

Drainage Concerns Regarding Proposed Construction at
County Road 4034
Douro-Dummer

A Bit of Historical Context

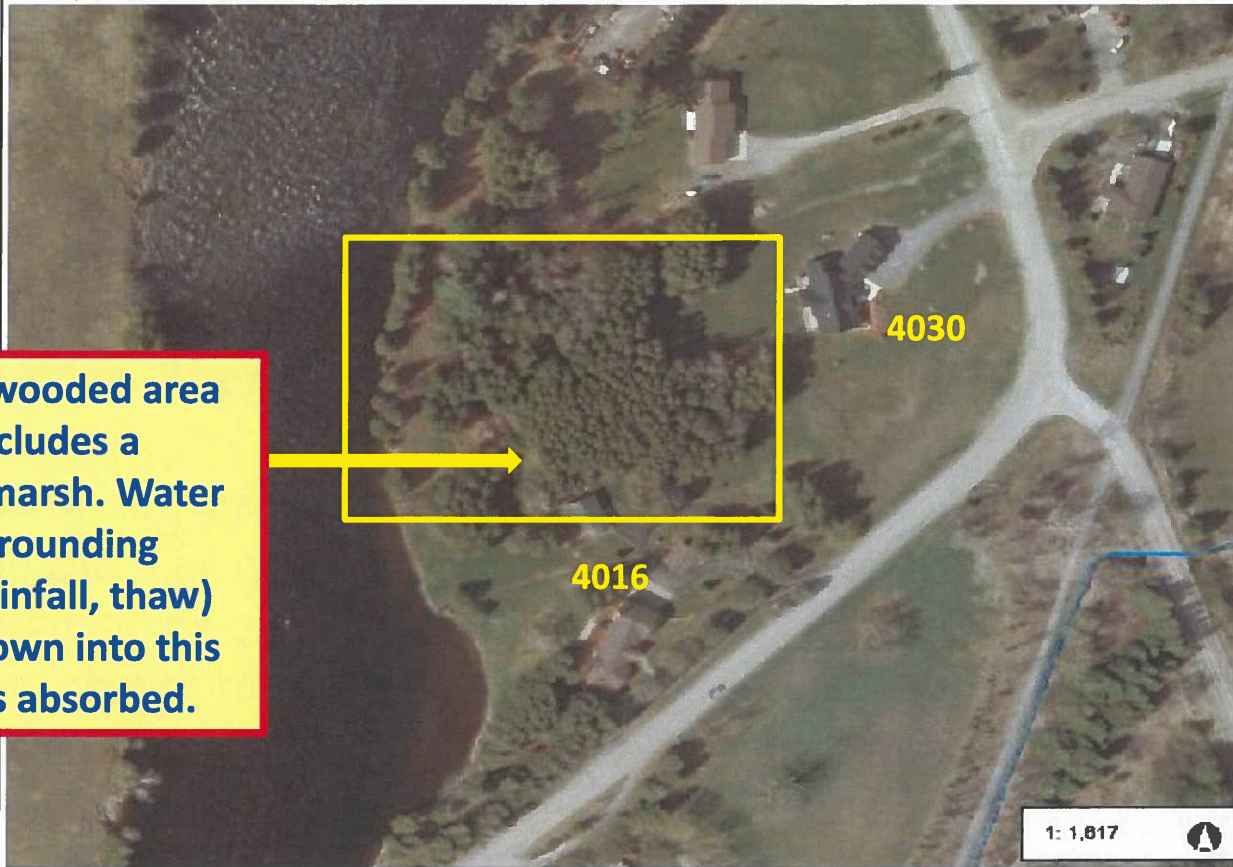
- **2009** – Douro Council approves new lot (4034) for future construction and agrees that **water would be able to run freely without issues from surrounding areas** into the new lot; also agrees that only **underground hydro** would be allowed into the new lot

Note: *At the time, this area is covered in topsoil and grass, has a forested area as well as a small marsh area. Water flows from 4016, 4030 and surrounding area into the woods and is absorbed without issue.*





County of Peterborough



Heavily wooded area which includes a natural marsh. Water from surrounding areas (rainfall, thaw) drains down into this lot and is absorbed.

