent Grate at Outlet	1.0	LS	500	500
Rip Rap at Outlet	15.0	tonne	100	1,500
Restoration/Seeding	1.0	LS	2,000	2,000
Culvert #1 (O.I.N. 13, McAllister)				
Removal of existing structure and excavated material at Station 0+240	1.0	LS	1,000	1,000
Restore Channel at Removed Culvert at Station 0+240	6.0	m	60	360
Supply & install 900mmØ Concrete Pipe c/w Bedding at Station 0+208	17.0	m	1,400	23,800
Supply and install Granular 'B' Type II	180.0	tonne	35	6,300
Supply & install Granular 'A'	50.0	tonne	40	2,000
Supply & install Concrete Block Endwalls	1.0	LS	20,000	20,000
Supply & install Rip Rap	10.0	tonne	100	1,000

<u>Item Description (Supply and Install New)</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost (\$)</u>	<u>Total (\$)</u>
Culvert #2 (O.I.N. 14, Reaume)				
Removal of existing structure and excavated material	1.0	LS	3,000	3,000
Restore Channel at Removed Culvert	18.0	m	60	1,080
Locate and Work Around Electrical Line	1.0	LS	300	300
Supply & install 600mmØ HDPE Pipe c/w Bedding	10.0	m	600	6,000
Supply and install Granular 'B' Type II	70.0	tonne	35	2,450
Supply & install Granular 'A'	30.0	tonne	40	1,200
Supply & install rip rap endwalls	25.0	tonne	110	2,750
Culvert #3 (O.I.N. 15, Hindi)				
Flush and Clean Existing Culvert	1.0	LS	1,500	1,500
Remove Existing Culvert, Excess Material and Restore Channel at Station 0+315	1.0	LS	2,000	2,000
Remove Existing Culvert, Excess Material and Restore Channel at Station 0+341	1.0	LS	2,000	2,000
Contingency				<u>13,860</u>
Sub Total				152,230
Allowances				7,400
Engineering				26,280
Completing AODA Compliant Document				1,500
Video Storm Sewer				1,200
Estimate for Tendering, Inspection and Contract Administration				13,800
ERCA Fee				<u>500</u>
Total Estimate excluding HST				202,910
Non-Recoverable HST (1.76%)				<u>3,430</u>
Total Estimate				\$ 206,340

SCHEDULE OF ASSESSMENT

Conc.	Lot or Part	Affected Hectares	Landowner Index Number	Owner	Culverts/Enclosure		Channel		Total (\$)	Equivalent Hectares
					Benefit (\$)	Outlet (\$)	Benefit (\$)	Outlet (\$)		
Public Lands										
	County Road 20	0.00		County of Essex	-	-	-	-	-	0.00
					-	-	-	-	-	
Agricultural Lands										
1	Pt. Lot 10	0.00	25	1109152 Ontario Limited	-	-	-	-	-	0.00
					-	-	-	-	-	
Non Agricultural Lands										
1	Pt. Lot 10	0.21	1	J. & A. Hilton	-	834	-	1,546	2,380	0.32
	Pt. Lot 10	0.11	2	J. Brown & D. Landry	-	437	-	1,080	1,517	0.17
	Pt. Lot 10	0.22	3	J. & K. Kearley	-	874	-	1,621	2,495	0.33
	Pt. Lot 10	0.11	4	T. & A. Tarte	-	437	-	1,080	1,517	0.17
	Pt. Lot 10	0.29	5	G. & A. Dethomasis	-	1,152	-	2,136	3,288	0.44
	Pt. Lot 10	0.13	6	K. Desormeaux	-	689	-	1,275	1,964	0.26
	Pt. Lot 10	0.29	7	R. & S. Meloche	-	1,152	-	2,136	3,288	0.44
	Pt. Lot 10	0.31	8	V. Lackovic	-	1,232	-	2,282	3,514	0.47
	Pt. Lot 10	0.60	9A	F. & A. Simone	25,573	1,697	-	3,549	30,819	0.90
	Pt. Lot 10 & Lot 11	0.55	9B	C. & N. Martin	-	1,556	1,633	3,253	6,442	0.83
	Pt. Lot 10	0.13	10	J. Litalien	-	689	-	1,275	1,964	0.26
	Pt. Lot 10	0.47	11	T. Laporte	-	1,330	951	2,329	4,610	0.71
	Pt. Lot 10	0.29	12	J. Di Pierdomenico	-	820	1,006	1,190	3,016	0.44

Conc.	Lot or Part	Affected Hectares	Landowner Index Number	Owner	Culverts/Enclosure		Channel		Total (\$) Equivalent Hectares	
					Benefit (\$)	Outlet (\$)	Benefit (\$)	Outlet (\$)		
	Pt. Lot 10 & Lot 11	1.91	13	P. McAllister	71,666	3,162	6,757	4,470	86,055	1.91
	Pt. Lot 10 & Lot 11	0.75	14	S. Reaume	13,481	231	2,601	2,048	18,361	1.13
	Pt. Lot 10 & Lot 11	1.08	15	J. & K. Hindi	1,314	170	3,178	2,362	7,024	1.62
	Pt. Lot 10	0.23	16	Winstar Homes & 2831035 Ontario Ltd	-	36	-	504	540	0.35
	Pt. Lot 10	0.05	17A	J. & R. Muresan	-	-	-	131	131	0.10
	Pt. Lot 10	0.05	17B	S. Gambeta & R. Booth	-	-	-	131	131	0.10
	Pt. Lot 10	0.06	18	C. Martin	-	-	-	175	175	0.09
	Pt. Lot 10 & Lot 11	2.20	19	N. & E. Martin	4,526	1,610	13,214	1,827	21,177	3.30
	Pt. Lot 10	0.37	20	C. & C. Blunt	-	-	1,351	307	1,658	0.56
	Pt. Lot 10	0.39	21	L. Bortolin	-	-	1,351	191	1,542	0.51
	Pt. Lot 10	0.32	22	G. Fawcett & K. Sullivan	-	-	1,351	81	1,432	0.48
	Pt. Lot 10	0.28	23	B. & P. Pare	-	-	1,300	-	1,300	0.42
	Pt. Lot 10	0.00	24	A. Martin & A. Chauvin	-	-	-	-	-	0.00
	Pt. Lot 10 & Lot 11	0.00	26	A. Thompson	-	-	-	-	-	0.00
	Pt. Lot 10	0.00	29	D. & J. Hay	-	-	-	-	-	0.00
	Pt. Lot 10	0.00	30	G. & M. Johns	-	-	-	-	-	0.00
	Pt. Lot 10	0.00	31	J. & D. Rawlins	-	-	-	-	-	0.00
	Pt. Lot 10	0.00	32	J. & J. Farmer	-	-	-	-	-	0.00
	Pt. Lot 10	0.00	33	L. Durocher & J. Gagnon	-	-	-	-	-	0.00
	Pt. Lot 10	0.00	34	P. & K. Tough	-	-	-	-	-	0.00
	Pt. Lot 11	0.00	27	A. Kojok & A. Ahmed	-	-	-	-	-	0.00
	Pt. Lot 11	0.00	28	D. & P. Kellam	-	-	-	-	-	0.00
	Pt. Lot 11	0.00	35	Phillip Fernades Designs	-	-	-	-	-	0.00
	Pt. Lot 11	0.00	36	J. & L. Simmons	-	-	-	-	-	0.00
					116,560	18,108	34,693	36,979	206,340	
					206,340					
					-					
					-					
					\$206,340					

Estimated Net Assessment

Net assessment subject to OMAFRA ADIP Policy and actual construction costs.

Conc.	Lot or Part	Affected Hectares	Landowner Index Number	Owner	Total Assessment (\$)	Estimated Grant (\$)	Allowances (\$)	Estimated Net Assessment (\$)
Public Lands								
	County Road 20			County of Essex	-			-
Agricultural Lands								
1	Pt. Lot 10		25	1109152 Ontario Limited	-			-
Non Agricultural Lands								
1	Pt. Lot 10	0.21	1	J. & A. Hilton	2,380			2,380
	Pt. Lot 10	0.11	2	J. Brown & D. Landry	1,517			1,517
	Pt. Lot 10	0.22	3	J. & K. Kearley	2,495			2,495
	Pt. Lot 10	0.11	4	T. & A. Tarte	1,517			1,517
	Pt. Lot 10	0.29	5	G. & A. Dethomasis	3,288			3,288
	Pt. Lot 10	0.13	6	K. Desormeaux	1,964			1,964
	Pt. Lot 10	0.29	7	R. & S. Meloche	3,288			3,288
	Pt. Lot 10	0.31	8	V. Lackovic	3,514			3,514
	Pt. Lot 10	0.60	9A	F. & A. Simone	30,819		600	30,219
	Pt. Lot 10 & Lot 11	0.55	9B	C. & N. Martin	6,442		800	5,642
	Pt. Lot 10	0.13	10	J. Litalien	1,964			1,964
	Pt. Lot 10	0.47	11	T. Laporte	4,610			4,610
	Pt. Lot 10	0.29	12	J. Di Pierdomenico	3,016			3,016