Legend

- First Nations
- Rivers
 - Intermittent
 - Permanent
- Regulated Provincial Parks
- DTM
 - High: 434.30
 - Low: -6099
- Hillshade
 - High: 254
 - Low: 0

2008

Notes

2008 view of lot 4034 in its natural state with trees and marsh area intact. Land absorbs all the water

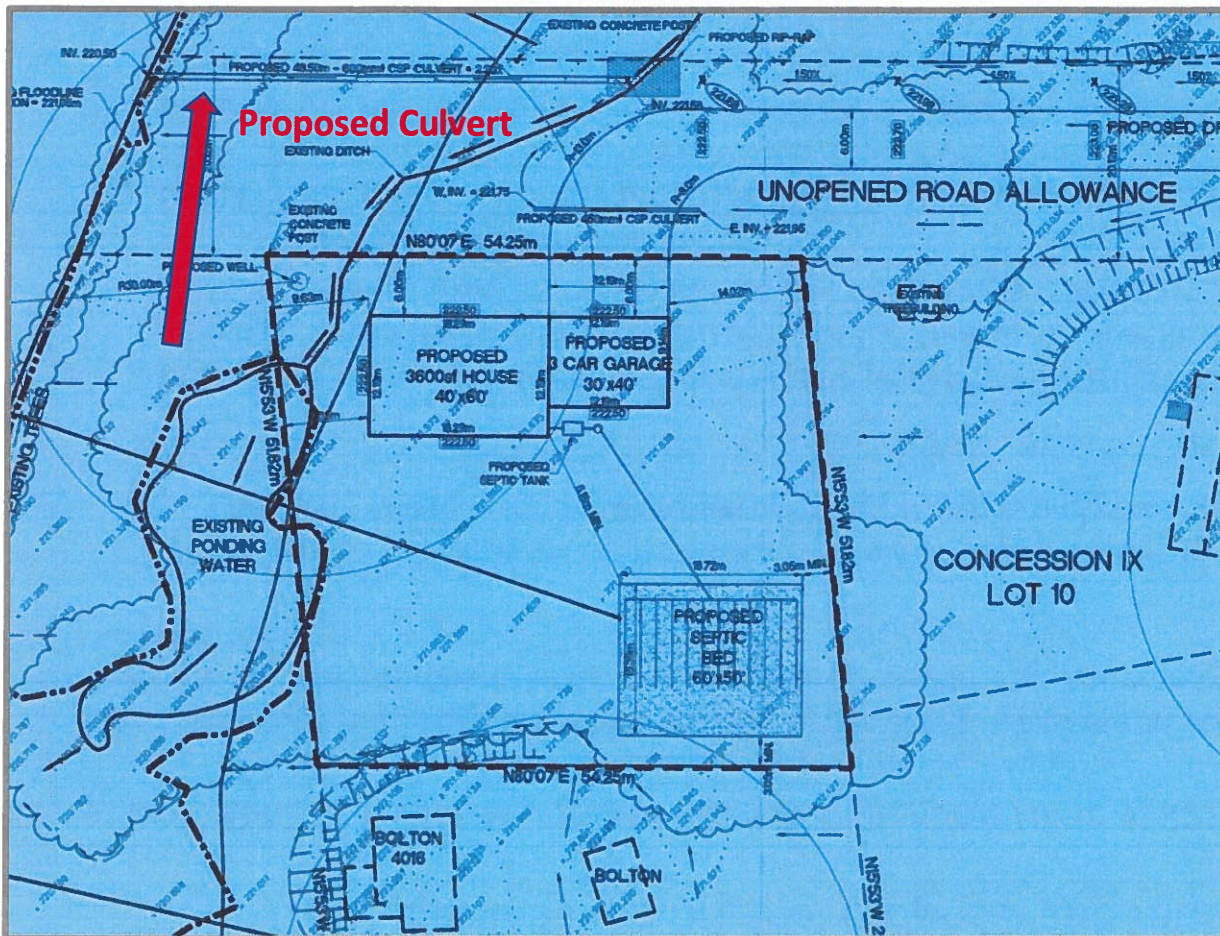
82.1 0 41.07 82.1 Meters

North_American_1983_CSRS_UTM_Zone_17N
© Latitude Geographics Group Ltd.

This map is a user generated static output from an internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

- **2013** – Notice of road construction is given to neighbours and site plan map shows a road and a drain going directly into the river at the end of the new road.
- **Topsoil is stripped**, and **gravel** is added for the road. A ton of **sand** is added (**2014**) and **90% of the trees removed**. The **small marsh is also removed**, and water is directed, by ditches and culverts, towards 4016 INSTEAD of into the river as first indicated by diagram sent out. (***We later learn (2022) that ORCA had originally expressed displeasure with the diagram showing a drain leading into the river.***)
- We have yet to see the **ORIGINAL REVISED plan (2013)** with new culvert that ORCA must have approved ***prior to construction in 2014.***
- **Immediately**, we noticed extra water migrating towards 4016 (both during rainfall as well as during spring thaw) and the sump pump ran frequently.
- A request for help regarding the drainage issue was made to building official (via email and phone). **No resolution provided.**

Original Proposed Site Plan with Culvert 2013



- This original plan is submitted to ORCA for approval and is declined **(June 2013)** in its original form. A request for additional details and a revision to the proposed culvert is made by ORCA.
- Follow-up email correspondence between ORCA and lawyer for the Hunters **(September 2013)** indicates that **ORCA is still waiting for a revised plan before they can issue a permit.**

ORCA declines the original proposal and requests a revised plan

Excerpt from ORCA's response letter to Murray Davenport (June 4, 2013)

Additional details are required related to construction activities and the proposed infrastructure located outside the subject property limits. These items must be addressed prior to ORCA issuing a permit for construction.

- 1) An erosion and sediment control plan is required. This plan should detail the means of minimizing, pollution, sedimentation and erosion during construction and post construction. Best management

Page 1 of 2

practices shall be employed, including site, landscape, infrastructure and/or facility design, construction controls, and appropriate remedial measures. Specific requirements include;

- a. Silt fence along the perimeter of the "existing ponding area" and along the 30m set back, these areas shall remain undisturbed.
- 2) ORCA is not in support of the proposed 600mm culvert, which outlets directly into the Otonabee River. Runoff from the proposed driveway/unopened road allowance could continue to travel through the existing ditch/swale and into the "existing ponded water". A slight realignment of this ditch/swale would be preferred over a culvert directly into the Otonabee River.

ORCA requests follow-up and revised plan 3 months later (Sept. 2013)

Richard Taylor Law Office

From: Cara Scrimshaw [cscrimshaw@otonabee.com]
Sent: September 10, 2013 11:57 AM
To: richard.taylor.law@cogeco.net
Subject: FW: ORCA Comments
Attachments: 2013-050 Eng. Review (June 2013).pdf

Hi Richard,

ORCA has received the applicable fees for Mr. Hunter's permit application (thank you); however, it appears as though there are a couple of items outstanding per our last review of the most recent submission as I have no record of a response in the file. Please see the attached last set of comments sent to Murray Davenport back in June 2013. They are minor issues, but need to be addressed just the same. Once ORCA is in receipt of a revised plan satisfying ORCA's comments (4 copies), I will be able to turn the permit around quite quickly. If you have any questions, do not hesitate to contact me.

Where is the referenced required feedback and **revised plan** that ORCA requested in response to their concern about the original diagram Murray submitted? Perhaps it exists but we have yet to see a copy of it. Even if ORCA did approve the new culvert, the drainage issue remains.

Photo from
Google Earth Pro
showing area
OCTOBER 2014

Topsoil is
stripped, trees
removed, sand
and gravel
brought in.

Marsh area
is removed



Road is
constructed.

Drainage and
flooding issues on
nearby properties
begin after these
changes are made.

September 2015

- **Letter to Township** from Murray Davenport stating that road has been completed and that culvert into river was deleted as per ORCA's memorandum from **June 4, 2013**. (Text is blurry on letter due to reduction in PDF size for mailing purposes.)
- Should there not **also** be a reference to an approved **REVISED plan in this letter?** Again, perhaps it exists but where is it?

M.J. Davenport & Associates Ltd.
CONSULTING ENGINEERS AND PLANNERS
MURRAY J. DAVENPORT, P. Eng. MICHAEL W. DAVENPORT, P. Eng.

January 12, 2015

Township of Douro-Dummer
P.O. Box 92,
894 South Street,
Warsaw, ON
K0L 3A0

Attention: Mr. David Clifford
 Chief Administrative Officer

Re: T & R Hunter Lot
 Township of Douro-Dummer
 Project No. 11-D-4689

Dear David,

We, hereby, certify that the construction of the driveway from County Road No. 32 to the Hunter lot has been constructed on the unopened road allowance in accordance with the agreement signed with the Township of Douro Dummer and M.J. Davenport & Associates Ltd. Drawing No. 4689-01 revised "As Constructed."

The culvert discharging directly into the Otonabee River was deleted during construction as suggested by the Otonabee Region Conservation Authority in their memorandum dated June 4, 2013.

We are available to discuss this project at your convenience.

Yours truly,

M.J. DAVENPORT & ASSOCIATES LTD.