Conc.	Lot or Part	Affected Hectares	Landowner Index Number	Owner	Total Assessment (\$)	Estimated Grant (\$)	Allowances (\$)	Estimated Net Assessment (\$)
	Pt. Lot 10 & Lot 11	1.91	13	P. McAllister	86,055		1,600	84,455
	Pt. Lot 10 & Lot 11	0.75	14	S. Reaume	18,361		500	17,861
	Pt. Lot 10 & Lot 11	1.08	15	J. & K. Hindi	7,024		700	6,324
	Pt. Lot 10	0.23	16	Winstar Homes & 2831035 Ontario Ltd	540			540
	Pt. Lot 10	0.05	17A	J. & R. Muresan	131			131
	Pt. Lot 10	0.05	17B	S. Gambeta & R. Booth	131			131
	Pt. Lot 10	0.06	18	C. Martin	175			175
	Pt. Lot 10 & Lot 11	2.20	19	N. & E. Martin	21,177		3,200	17,977
	Pt. Lot 10	0.37	20	C. & C. Blunt	1,658			1,658
	Pt. Lot 10	0.39	21	L. Bortolin	1,542			1,542
	Pt. Lot 10	0.32	22	G. Fawcett & K. Sullivan	1,432			1,432
	Pt. Lot 10	0.28	23	B. & P. Pare	1,300			1,300
	Pt. Lot 10	0.00	24	A. Martin & A. Chauvin	-			-
	Pt. Lot 10 & Lot 11	0.00	26	A. Thompson	-			-
	Pt. Lot 10	0.00	29	D. & J. Hay	-			-
	Pt. Lot 10	0.00	30	G. & M. Johns	-			-
	Pt. Lot 10	0.00	31	J. & D. Rawlins	-			-
	Pt. Lot 10	0.00	32	J. & J. Farmer	-			-
	Pt. Lot 10	0.00	33	L. Durocher & J. Gagnon	-			-
	Pt. Lot 10	0.00	34	P. & K. Tough	-			-
	Pt. Lot 11	0.00	27	A. Kojok & A. Ahmed	-			-
	Pt. Lot 11	0.00	28	D. & P. Kellam	-			-
	Pt. Lot 11	0.00	35	Phillip Fernades Designs	-			-
	Pt. Lot 11	0.00	36	J. & L. Simmons	-			-
					206,340	-	7,400	198,940

Jeths Drain
Town of Amherstburg
May 7, 2024

1 of 2

SCHEDULE OF MAINTENANCE NO. 1
To Maintain the Jeths Drain from Station 0+143 to 0+486

Conc.	Lot or Part	Affected Hecatares	Landowner Index Number	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
Non Agricultural Lands							
1	Pt. Lot 10	0.21	1	J. & A. Hilton	-	216	216
	Pt. Lot 10	0.11	2	J. Brown & D. Landry	-	151	151
	Pt. Lot 10	0.22	3	J. & K. Kearley	-	226	226
	Pt. Lot 10	0.11	4	T. & A. Tarte	-	151	151
	Pt. Lot 10	0.29	5	G. & A. Dethomasis	-	298	298
	Pt. Lot 10	0.13	6	K. Desormeaux	-	178	178
	Pt. Lot 10	0.29	7	R. & S. Meloche	-	298	298
	Pt. Lot 10	0.31	8	V. Lackovic	-	318	318
	Pt. Lot 10	0.60	9A	F. & A. Simone	-	495	495
	Pt. Lot 10 & Lot 11	0.55	9B	C. & N. Martin	229	454	683
	Pt. Lot 10	0.13	10	J. Litalien	-	178	178
	Pt. Lot 10	0.47	11	T. Laporte	134	325	459
	Pt. Lot 10	0.29	12	J. Di Pierdomenico	140	166	306
	Pt. Lot 10 & Lot 11	1.91	13	P. McAllister	943	624	1,567
	Pt. Lot 10 & Lot 11	0.75	14	S. Reaume	363	286	649
	Pt. Lot 10 & Lot 11	1.08	15	J. & K. Hindi	443	330	773
	Pt. Lot 10	0.23	16	Winstar Homes & 2831035 Ontario Ltd	-	70	70
	Pt. Lot 10	0.05	17A	J. & R. Muresan	-	18	18
	Pt. Lot 10	0.05	17B	S. Gambeta & R. Booth	-	18	18
	Pt. Lot 10	0.06	18	C. Martin	-	24	24
	Pt. Lot 10 & Lot 11	2.20	19	N. & E. Martin	1,843	255	2,098
	Pt. Lot 10	0.37	20	C. & C. Blunt	188	43	231

Conc.	Lot or Part	Affected Hecatares	Landowner Index Number	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
	Pt. Lot 10	0.39	21	L. Bortolin	188	27	215
	Pt. Lot 10	0.32	22	G. Fawcett & K. Sullivan	188	11	199
	Pt. Lot 10	0.28	23	B. & P. Pare	181	-	181
					4,840	5,160	10,000
Total Assessment					\$10,000		

Jeths Drain
 Town of Amherstburg
 May 7, 2024

SCHEDULE OF MAINTENANCE NO. 2
 To Maintain the Jeths Drain from Station 0+000 to 0+143

Conc.	Lot or Part	Affected Hectares	Landowner Index Number	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
Non Agricultural Lands							
1	Pt. Lot 10	0.21	1	J. & A. Hilton	25	227	252
	Pt. Lot 10	0.11	2	J. Brown & D. Landry	105	103	208
	Pt. Lot 10	0.22	3	J. & K. Kearley	105	153	258
	Pt. Lot 10	0.11	4	T. & A. Tarte	105	103	208
	Pt. Lot 10	0.29	5	G. & A. Dethomasis	56	157	213
	Pt. Lot 10	0.13	6	K. Desormeaux	56	94	150
	Pt. Lot 10	0.29	7	R. & S. Meloche	86	94	180
	Pt. Lot 10	0.31	8	V. Lackovic	41	48	89
	Pt. Lot 10	0.6	9A	F. & A. Simone	249	34	283
	Pt. Lot 10	0.13	10	J. Litalien	-	9	9
					828	1,022	1,850
				Total Assessment	\$1,850		

Jeths Drain
Town of Amherstburg
May 7, 2024

SPECIFICATION OF WORK

1. Location

The location of the proposed and future work outlined in this specification is in Lot 10 Concession 1 in the Town of Amherstburg.

2. Scope of Work

The work to be included in this specification includes, but is not limited to, the following:

- Open Channel Improvements
- Channel Enclosure
- Culvert replacements

3. General

Each tenderer must inspect the site prior to submitting their tender and satisfy themselves by personal examination as to the local conditions that may be encountered during this project. The Contractor shall make allowance in their tender for any difficulties which they may encounter. Quantities or any information supplied by the Engineer is not guaranteed and is for reference only.

All work and materials shall be to the satisfaction of the Drainage Superintendent who may vary these specifications as to minor details but in no way decrease the proposed capacity of the drain.

The Contractor shall provide all labour, equipment, and supervision necessary to complete the work as shown in the Plans and described in these specifications. Any work not described in these specifications shall be completed according to the Ontario Provincial Standard Specifications and Standard Drawings.

Any equivalents shall be approved in writing by the Engineer or Drainage Superintendent prior to ordering.

4. Health and Safety

The Contractor at all times shall be responsible for health and safety on the worksite including ensuring that all employees wear suitable personal protective equipment including safety boots and hard hats.

The Contractor shall be responsible for traffic control as per the Ontario Traffic Manual Book 7 – Temporary Conditions (latest revision) when working on public road allowances. A copy of a traffic control plan shall be submitted to the Engineer, Drainage Superintendent and kept on site at all times. The Contractor shall maintain suitable barricades, warning lights, and temporary traffic notices, at his expense, in their proper position to protect the public both day and night. Flagmen are the responsibility of the Contractor when working on the road allowance and when entering or exiting a worksite onto a roadway.

The Contractor shall be responsible to ensure that all procedures are followed under the Occupational Health and Safety Act to ensure that work sites are safe and that accidents are prevented. In the event of a serious or recurring problem, a notice of noncompliance will be issued. The Contractor will be responsible for reacting immediately to any deficiency and correcting any potential health and safety risk. Continuous disregard for any requirement of the Occupational Health and Safety Act could be cause for the issuance of a stop work order or even termination of the contract.

They shall also ensure that only competent workmen are employed onsite and that appropriate training and certification is supplied to all employees.

5. Workplace Safety and Insurance Board

Upon award of the contract and prior to commencement of work, the Contractor shall furnish the Town of Amherstburg with a satisfactory Certificate of Insurance (COI) containing the information below, for the period of the execution of the work:

- i. A Commercial General Liability (CGL) policy that shall be not less than 5 million dollars per occurrence.
- ii. The CGL policy shall include bodily injury including death, personal injury, property damage, tenants legal liability, non-owned automobile and contain a cross liability/severability of interest clause. The certificate must also include acknowledgement that coverage under the policy specifically extends to the

works in question. The COI shall name the Town of Amherstburg, County of Essex and R. Dobbin Engineering Inc. as additional insured to the policy.

- iii. The CGL policy shall not contain any exclusion or limitation in respect to shoring, underpinning, raising or demolition of any building or structure, pile driving, caisson work, collapse of any structure or subsidence of any property, structure or land from any cause.
- iv. The Contractor shall note that where construction works are performed within lands owned by the County of Essex or Ministry of Transportation, the CGL policy shall also name the County of Essex and/or the Ministry of Transportation as additional insured to the policy.
- v. The liability insurance shall be endorsed to provide that the policy shall not be altered, cancelled or allowed to lapse without 30 days prior written notice to the Town of Amherstburg.

6. MNRF Drain Registration

The Contractor is advised that the Town of Amherstburg has conducted an "Endangered Species Act Review" and has registered it's drainage activities with the Ministry of Natural Resources and Forestry.

The Town of Amherstburg, in pursuant to the Endangered Species Act Municipal Agreement, has identified the potential presence of certain species within the project area. It is the responsibility of the Contractor to make certain that necessary provisions are undertaken to ensure the protection of all species at risk and their habitats throughout the course of construction. It is also the responsibility of the Contractor to make itself familiar with the following documents:

1. Town of Amherstburg – Complete Mitigation Documents
2. Town of Amherstburg - Additional Mitigation Measures for Snakes Species
3. Town of Amherstburg - Additional Mitigation Measures for Turtle Species
4. Snakes of Ontario Identifier Guide
5. Turtles of Ontario Identifier Guide

These documents will be provided to the successful bidder.

The Contractor will be responsible for providing the necessary equipment and materials required by the mitigation plans and shall contact the Town of Amherstburg Drainage Superintendent immediately if any endangered species are encountered during construction.

7. Utilities

The Contractor is responsible for organizing locates and exposing all the utilities along the length of the drainage works. If any utilities interfere with the proposed drainage works in a manner not shown on the accompanying Estimate of Cost or profile the Contractor shall notify the Drainage Superintendent and Engineer.

The Contractor is responsible for coordinating the replacement of additional utilities with the utility company if they interfere with the proposed drain. All costs for the utility to replace their services will be outside of this report and shall be borne by the utility as per Section 26 of the Drainage Act.

All additional costs to work around and organize replacement of the utilities not included in the estimate shall be tracked separately and the cost plus a portion of the engineering (25% of the cost) shall be borne by that utility.

The electrical wire at Culvert No. 2 will be relocated by the property owner following the completion of construction.

8. Pre-Construction Meeting

There is a requirement for a pre-construction meeting to be held prior to any construction taking place. The meeting will be scheduled by the Contractor with notices sent out by the Town. The Contractor shall notify all parties at least two weeks prior to wanting to hold a pre-construction meeting.

9. Benchmarks

The benchmarks are based on geodetic elevations. Elevations are available at the locations shown on the Profile drawing. Where these elevations are on existing structures to be replaced, they shall be transferred by the Contractor prior to the removal.

The Contractor is required to complete a benchmark loop prior to construction to verify the benchmarks. If discrepancies exist the Contractor must notify the Drainage Superintendent and Engineer prior to completing any work.

10. Traffic Control

Access and driveways to private properties shall not be obstructed longer than the minimum time necessary for the work and shall be reinstated as soon as possible all to the satisfaction of the Engineer. The Contractor shall schedule any obstruction of existing driveways and accesses with the owners at least two full working days in advance. The Traffic Plan must be approved by the Town prior to the commencement of any road closures.

- a) The Contractor shall supply, erect and maintain all detour signs and special signs necessary for detours to divert traffic from the area under construction as directed by the Drainage Superintendent or Engineer. All this work shall be at the Contractor's expense.
- b) The Contractor shall be responsible for supplying, erecting and maintaining all signs, supports, barricades, flashers, cones, etc. in the construction area and at the boundaries of the work as part of the above detours, all to the satisfaction of the Engineer or Drainage Superintendent. All this work shall be done by the Contractor at their own expense.
- c) The Contractor shall not be allowed to proceed with construction activities unless proper signage and flagmen are present. Flagging procedures, signage and detours shall conform to the recommendations of Book 7, Temporary Conditions, Ontario Traffic Manual, issued by the Ministry of Transportation. Conformance shall be enforced by the Ministry of Labour Inspector.

11. Access and Working Area

Access to the work site for construction and future maintenance of the drain shall be from roadways. From Station 0+105 to 0+486 access shall be from Easy Street and through the property with L.I.N. 9B and 9A or from Marsh Court and through the property with L.I.N. 9A. Access may also be gained through the property with L.I.N. 15 from Texas Road. All accesses shall be restricted to a width of 6m.

Access to the work site for future maintenance of the drain from Station 0+000 to 0+105 shall be from Marsh Court and through the individual properties on which the drain is located. All accesses shall be restricted to a width of 6m.

Any damage caused to gain access to the site shall be restored to its pre-construction state at the expense of the Contractor.

The working area for the construction and future maintenance of the tile portion of the Jeths Drain (Station 0+000 to 0+143) shall be restricted to a width of 10m along the length of the drainage works normally centred on the proposed tile drain. The working area for the channel (Station 0+143 to 0+486) shall be 10m wide and shall generally be along the north side of the channel. For construction only, the working area shall extend 10m past the banks of the channel on both sides from Station 0+120 to 0+143.

The remainder of the drainage works shall be maintained in accordance with the Engineer's Report dated August 12th, 2022

12. Removals

The culverts and any native backfill material, when required, shall be removed in their entirety. The culvert, backfill and the concrete rubble shall be disposed offsite at the expense of the Contractor. Any broken concrete or rip rap (concrete bags) from the existing structures shall be disposed offsite at the expense of the Contractor unless determined re-usable by the Drainage Superintendent or Engineer.

The Contractor shall work around the existing fences and signs if they are able to. If the existing fences and signs are required to be removed, they shall be removed and re-installed in the same location with the existing materials. All work in connection with fences and signs shall be carried out in a careful manner so they are replaced in as good a condition as the existing materials permit.

Where the culverts are to be removed, the Contractor shall restore the channel in these sections with 2:1 side slopes, a 0.90m bottom and shall restore them in accordance with the restoration specification.

13. Brushing and Tree Removal

For construction and future maintenance of the drain, all brush, stumps, trees, vegetation, etc. within the working area, the drain bottom, along the bank where the work is taking place and on the opposite side where impeding the flow of the drain, as determined by the Drainage Superintendent or Engineer, shall be removed.

A mechanical grinder attached to an excavator shall be used for the removal of brush and trees. Any brush and trees too large to grind shall be close cut. The Contractor shall stockpile the trees and brush in a single pile on the property in which they were removed

or dispose of the trees and brush offsite. Where brush and trees are removed within a bush section of the drain the trees and brush shall be disposed of within the bush at the limits of the working area. The Contractor is responsible for the burning of the trees and brush not in the bush sections. The Contractor is responsible for obtaining all necessary permits for any disposal sites. Burning of the trees and brush is subject to local bylaws and guidelines of the Ministry of the Environment Conservation and Parks.

Certain trees may be left in place at the direction of the Drainage Superintendent or Engineer. Trees may be limbed and piled for firewood, instead of burned, at the request of a Landowner.

14. Strip Existing Channel

The existing channel that is being enclosed shall be stripped. The topsoil shall be stockpiled at the edge of the working allowance. Once the channel is filled and graded to the Contractor shall level the topsoil over the swale.

15. Excavation of Open Channel

For construction and future maintenance, the open channel shall be excavated and maintained to the depths and grades as per the profile and drawings as contained in this Engineers Report. The channel shall be excavated to the proper depth using a laser or similar approved device with a labourer onsite to ensure correctness of grade and to confirm location of tile ends.

The excavated material shall be trucked offsite or utilized to fill in the channel between Station 0+120 and 0+143. The material shall be removed leaving a rounded bottom with the intent not to undercut the existing side slopes.

The north bank shall be re-sloped to 2:1 from Station 0+143 to 0+486.

It is R. Dobbin Engineering's opinion that the drainage improvements for this project are exempt from Section 8 of O.Reg 406/19 as per Schedule 2, Item 1 of the Regulation.

16. Flushing / Cleaning of Culvert and Tile Drain

Culvert No. 3 and the existing drain from Station 0+105 to 0+120 shall be cleaned/flushed. The drain from Station 0+105 to 0+120 shall be flushed after the downstream channel has been dug. If, after cleaning or in the future, Culvert No. 3 is determined to be in poor shape, at the discretion of the Drainage Superintendent or Engineer, it shall be removed from the drainage works and the banks on both sides shall

be re-sloped to 2:1 and it shall be restored in accordance with the restoration specification.

17. Outlet Works at Station 0+143 (Rodent Grate and Rip Rap)

The outlet pipe at Station 0+143 shall have a manufactured rodent rotating grate. It shall be installed at the outlet to the open channel.

Erosion protection made up of rip rap and filter fabric shall be installed on the channel side slope from the bottom of the channel to the top of the bank and for a distance of 1m on either side of the outlet. Rip rap shall be made up of 150mm to 300mm quarry stone or approved equal. The area to receive the rip rap shall first be graded to allow the placement of the rip rap to a depth of 400mm below finished grade. After grading, a layer of filter fabric (Mirafi P150 or approved equal) is to be placed with any joints overlapped a minimum of 600mm. Rip rap shall then be placed with the smaller pieces placed in the gaps and voids to give it a uniform appearance.

18. Installation of Culverts

The Contractor is required to notify the Landowner forty-eight (48) hours prior to the removal of a culvert.

The Contractor shall supply, install and backfill CSA Approved high density polyethylene (HDPE) smooth wall pipe (320 kPa) with bell and spigot joints. The Contractor shall supply, install and backfill 65-D reinforced concrete pipe with rubber gasket joints. Both shall be installed in accordance with the below specification and OPSS 410.

The culverts designated to be replaced in the future under this report shall be examined after any cleanout of the open channel as to its condition. If it is found to be in disrepair (i.e. there are holes corroded in the bottom or sides) it shall be replaced as per these specifications.

The culverts shall be installed generally in the same location or as approved by the Drainage Superintendent or Engineer. The culverts shall be installed with the invert 10% (minimum 150mm) below the original channel bottom elevation unless otherwise shown in order to achieve the minimum cover. It is the Contractors responsibility to ensure that the minimum cover is achieved when backfilling the culverts.

All culverts may have concrete block or rip rap end walls. The access culverts shall be assessed, as per the report, to provide a 6m access width. If an owner requests a longer culvert than that required to achieve a 6m top width, please refer to the report.

Any tile outlets extended as a result of a culvert shall be extended at the landowner's expense. The pipes that shall be extended upstream or downstream of the proposed culvert shall be done with non-perforated HDPE agricultural tubing with a manufactured coupling, elbow and rodent grate.

The bottom of the excavation shall be excavated to a minimum of 100mm below the proposed invert. The pipe shall be bedded with ¾" clear stone. When the pipe has been installed to the proper grade and depth, the excavation shall be backfilled with ¾" clear stone and wrapped in filter fabric from the bottom of the excavation to the spring line of the pipe. Care shall be taken to ensure that the backfill on either side of the culvert does not differ by more than 300mm so that the pipe is not displaced. The access culverts shall be backfilled from the spring line to within 150mm of finished grade with Granular "B" Type II. The top 150mm shall be backfilled with compacted 100% crushed Granular "A" material to finished grade. If asphalt is proposed, the asphalt shall be HL4 and shall match the existing thickness. In these cases, the compacted Granular "A" shall occupy 150mm below the proposed asphalt. Native backfill is not permitted.