Murray J. Davenport, P. Eng.

c.c. Mr. Terry & Ms. Ruth Hunter
 Mr. Richard J. Taylor, Barrister, Solicitor, Notary Public

April 2017



**Original owner
continues to remove
vegetation, further
exacerbating
drainage issues.**

Potential Drainage Disaster is Averted in 2019

- Notice is given by Peterborough County indicating that drain work will be conducted on the east side of County Road 32 (**near entrance to 4030 and 4034**) and that **all excess water will be directed down the road allowance and then straight into the river** as per the Murray Davenport plan. Again, they show the plan **ON RECORD** as having a pipe going straight into the river.
- Knowing that the culvert into the river did NOT exist and had, instead, been diverted towards 4016, **Dean Bolton immediately contacted the county** about the drainage disaster that would unfold if the current plan remained intact. In the final hour, the plan was ditched, and the water was **directed to the Lock 24 drain ditch**. This close call underscores how problematic it has been not having an up-to-date REVISED plan on file from the start.

April 2020

This area floods regularly. There were no water drainage issues impacting house at 4016 County Road 32 prior to 2013.

Spring thaw issues are also a real issue at 4030 County Road 32 since the drainage pattern has been disturbed.

The lot at 4034 County Road 32 is sold

- Ruth and Terry Hunter sell their lot to Kathryn Carrington and Dave Paterson in 2020.
- Concerned about **unaddressed drainage issues** that have arisen in adjacent properties beginning in 2013 and progressively worsening, Brian, Dean, and Al Bolton write to the township. (See copy of letter in following two slides.) In their letter, they reiterate the importance of council ensuring their previously approved requests are (finally) honoured. They want the flooding problem addressed **before** the new owners begin to build on their new lot as construction without a resolution *first* will likely exacerbate the current drainage problem.

October 28, 2020

Letter of Concern – October 2020

Dear Mr. Condon;

We are writing this letter to request an investigation into a few important concerns our families have in relation to the property at **4034 County Road 32**, in Douro-Dummer formerly owned by Ruth and Terry Hunter and recently purchased by Dave and Kathy Paterson. This property lies adjacent to our three homesteads and our families share collective concerns related to: 1) **location of future power lines;** and 2) man-made **water drainage issues** in the area. While it is certainly not our intention to impose undue hardship on the Patersons, with the construction of their new home on the horizon and for the sake of everyone involved, it is important that these issues be addressed as soon as possible.

Back in 2012, Terry and Ruth Hunter sought to have their (former) lot approved to allow for the future construction of a home at some point. During that original council meeting, we (as adjacent property owners) requested that two issues be agreed to *before* we gave our consent for approval:

1. That only **underground hydro** would be allowed to service the lot
2. That the **natural drainage** from the adjacent lots that flowed through the south part of the Hunter lot would not be altered.

In preparation for Orca approval, the Hunters hired Murray Davenport (engineer) to design a site plan that would include drainage culverts as well as a road alongside the property. The design that was submitted to council by the Hunters was done without any consultation with any of us. The original Davenport plan showed water flowing from the adjacent lots through the south part of the Hunter lot and it indicated that water would flow through culverts, straight along the road allowance and directly into the **river**. After the road was constructed, somehow the original drainage plan changed. New culverts (not on the plan) were constructed that ran *parallel* to the river instead of into the river, completely changing the course of direction of the flowing water. Excess water in the area, beginning on the *other* side of the road at the former Mundell property (now owned by the McLean family) began flowing into these new culverts as did all other excess water from the Hunter lot and surrounding area directly towards the base of the small grey bungalow at 4016 County Road 32 (one of our properties). Compounding the problem was the fact that the natural marsh in the area was also destroyed and a ton of sand was added to the lot. Every spring since, the area around this grey house becomes overloaded with water, and the sump pump has to work 24/7 to prevent basement flooding.

Last summer, the Douro township began construction on a water diversion project directly in front of one of our homes (4032 County Road 32). The township began its initial construction plan (see **Appendix A**) while working on the assumption that the Davenport diagram showing a culvert the end of the road alongside the former Hunter property was accurate (see **Appendix C**). After consultation with the township by email (see **Appendix B**), the realization hit that the township had been working on the false assumption that culverts from the original Davenport plan *actually existed* at the end of the road. Once the error was discovered, thankfully the township changed course and a massive error (which could have *really* exacerbated flooding) was prevented. One has to wonder how on earth the 'new' Davenport plan (without a copy on record with the township) was ever approved by ORCA and/or Douro. Perhaps it never was.

In closing, we would like someone from the township (or perhaps, ORCA) to do a proper site assessment BEFORE additional construction on the lot at 4034 County Road 32 to ensure that none of our adjacent properties will bear the brunt of future drainage issues should the culvert system in place become overloaded with water. We also request confirmation that our original approved request for underground hydro cables on that lot be enforced. Thank you for your attention to this matter. Please contact us at your earliest convenience.