The length of Culvert No. 2 is based on utilizing rip rap end walls. If concrete block end walls are proposed the culvert shall be decreased in length accordingly (a 8m culvert with concrete block end walls will provide a 6m top width).

It is the Contractor's responsibility to ensure that adequate cover is obtained prior to crossing the culvert in accordance with the manufacturer's recommendations.

19. Rip Rap End Walls

If rip rap end walls are used, they shall consist of 150mm x 300mm quarry stone or approved equal. The area to receive the rip rap shall be graded to a depth of 400mm below finished grade. Filter fabric (Mirafi P150 or approved equal) shall then be placed with any joints overlapped a minimum 600mm. The quarry stone shall then be placed with the smaller pieces placed in the gaps and voids to give it a uniform appearance.

20. Block End Wall (Culvert No. 1)

A concrete block end wall shall be utilized for Culvert No. 1 and shall be as outlined below:

1. A swift lift device will be required to place the blocks. A 75mm eye bolt will be required to place the caps.
2. The bottom course of blocks shall be founded on a firm solid base. The contractor shall provide a minimum levelling course of 150mm of compacted 3/4" Clear Stone, or a 100% compacted granular A, or lean concrete as a foundation base.
3. Ensure that the base is level and flat as this will greatly improve speed of installation.
4. On new culverts a minimum of 150mm of block wall will extend below the culvert to prevent scouring under the culvert.
5. The bottom course of blocks shall be embedded into the drain bottom to achieve the desired top elevation of the wall.
6. Blocks shall extend from the pipe invert across the full height and width of the drain and be imbedded a minimum of 300mm into the drain banks. Where possible the top of the block wall will match the height of the completed driveway.
7. Blocks shall be placed such that all joints are staggered.
8. Any excavation voids on the ends of block walls below subsequent block layers shall be filled with 3/4" Clear Stone.
9. Where block walls extend beyond three blocks in height, they should be battered a minimum of 1 unit horizontal for every 10 units vertical throughout the wall's full height and width. This can be achieved using pre-battered base blocks, or by careful preparation of the base.
10. Filter cloth (270R or equivalent) should be placed behind the wall to prevent the migration of fill material through the joints.
11. The walls should be backfilled with a free draining granular fill.
12. A uni-axial geogrid (5G350 or equivalent) should be used to tie back the headwalls where walls extend beyond 1.8m in height.
13. The face of the block wall shall not extend beyond the end of the pipe culvert.
14. Any gaps between the blocks and culvert shall be sealed with non-shrink grout for the full depth of the block.

Erosion protection shall be placed on the channel bottom and banks next to the end walls for Culvert No. 1. The erosion protection shall consist of 150mm x 300mm quarry stone over filter fabric (Terrafix 270R or approved equal). It shall extend 1m from the end walls from top of bank to top of bank at the end wall.

The culvert shall be backfilled in conjunction with the placement of the blocks. The gaps between the culvert and the blocks and the blocks and the retaining wall shall be filled with concrete cinder blocks/bricks and mortar to give the end wall a finished appearance.

The concrete blocks shall be Easy Block by Underground Specialties or an approved equivalent. The outlet end wall shall have a precast concrete structure surrounding the pipe. The precast structure shall allow for a lock block installation. Approved equivalents must be approved in writing by the Engineer or Drainage Superintendent prior to purchasing the blocks.

Shop drawings for the outlet headwall shall be provided to the Engineer prior to construction commencing and ordering of the blocks.

21. Culvert Maintenance

The Contractor shall be responsible for maintenance of the access culverts for a period of one year after their installation. This will include repairing any settlement areas on the travel surface with Granular "A" and/or topsoil and seed.

22. Subsurface Drainage

All existing subsurface drains encountered during construction of the open channel shall be reconnected or extended to the open channel unless otherwise noted on the drawings or as directed by the Drainage Superintendent or Engineer.

A suitable length of equivalent sized PE agricultural tubing shall be used to connect the drain to the open channel. Manufactured fittings shall connect the PE tile to the existing drain. The connections shall be carefully backfilled to ensure there is adequate support under the pipe and large clumps of clay do not displace the tile.

Tile outlets larger than 150mm in diameter, or as determined by the Drainage Superintendent or Engineer at the time of construction, require erosion protection and rodent grates. The erosion protection made up of rip rap and filter fabric shall be installed on the embankment slope from 0.3m above the tile outlet to the channel bottom. The erosion protection shall be 1.0m wide. Rip rap shall be made up of 150mm to 300mm quarry stone or approved equal. The area to receive the rip rap shall first be graded to allow the placement of the rip below finished grade. After grading, a layer of filter fabric (Mirafi P270 or approved equal) is to be placed with any joints overlapped a minimum of 600mm. Rip rap shall then be placed with the smaller pieces placed in the gaps and voids to give it a uniform appearance.

23. Pipe to Enclose Open Channel

The pipe between Station 0+120 and 0+143 shall be PVC SDR 35. The pipe shall be attached to the existing PVC pipe with a manufactured coupling approved by the Engineer. The pipe shall be installed in the approximate location of the channel and shall be bedded with OPS Granular "A" to 300mm above the pipe. Fill from the excavated channel shall be used as backfill to fill in the channel. The material shall be compacted in no greater than 300mm lifts and shall be compacted to 98% SPMDD.

24. Seeding/Restoration

All areas disturbed by construction including accesses, the channel enclosure, side slopes, working areas, etc. shall be restored with 100mm of screened topsoil and bonded fiber matrix mulch hydroseed.

25. Environmental Considerations

The Contractor shall take care to adhere to the following considerations.

- Operate machinery in a manner that minimizes disturbance to the banks of the watercourse.
- Erosion and sediment control measures must be installed prior to construction to prevent sediment from entering the water body.
- Material shall not be placed in areas regulated by the Conservation Authority or Ministry of Natural Resources.
- All granular and erosion control materials shall be stockpiled a minimum of 3.0m from the top of the bank or excavation. Material shall not be placed in surface water runs or open inlets that enter the channel.
- All activities, including maintenance procedures, shall be controlled to prevent the entry of petroleum products, debris, rubble, concrete, or other deleterious substances into the water. Vehicle and equipment refuelling and maintenance shall be conducted away from the channel, any surface water runs, or open inlets. All waste materials shall be stockpiled well back from the top of the bank and all surface water runs and open inlets that enter the drain.
- When possible, all construction within the open channel shall be carried out during periods of low flow or in dry conditions.
- The Contractor shall conduct regular inspections and maintain erosion and sediment control measures and structures during the course of construction.
- The Contractor shall repair erosion and sediment control measures and structures if damage occurs.

- The Contractor shall remove non-biodegradable erosion and sediment control materials once site is stabilized.
- Remove all construction materials from site upon project completion.

Light duty silt fencing shall be installed down-gradient of the work for the duration of construction.

The light duty silt fencing shall be supplied and installed in accordance with OPSS 805 and OPSD 219.110. The light duty silt fencing shall be removed once the disturbed area has been re-vegetated.

Best Management Practices – Culvert Replacements in Municipal Drains

This document describes the conditions on which one may proceed with a culvert replacement in a municipal drain without DFO approval/notification. All municipal, provincial, or federal legislation that applies to the work being proposed must be respected. If the conditions/requirements below cannot be met, please complete the drain notification form and submit it to the Fisheries Protection Program for review at: FisheriesProtection@dfo-mpo.gc.ca.

Potential Impacts to Fish Habitat

- Infilling fish habitat by encroachment of the water crossing footprint or channel realignment to accommodate culvert
- Harmful substrate alteration of fish habitat (e.g. blockage of groundwater upwellings, critical SAR habitat, spawning areas)
- Removal of riparian vegetation and cover along the banks of the municipal drain
- Removal of edge habitat (e.g. undercut bank, shallower areas with lower velocity, aquatic vegetation) creation of barriers to fish movement (e.g. perched crossings, velocity barriers, alteration of the natural stream gradient)
- Alteration of channel flow velocity and/or depth (e.g. oversized culvert resulting in insufficient depth for fish passage at low flow or undersized culvert resulting in a flow velocity barrier at high flow)
- Alteration of channel morphology and sediment transport processes caused by the physical structure of the crossing resulting in upstream and downstream sediment aggradation/erosion
- Re-entry of sediment that was removed/stockpiled into the watercourse
- Erosion downstream from sudden release of water due to the failure of site isolation
- Stranding of fish in isolated ponds following de-watering of the site
- Impingement or entrainment of fish when de-watering pumps are used
- Short term or chronic transport of deleterious substances, including sediment, into fish habitat from construction or road drainage

Requirements

The following requirements must be met:

- There are no aquatic Species at Risk present in the work zone or impact zone. To confirm there are no aquatic Species at Risk present, refer to the document, [A Guide for Interpreting Fish and Mussel Species at Risk Maps in Ontario](#) which can be found at: <http://www.dfo-mpo.gc.ca/Library/356763.pdf>. Links for Ontario Conservation Area specific fish and mussel maps that include critical habitat extents and a list of aquatic Species at Risk found within the conservation authority boundary can be found on Page 5 of [A Guide for Interpreting Fish and Mussel Species at Risk Maps in Ontario](#).
- The culvert is embedded into the streambed and must allow for the free passage of fish.
- The work involves like-for-like replacements of existing road or private access culverts on all drain types without SAR.
- On C and F Drains only, this can also include replacements with extensions and end walls for the purposes of providing the property or road with safe access, but the project permanent footprint will not increase more than 250 m² below the high water mark.
- The project does not involve replacing a bridge or arch with one or more culverts installed in parallel or a larger-diameter culvert with more than one culvert installed in parallel.