Sincerely,

Allan Bolton (4014 County Road 32; 705 740-5555)

Dean Bolton (4030 County Road 32 705 872-7712)

Brian Bolton (4026 County Road 32; 705 875-5820)

2020 - 2022

- New owners begin the process of clearing more trees from the land, adding large boulders (for foundation), and jumping through **unanticipated hoops** in order to ready the lot for the construction of their new home.
- One of the studies they are required to have completed is a Stage 1 **archaeological study of the land** to determine if any First Nation artifacts exist anywhere on their new property:

YORK NORTH ARCHAEOLOGICAL SERVICES INC.

1264 Bathurst Street, Peterborough, Ontario K9H 6X8

Telephone (705)-742-7301, Fax (705) 740-9095

Email ynas@cogeco.net

Website: ynas.ca

**STAGE 1 ARCHAEOLOGICAL ASSESSMENT FOR THE PROPOSED
DEVELOPMENT OF 4034 CENTRE ROAD IN PART LOT 10, CONCESSION 9,
DOURO-DUMMER TOWNSHIP PETERBOROUGH COUNTY, ONTARIO**

Archaeological Study Begins

- York North Archaeological Services (YNAS) complete their study of the lot and issue a report in August 2021
- The report references the fact that *the natural land has been so significantly disturbed from its original state that any potential trace of artifacts would have been removed prior to the study.* As such, a Stage 2 study is not recommended.

May 2021



Excerpt from YNAS Report August 2021

YNAS was also in communication with M.J. Davenport, who is planning and organizing the development of this property. Information was shared about the topsoil stripping. YNAS was informed that the Drain Bros. Excavating company were in charge of the topsoil stripping for Ruth and Terry Hunter (Figure 10, Plates 1, 2). The back-dirt pile that the current owners inherited was moved by them from the east edge of the property to the south edge. The Drain Brothers brought in 3 feet of sand gravel fill and spread it on the property. Plates 5. 9 Figure 10 show the culvert between the subject property and the newly constructed Centre Road (2014). Gravel fill was also brought in for this purpose to raise the roadbed.

In Communication with the Drain Bros. Excavating Company, it was confirmed that extensive topsoil stripping occurred in 2014, 3 feet of fill was added to extend Centre Road down toward the Otonabee River and onto the property(Figure 7). Trees were removed by both the former owners (2014) and the current owners (2020)

- Questions remain as to how the current flooding issues created by so much stripping of the land will be addressed IN ADDITION TO future problems caused by construction. Mature trees absorb a significant amount of moisture, and this absorption potential has been lost. Topsoil has been replaced by gravel.

Excerpt from YNAS Report August 2021

- YNAS report contains numerous references to excessively wet conditions on the lot. These conditions have worsened since 2013 and have not yet been addressed. A solution must be implemented before the lot is raised and construction begins so that flooding is not further exacerbated on nearby properties.

Excessively Wet Conditions:

Upon a Site Inspection, it was obvious that the Study Area was excessively wet. The culvert in between Centre Road and the property had a steady flow of water (Figure 10 Plates 9). The western edge of the property, toward the Otonabee River, has standing water (Plates 13, and 14). The water table is so high on this property such that the proponent must have a raised septic bed, and house. Plates 1, 2, 7, 8, 10-13 show the boulders brought in by the current owners and fill brought in by the former owners in order to build a raised foundation for the septic and house.

Under the *Standards and Guidelines for Consultant Archaeologists (2011)*, Section 2.1. Standard 2a,i subsection (i), this property would not need an assessment due to the severity of the wet conditions encountered here. The location relative to the slope and alterations to the property have caused or worsened drainage issues.

Excerpt from YNAS Report August 2021

The potential of finding archaeological resources has been completely removed due to major landscaping involving grading below topsoil. The land alterations were conducted in order to mitigate against the excessively wet conditions encountered on this property. Fill was added to the Study Area in the amount of 3 feet of sand and gravel. Given the high water levels the township has stipulated that both the septic bed and house have to be above grade. The proponent will have to bring in boulders and more fill to create a foundation that will house the raised septic system and even more fill to raise the house above the septic bed.

- Unfortunately, the land alterations have **NOT MITIGATED** the excessively wet conditions on the lots adjacent to 4034.

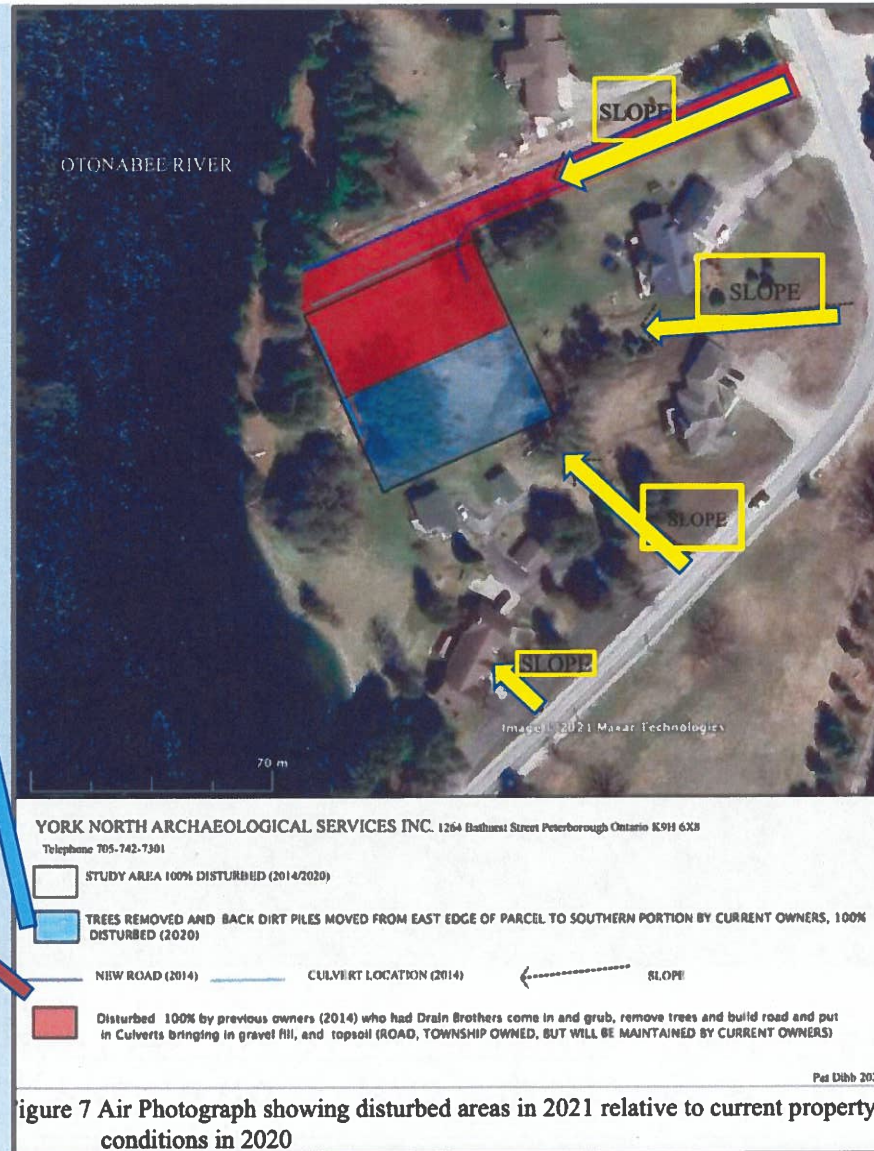
This unfortunate impact goes against the agreement with council signed in 2009.

As the YNAS study shows, the natural drainage pattern slopes towards 4034. Water has been backing up and spilling over since 2014. If the land at 4034 is raised further for construction purposes, immediate mitigation efforts must be put in place first, not after the fact.

Picture obtained from YNAS report.

- Light blue indicates trees removed; back dirt piles moved by current owners; **100% disturbed.**

- Red area indicates **100% disturbed** area by original owners



Arrows indicate **slope of land and natural direction of water flow** (emphasis added in yellow)

*Stripping of topsoil and vegetation on lot, raising of land, addition of sand fill, ditches and culverts redirecting flow have caused flooding on adjacent lands since 2013. Further raising of the land **contrary to natural slope** without significant mitigation measures put in place *first* will cause increased flooding.

Picture from YNAS Report August 2021

Paterson Stage 1 Archaeological Assessment of 4034 Centre Road Douro-Dummer Township

36



Reference is made regarding standing water in the picture.

After a rainfall or a winter thaw, that standing water significantly increases in volume and spills back onto our properties located at 4016 and 4030 County Rd. 32.