- The project does not involve building more than one culvert installed in parallel on a single watercourse crossing site (e.g. twin culvert).
- The project does not involve temporarily narrowing the watercourse to an extent or for a duration that is likely to cause erosion, structural instability or fish passage problems.
- The municipal drain has no flow/low flow or is frozen to the bottom at the time of the replacement.
- In-water work is scheduled to respect timing windows (Tables 1 and 2) to protect fish, including their eggs, juveniles, spawning adults, and/or the organisms upon which they feed.
- The work can be conducted using the Culvert Removal Method described below and Standard Measures to Avoid Causing *Serious Harm to Fish* will be implemented when required.

Note: If your project must be conducted without delay in response to an emergency (e.g. the project is required to address an emergency that poses a risk to public health or safety or to the environment or property), you may apply for an Emergency Authorization (<http://www.dfo-mpo.gc.ca/asp/forceDownload.asp?FilePath=/pnw-ppe/reviews-revues/Emergency-Authorizations-Autorisations-Urgences-eng.pdf>).

Culvert Removal Methodology

- Plan/manage the work site in a manner that prevents sediment from entering the municipal drain by installing sediment and erosion control materials where required. Ensure that a sediment and erosion control plan is developed and modified as necessary for the site.
- Where required, install effective erosion and sediment control measures before starting work to prevent sediment from entering the municipal drain.
- Implement site isolation measures when in-water work is required.
 - Install an impervious barrier upstream of the work area (Figure 1). If possible, install a secondary barrier upstream of the work area for added protection.
 - Attempt to drive out the fish from the work area and then install the impervious barrier downstream of the work area. This may reduce or eliminate the need for a fish salvage.
 - When the drain is flowing, maintain downstream flows (e.g. bypass water around the work site using pumps or flume pipes; Figure 2). Provide temporary energy dissipation measures (e.g. rip-rap) at discharge point of the hose or temporary outlet pipe when required. Routinely inspect bypass pump and hose or pipe to ensure proper operation. Inspect discharge point for erosion and reposition hose/pipe or install additional temporary energy dissipation material as needed.
 - Dewater the isolated work area. The hose for a pump may discharge along the top of the bank into existing vegetation; however, the area should be monitored for signs of erosion. Reposition the hose or install additional temporary energy dissipation material as needed.
 - A fish screen with openings no larger than 2.54 mm (0.10 inches) should be equipped on any pump used during the operation. Note: Additional information regarding fish screens can be found in the DFO Freshwater Intake End-of-Pipe Fish Screen Guideline document (<http://www.dfo-mpo.gc.ca/Library/223669.pdf>).
 - Collect any fish present in the isolated work area and relocate them downstream.
 - Fish salvage operations must be conducted under a license issued by the Ontario Ministry of Natural Resources and Forestry (MNRF). The MNRF should be contacted well in advance of any work to obtain the required fish collection license.
- Install the culvert so that it is embedded into the streambed; ensure the culvert remains passable (e.g. does not become perched) by fish and wildlife.

- Decommission the site isolation in a manner that minimizes the introduction of sediment. The downstream isolation barrier shall gradually be removed first, to equalize water levels inside and outside of the isolated area and to allow suspended sediments to settle.
- Stabilize and remove waste from the site.
- Where required, maintain effective erosion and sediment control measures until complete re-vegetation of disturbed areas is achieved.



Figure 2. Isolation of Site

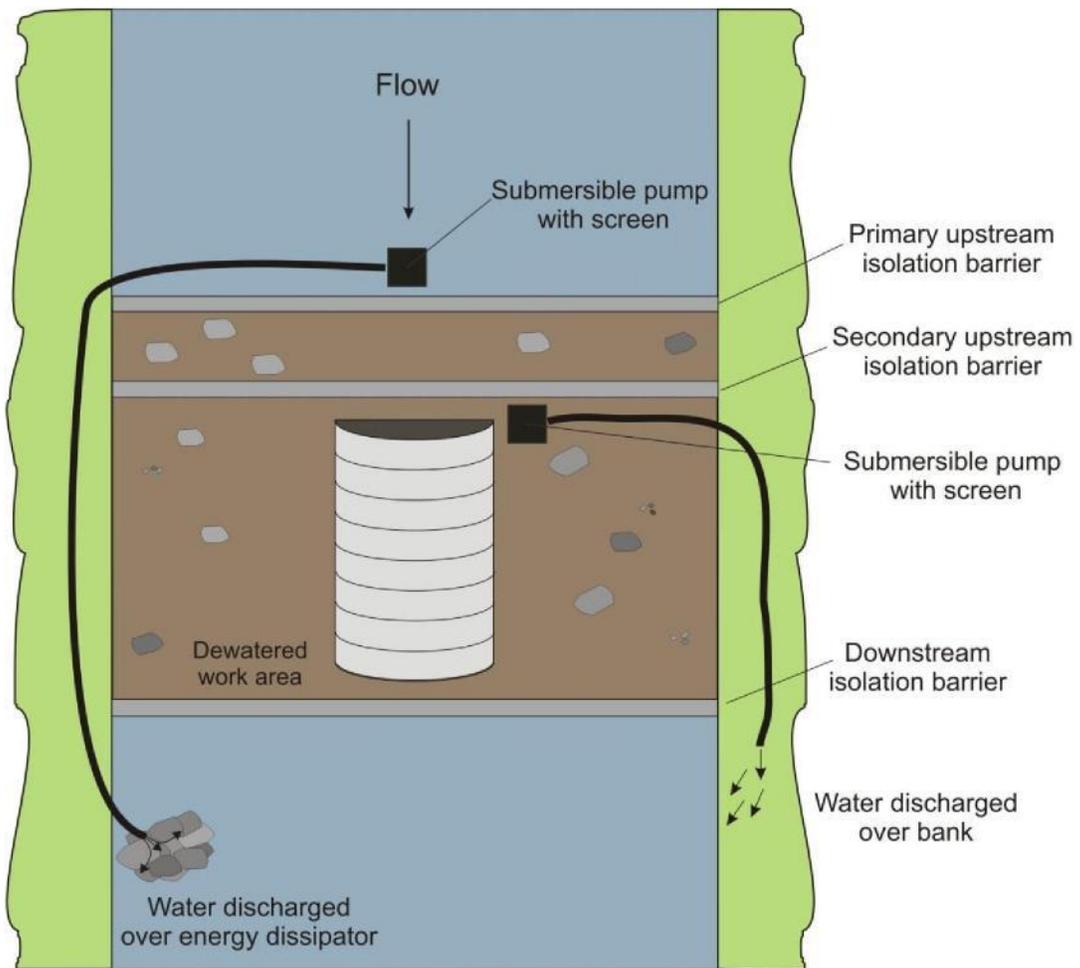


Figure 3. Isolation and Bypass Diversion when Working In-Water

Timing Windows

Figure 1 and Tables 1 and 2 can be used to determine the Restricted Activity period for the drain based on its classification. Note: Timing windows identified on [Conservation Authority](#) permits or [Ministry of Natural Resources](#) (Government of Ontario) work permits may differ and take precedence.



Figure 1. Ontario's Northern and Southern Region boundaries for determining application of restricted activity timing windows.

Table 1. Restricted Activity timing windows for the protection of spawning fish and developing eggs and fry in the Northern Region. Dates represent when work should be avoided.

DRAIN TYPE	RESTRICTED ACTIVITY PERIOD
A	SEPTEMBER 1 TO JULY 15
B	SEPTEMBER 1 TO JULY 15
C	APRIL 1 TO JULY 15
D	SEPTEMBER 1 TO JULY 15
E	APRIL 1 TO JULY 15

Table 2. Restricted Activity timing windows for the protection of spawning fish and developing eggs and fry in the Southern Region. Dates represent when work should be avoided.

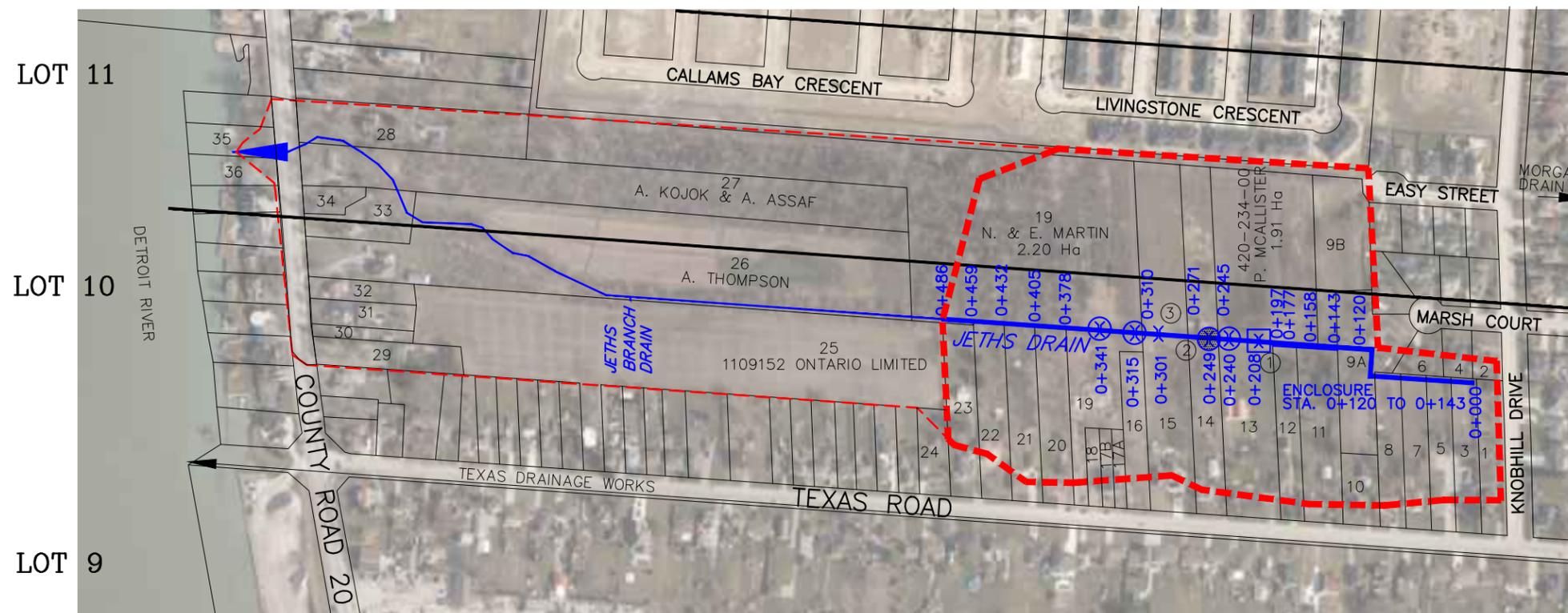
DRAIN TYPE	RESTRICTED ACTIVITY PERIOD
A	SEPTEMBER 15 TO JULY 15
B	MARCH 15 TO JULY 15
C	MARCH 15 TO JULY 15
D	OCTOBER 1 TO JULY 15
E	MARCH 15 TO JULY 15

Standard Measures to Avoid Causing *Serious Harm to Fish*

When implementing a culvert removal project in a municipal drain, the *Fisheries Act* still requires an individual/company to ensure they avoid causing *serious harm to fish* during any activities in or near water. The following advice will help one avoid causing harm and comply with the *Act* (for additional information see <http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/measures-mesures-eng.html>).

1. Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation.
2. Whenever possible, operate machinery on land above the high water mark or on ice and in a manner that minimizes disturbance to the banks and bed of the municipal drain.
 - Ensure that machinery arrives on site in a clean condition and is maintained free of fluid leaks.
 - Limit machinery fording of the municipal drain to a one-time event (i.e., over and back), and only if no alternative crossing method is available. If repeated crossings of the municipal drain are required, construct a temporary crossing structure.
 - Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering the water.
 - Keep an emergency spill kit on site in case of fluid leaks or spills from machinery.
3. Install effective sediment and erosion control measures before starting work to prevent sediment from entering the municipal drain. Inspect them regularly during the course of construction and make all necessary repairs if any damage occurs.
4. Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized, suspended sediment has resettled to the bed of the municipal drain and runoff water is clear.
5. Undertake all in-water activities in isolation of open or flowing water while maintaining the natural flow of water downstream and avoid introducing sediment into the municipal drain.
6. Ensure applicable permits for relocating fish are obtained and relocate any fish that become trapped in isolated pools or stranded in newly flooded areas to the main channel of the watercourse.
7. Ensure that the water that is being pumped/diverted from the site is filtered (sediment remove) prior to being released (e.g. pumping/diversion of water to a vegetated area).
8. Implement measures for containing and stabilizing waste material (e.g. dredging spoils, construction waste and materials, commercial logging waste, uprooted or cut aquatic plants, accumulated debris) above the high water mark of nearby waterbodies to prevent re-entry.
9. Stabilize shoreline or banks disturbed by any activity associated with the project to prevent erosion and/or sedimentation, preferably through re-vegetation with native species suitable for the site.
10. If replacement rock reinforcement/armouring is required to stabilize eroding or exposed areas, then ensure that appropriately-sized, clean rock is used; and that rock is installed at a similar slope to maintain a uniform bank/shoreline and natural stream/shoreline alignment.
11. Remove all construction materials from site upon project completion.

CONC 1



LANDOWNER IDENTIFICATION NUMBER

1. 0.21 Ha J. & A. Hilton	18. 0.06 Ha C. Martin
2. 0.11 Ha J. Brown & D. Landry	19. 2.20 Ha N. & E. Martin
3. 0.22 Ha J. & K. Kearley	20. 0.37 Ha C. & C. Blunt
4. 0.11 Ha T. & A. Tarte	21. 0.39 Ha L. Bortolin
5. 0.29 Ha G. & A. Dethomas	22. 0.32 Ha G. Fawcett & K. Sullivan
6. 0.13 Ha K. Desormeaux	23. 0.28 Ha B. & P. Pare
7. 0.29 Ha R. & S. Meloche	24. 0.00 Ha A. Martin & A. Chauvin
8. 0.31 Ha V. Lackovic	25. 0.00 Ha 1109152 Ont. Ltd.
9A. 0.60 Ha F. & A. Simone	26. 0.00 Ha A. Thompson
9B. 0.55 Ha C. & N. Martin	27. 0.00 Ha A. Kojok & A. Ahmed
10. 0.13 Ha J. Litalien	28. 0.00 Ha D. & P. Kellam
11. 0.47 Ha T. LaPorte	29. 0.00 Ha D. & J. Hay
12. 0.27 Ha J. Di Pierdomenico	30. 0.00 Ha G. & M. Johns
13. 1.91 Ha P. McAllister	31. 0.00 Ha J. & D. Rawlins
14. 0.75 Ha S. Reaume	32. 0.00 Ha J. & J. Farmer
15. 1.08 Ha J. & K. Hindi	33. 0.00 Ha L. Durocher & J. Gagnon
16. 0.23 Ha WINSTAR HOMES & 2831035 ONTARIO LTD	34. 0.00 Ha P. & K. Tough
17A. 0.05 Ha J. & R. Muresan	35. 0.00 Ha Phillip Fernandes Designs
17B. 0.05 Ha S. Gambeta & R. Booth	36. 0.00 Ha J. & L. Simons



LEGEND

- DRAINAGE AREA
- JETHS DRAIN
- MUNICIPAL DRAIN
- EXISTING CULVERT
- CULVERT NUMBER
- EXISTING CULVERT TO BE REPLACED
- EXISTING CULVERT TO BE REMOVED
- PROPOSED NEW CULVERT



4218 Oil Heritage Road
 Petrolia Ontario, N0N 1R0
 Phone: (519) 882-0032 Fax: (519) 882-2233

DRAWING NAME:
 Jeths Drain Plan

PROJECT No.
 2023-1527

APPROVED J. WARNER	NO.	REVISIONS	DATE	BY
CHECKED B. VAN RUITENBURG	1	FINAL REPORT	MAY 7, 2024	CS
DRAWN C. SAUNDERS	SCALE 1:5,000			

TOWN of AMHERSTBURG
JETHS DRAIN
PLAN

1
 OF 3

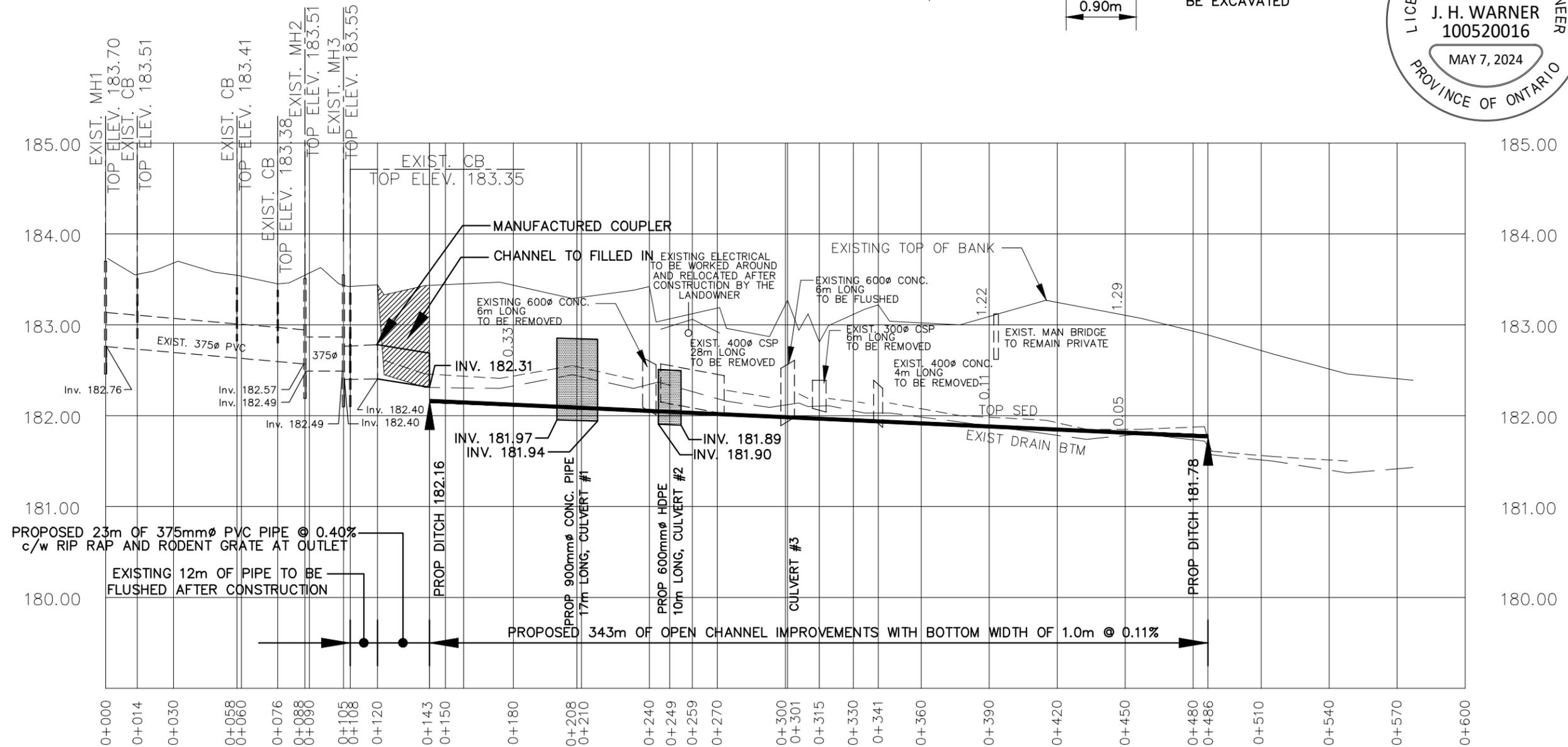
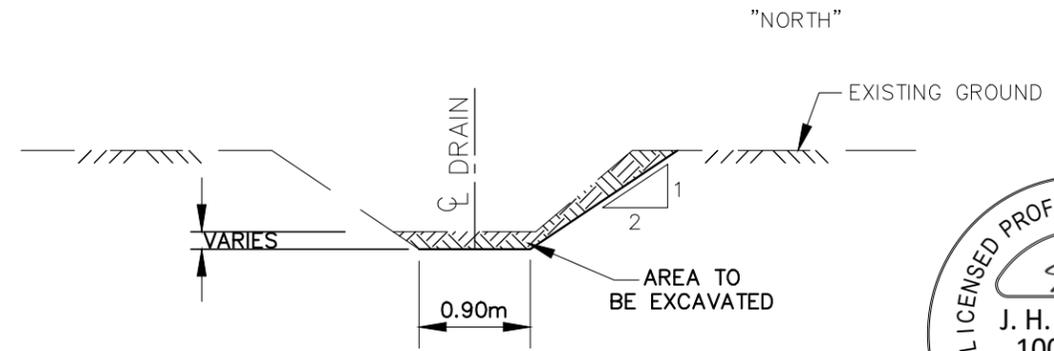
Last Updated: May 7, 2024