Plate 14 View west along the western edge of the Study Area, note the standing water

Picture from YNAS Report August 2021

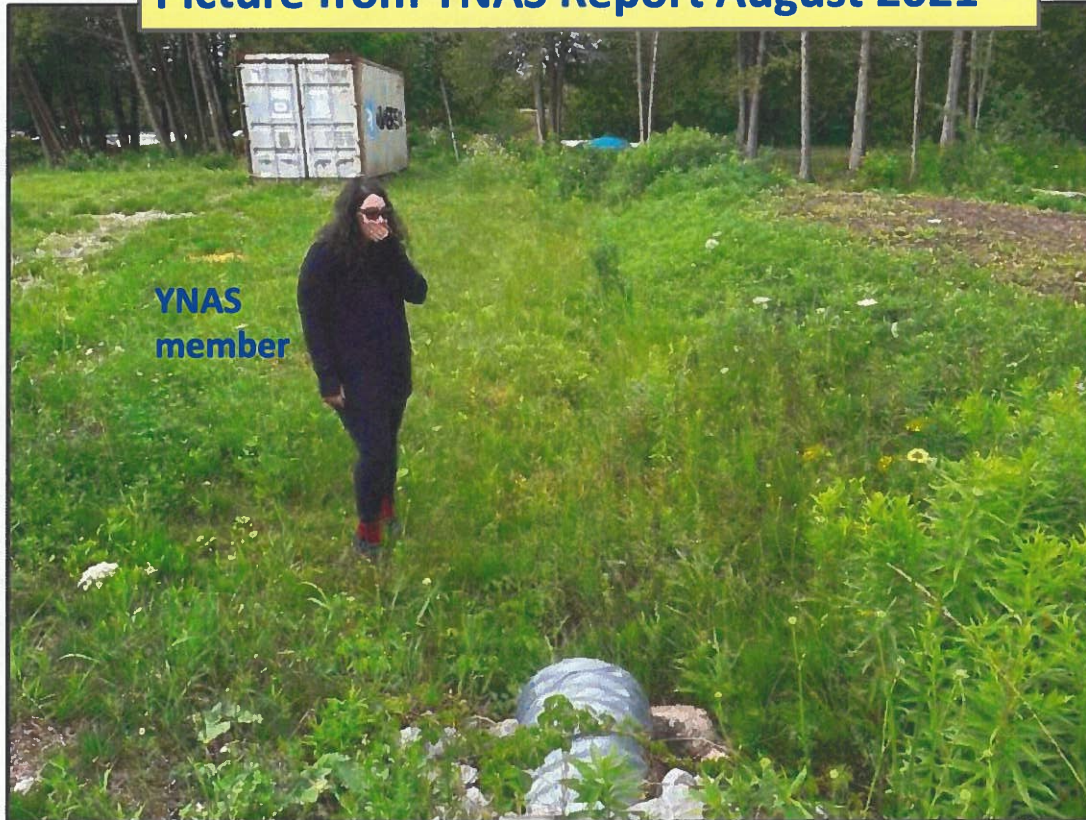


Plate 9 View along the northern edge of the property along the ditch to the right of the YNAS crewmember, the road to the right of the ditch has been infilled to raise it above the poorly drained soil in that area of the property