GENERAL NOTES

- BENCHMARK No.1 ELEV. 183.70
TOP OF LID OF MANHOLE #1
AT STATION 0+000

BENCHMARK No.2 ELEV. 182.189
TOP OF SQUARE IRON BAR ON
SOUTH SIDE OF DRAIN AT ST. 0+487

- UPPER NUMBERS ARE DEPTH FROM
TOP OF BANK TO BOTTOM OF NEW CHANNEL.
- LOWER NUMBERS ARE DEPTH OF
PROPOSED CHANNEL EXCAVATION.



4218 Oil Heritage Road
Petrolia Ontario, N0N 1R0
Phone: (519) 882-0032 Fax: (519) 882-2233

DRAWING NAME:
Jeths Drain Profile

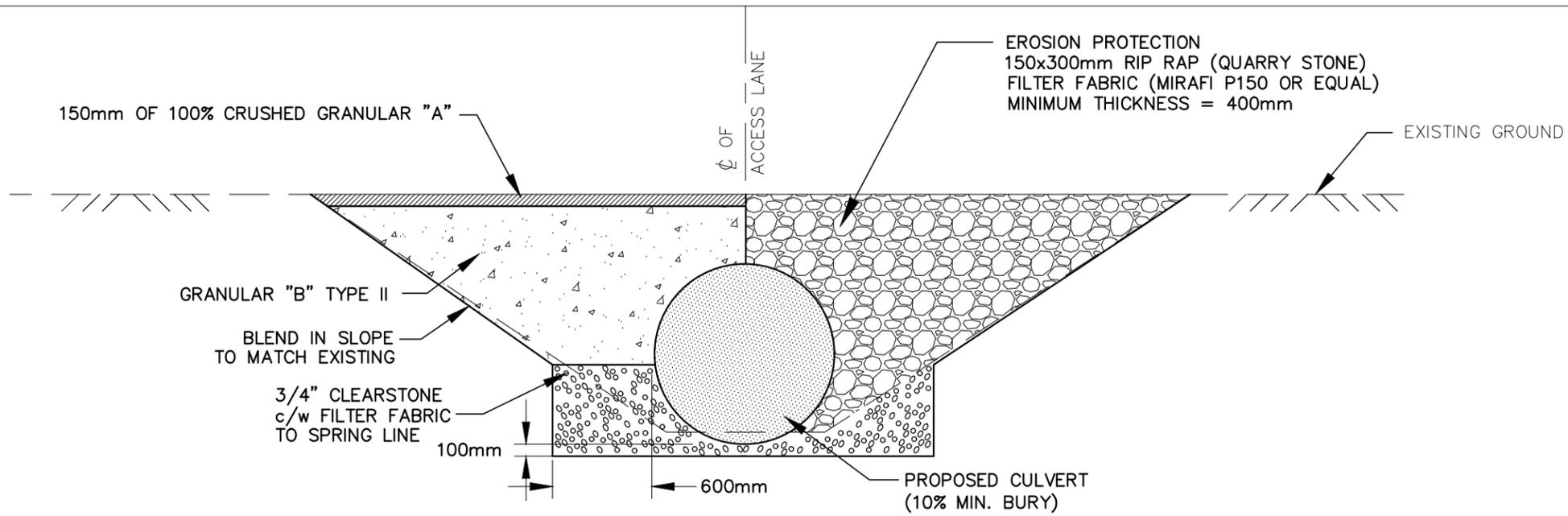
PROJECT No.
2023-1527

APPROVED	NO.	REVISIONS	DATE	BY
J. WARNER				
CHECKED	1	FINAL REPORT	MAY 7, 2024	CS
B. VAN RUITENBURG				
DRAWN				
C. SAUNDERS				

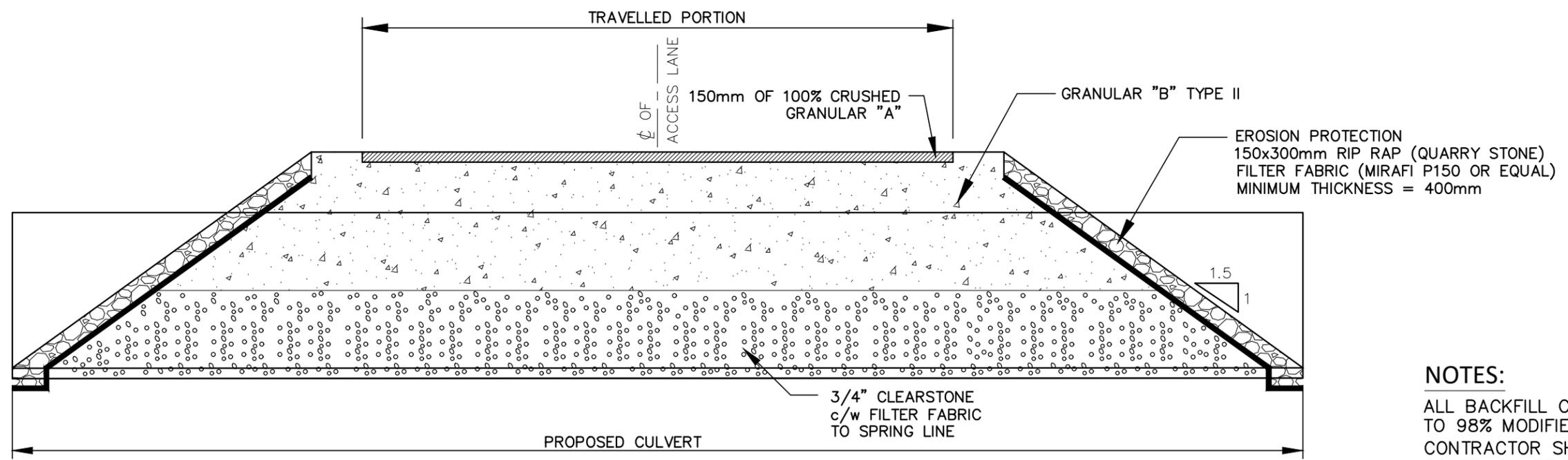
SCALE: 1:2,000
0 20 40 60m

TOWN of AMHERSTBURG
JETHS DRAIN
PROFILE

2
OF 3



PROPOSED PIPE END SECTION



PROPOSED CROSS-SECTION

NOTES:
 ALL BACKFILL COMPACTED TO 98% MODIFIED PROCTOR DENSITY
 CONTRACTOR SHALL ENSURE MINIMUM COVER IS MET PRIOR TO CROSSING



4218 Oil Heritage Road
 Petrolia Ontario, N0N 1R0
 Phone: (519) 882-0032 Fax: (519) 882-2233

PROJECT No.
 2023-1527

APPROVED	NO.	REVISIONS	DATE	BY
J. WARNER				
CHECKED	1	FINAL REPORT	MAY 7, 2024	JW
B. VAN RUITENBURG				
DRAWN	SCALE 1:75			
J. WARNER	0 2m			

TOWN of AMHERSTBURG
JETHS DRAIN
TYPICAL SLOPED END WALL CULVERT DETAIL

3
OF 3

DRAWING NAME:
 Jeths Drain Culvert Detail

Last Updated: May 7, 2024

THE CORPORATION OF THE TOWN OF AMHERSTBURG

BY-LAW NO. 2024-046

By-law to provide for the improvements to the Jeths Drain (2024) based on the report of Josh Warner, P.Eng of R. Dobbin Engineering Inc.

WHEREAS a request for improvement of the Jeths Drain was received under section 78 of the Drainage Act;

WHEREAS Council of the Corporation of the Town of Amherstburg appointed an engineer for the purpose of preparation of an engineer's report for improvements to the Jeths Drain (2024) under Section 78 of the Drainage Act;

WHEREAS Council of the Corporation of the Town of Amherstburg has authorized Josh Warner, P.Eng., of R. Dobbin Engineering Inc., to prepare a report and said engineer's report dated May 7, 2024 entitled Jeths Drain (2024) can be referenced as Schedule A, as attached hereto;

WHEREAS \$206,340.00 is the estimated cost provided for the new the drainage works;

AND WHEREAS the report was considered by the Amherstburg Drainage Board at the meeting held on June 4, 2024.

NOW THEREFORE the Council of the Corporation of the Town of Amherstburg hereby enacts as follows:

1. AUTHORIZATION

The attached drainage report is adopted and the drainage works is authorized and shall be completed as specified in the report.

2. BORROWING

The Corporation of the Town of Amherstburg may borrow on the credit of the Corporation the amount of \$206,340.00 being the estimated amount necessary for the improvements of the drainage works.

3. DEBENTURE(S)

The Corporation may issue debenture(s) for the amount borrowed less the total amount of:

- (a) Grants received under section 85 of the Drainage Act;
- (b) Monies paid as allowances;
- (c) Commuted payments made in respect of lands and roads assessed with the municipality;
- (d) Money paid under subsection 61(3) of the Drainage Act; and
- (e) Money assessed in and payable by another municipality.

4. PAYMENT

Such debenture(s) shall be made payable within 5 years from the date of the debenture(s) and shall bear interest at a rate not higher than 1% more than the municipal lending rates as posted by The Town of Amherstburg's Bank's Prime Lending Rate on the date of sale of such debenture(s).

- (1) A special equal annual rate sufficient to redeem the principal and interest on the debenture(s) shall be levied upon the lands and roads and shall be collected in the same manner and at the same as other taxes are collected in each year for 5 years after the passing of this by-law.

(2) All assessments of \$1000.00 or less are payable in the first year in which the assessments are imposed.

Read a first and second time and provisionally adopted this 8th day of July, 2024.

MAYOR – MICHAEL PRUE

CLERK – KEVIN FOX

Read a third time and finally passed this ___ day of _____, 2024.

MAYOR – MICHAEL PRUE

CLERK – KEVIN FOX



THE CORPORATION OF THE TOWN OF AMHERSTBURG

OFFICE OF ENGINEERING AND PUBLIC WORKS

MISSION STATEMENT: Committed to delivering cost-effective and efficient services for the residents of the Town of Amherstburg with a view to improve and enhance their quality of life.

Table with 2 columns: Author's Name, Report Date, Author's Phone, Date to Drainage Board, Author's E-mail, Resolution #.

To: Members of the Drainage Board
Subject: Authorizing By-Law – Sucker Creek Drain

1. RECOMMENDATION:

It is recommended that:

- 1. The report from the Drainage Superintendent and Engineering Coordinator dated May 27, 2024 regarding Authorizing By-Law for the Sucker Creek Drain BE RECEIVED;
2. The drainage report dated March 19, 2018 by Gerard Rood, P.Eng., of Rood Engineering Inc. BE RECEIVED;
3. That Essex Council's decision to proceed with the drainage works under Essex By-Law No. 1734 BE RECEIVED;
4. That By-Law No 2024-048 BE READ 3 TIMES to become the Authorizing By-Law for the future repair and maintenance of the Sucker Creek Drain for the portion of drain within the limits of the Town of Amherstburg.

2. BACKGROUND:

Under the provisions of the Drainage Act (Act), when the Council of any municipality undertaking the repair/Improvements of a drainage works by By-Law, serves upon the Clerk of any other municipality liable to contribute to any portion of those works, the affected municipality must pass a By-Law of their own in order to repair and maintain their portion of the drainage works within their municipality and the Council of that municipality must have a bylaw for which to perform the works and to recover costs for said works.

3. DISCUSSION:

Section 75 of the Act discusses the obligation on each Council to adopt a By-Law which permits Council to not only furnish the funds required to complete a drainage works, it also provides a mechanism to recover the cost furnished by that By-Law from the lands, roads and agencies affected and liable for the drainage works.

Drainage has no boundaries when another Municipality is the initiating municipality under the Act. In other words, the initiating municipality carries the work adopted through to a sufficient outlet even if it enters one or more adjacent municipalities through the authority of their adopted bylaw. Any assessments to any of the adjacent municipalities are collected by the initiating municipality as per the ratios in the adopted Engineers' Report appended to the initiating municipality's By-Law.

After the construction and assessment of the works, the adjacent municipality then must create a bylaw of their own in order to levy costs assessed to the lands within that municipality when it performs repair and maintenance on the drain. This By-Law is called an Authorizing By-Law and provides the mechanism for the non-initiating municipality to levy the costs to the affected lands, roads and agencies affected by the works and within their jurisdiction on a bylaw for the drain passed by another municipality.

4. RISK ANALYSIS:

Under the provisions of the Act, any drainage works constructed 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, and 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 proportions 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 of on an appeal.

The Town is obligated to construct, maintain and repair drainage works and to recover the cost to do so from all affected lands, but only as dictated by the current bylaw for said drain. If the Town assessed cost for maintenance using another municipality's by-law, it could face appeals from landowners. Landowner have appeal rights on their assessment for the construction, maintenance or repair of a drainage works.

5. FINANCIAL MATTERS: - Town costs to administer the Act are not recoverable.

6. CONSULTATIONS: - N/A

7. CONCLUSION: - Administration is recommending that By-Law 2024-048 be adopted and used for the repair and maintenance of the Sucker Creek Drain.



Sam Paglia, P.Eng.,
Drainage Superintendent and Engineering Coordinator

The Corporation of the Town of Essex

By-Law Number 1734

Being a By-law to provide for the Sucker Creek Drain Updated Maintenance Schedule of Assessment Report, Geographic Township of Colchester North, Town of Essex and Geographic Township of Anderdon in the Town of Amherstburg, County of Essex, Project REI2015D017.

Whereas the Town of Essex Drainage Department recommended and Council appointed a Drainage Engineer to prepare a drainage report for the Sucker Creek Drain: Updated Maintenance Schedule of Assessment Report, Geographic Township of Colchester North, Town of Essex and Geographic Township of Anderdon in the Town of Amherstburg, County of Essex;

And Whereas Section 78 of the Drainage Act, R.S.O. 1990, Chapter D. 17, as amended 2010, states that the Council of any municipality whose duty it is to maintain and repair the drainage works or any part thereof, may on the report of an Engineer appointed by it, accept and or complete the recommended updated maintenance schedule and or improvements recommended as set forth in such report;

And Whereas a drainage report dated March 19th, 2018 and considered by Council at its July 16, 2018 Consideration of Report meeting, has been procured and made by Gerard Rood, Professional Engineer, Rood Engineering Inc. and that the said report is attached hereto and forms part of this by-law;

And Whereas the Council of The Corporation of the Town of Essex is of the opinion that the said updated maintenance schedule and or improvements are warranted and desirable;

Now therefore the Council of The Corporation of the Town of Essex pursuant to the Drainage Act enacts as follows:

1. That the considered Report dated March 19th, 2018 and attached hereto as Schedule A to this By-law is hereby adopted and that the said updated maintenance schedule and or improvements as therein indicated and set forth are hereby authorized and shall be completed in accordance therewith.
2. That the Corporation of the Town of Essex may borrow on the credit of the Corporation the amount of \$100,000.00, the amount necessary to establish the



said updated maintenance schedule and or improvements identified in said Report.

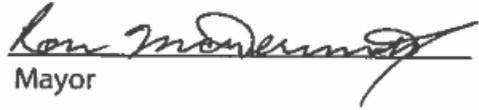
3. That the Corporation may issue debentures for the amount borrowed less the total amount of:
 - Grants received under Section 85 of the Drainage Act, R.S.O. 1990, Chapter D. 17, as amended, 2010;
 - Commuted payments made in respect of lands and roads assessed within the Municipality;
 - Money paid under Section 61(3) of the Drainage Act, R.S.O. 1990, Chapter D. 17, as amended 2010;

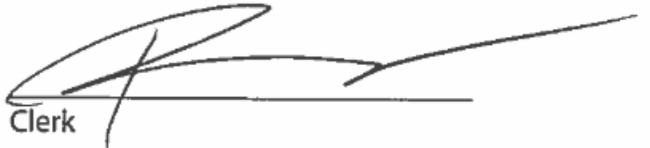
and such debentures shall be made payable: a) in the case of assessments in value of between \$500.00 and \$9,999.99 within (5) five years from the date of the debenture and shall bear interest at a rate not higher than the lending rates published by Infrastructure Ontario for municipalities; or b) in the case of assessments in value of \$10,000.00 and greater, within (10) ten years from the date of the debenture and shall bear interest at a rate not higher than the lending rates published by Infrastructure Ontario for municipalities

4. That a special equal annual rate sufficient to redeem the principal and interest on the debentures shall be levied upon the lands and roads as set forth in the Schedule, to be collected in the same manner as other taxes collected in each year for (5) five or (10) ten years (as applicable) after the passing of this by-law.
5. For paying the amount assessed upon the lands and roads belonging to or controlled by the Municipality, a special rate sufficient to pay the amount assessed plus interest thereon, shall be levied upon the whole rateable property in the Town of Essex, in each year for five years after the passing of this by-law to be collected in the same manner and at the same time as other taxes are collected.
6. All assessments of \$499.99 or less are payable in the first year in which the assessment is imposed.
7. The by-law comes into force on the passing thereof and may be cited as "Sucker Creek Drain"



Read a first and a second time and provisionally adopted on August 7th 2018.


Mayor


Clerk

Read a third time and finally passed on

Mayor

Clerk

THE CORPORATION OF THE TOWN OF AMHERSTBURG

BY-LAW NO. 2024-048

**By-law to provide for the adoption of the report of Mr. Gerard Rood, P.Eng of
Rood Engineering Inc. for the Sucker Creek Drain**

WHEREAS Council of the Town of Essex procured and adopted a report for the updated maintenance schedule to the Sucker Creek Drain under By-Law No. 1734.

AND WHEREAS the fully adopted report appended to Essex By-Law 1734 for the updated maintenance schedule (hereafter “Drainage Report”) dated March 19, 2018, authored by Mr. Gerard Rood, P.Eng., of Rood Engineering Inc., is attached hereto as Schedule “A” and forms part of this By-Law.

AND WHEREAS The Council of the Corporation of the Town of Amherstburg, pursuant to the Drainage Act hereby enacts the following;

AUTHORIZATION

The attached Drainage Report adopted by the Town of Essex by-law 1837, be given a Town of Amherstburg By-Law number 2024-048 to permit the future recovery of maintenance assessments levied to Amherstburg Lands.

Read a first, second and third time and fully adopted this 8th day of July, 2024.

MAYOR – MICHAEL PRUE

CLERK – KEVIN FOX