Change in appearance of the lot at 4034 County Road 32; 2011 - 2021

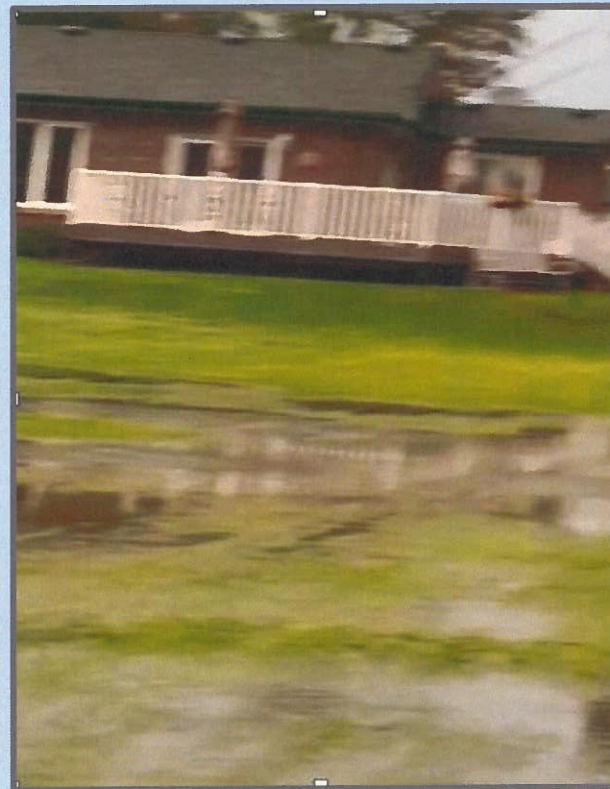
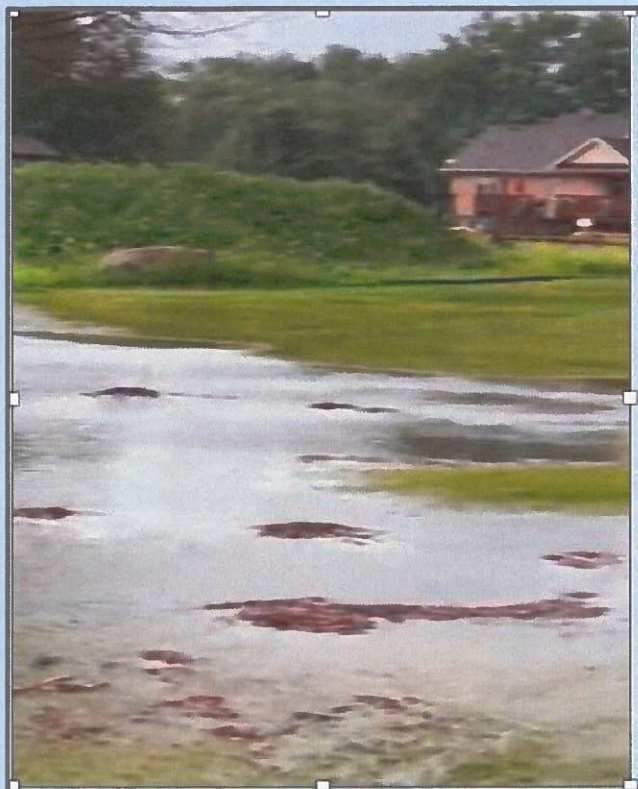
- Given such extensive stripping of the land (removal of trees, marsh, topsoil) and the addition of a culvert that now directs water *towards* 4016 instead of towards the river, it is not difficult to understand why we have such significant issues with flooding at our adjacent properties.

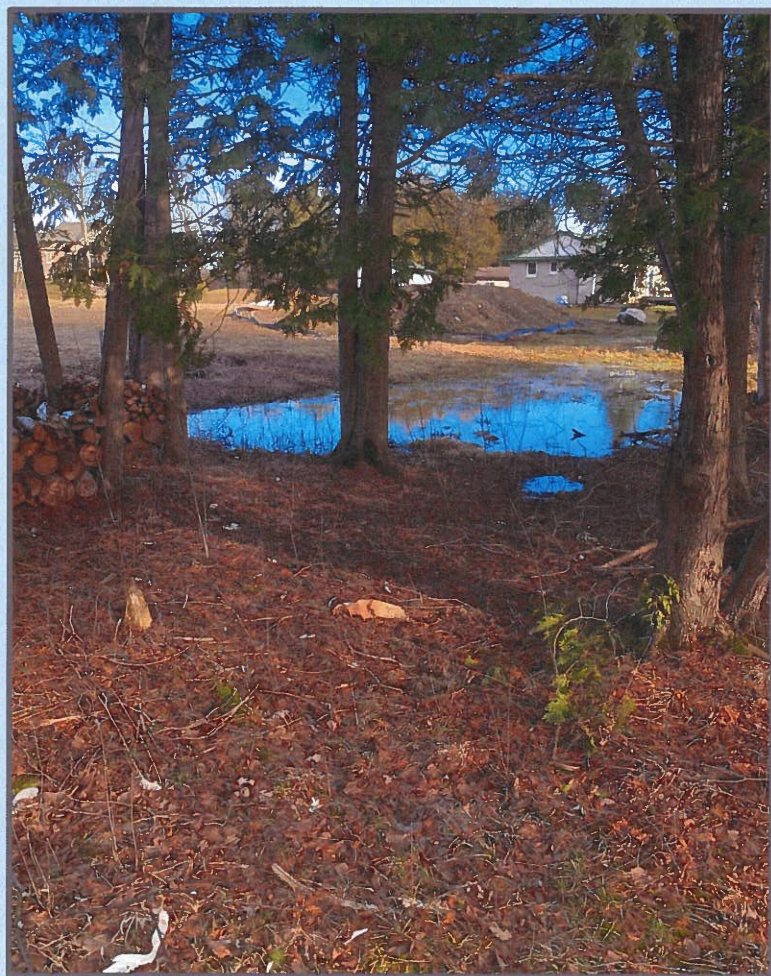


- The following slides contain **visual examples** of some of the flooding and drainage issues we have experienced over the years on our properties. Prior to the work the original owners did on their land, including the construction of the unassumed road in 2014, we did not have any issues with drainage.

July 18, 2021



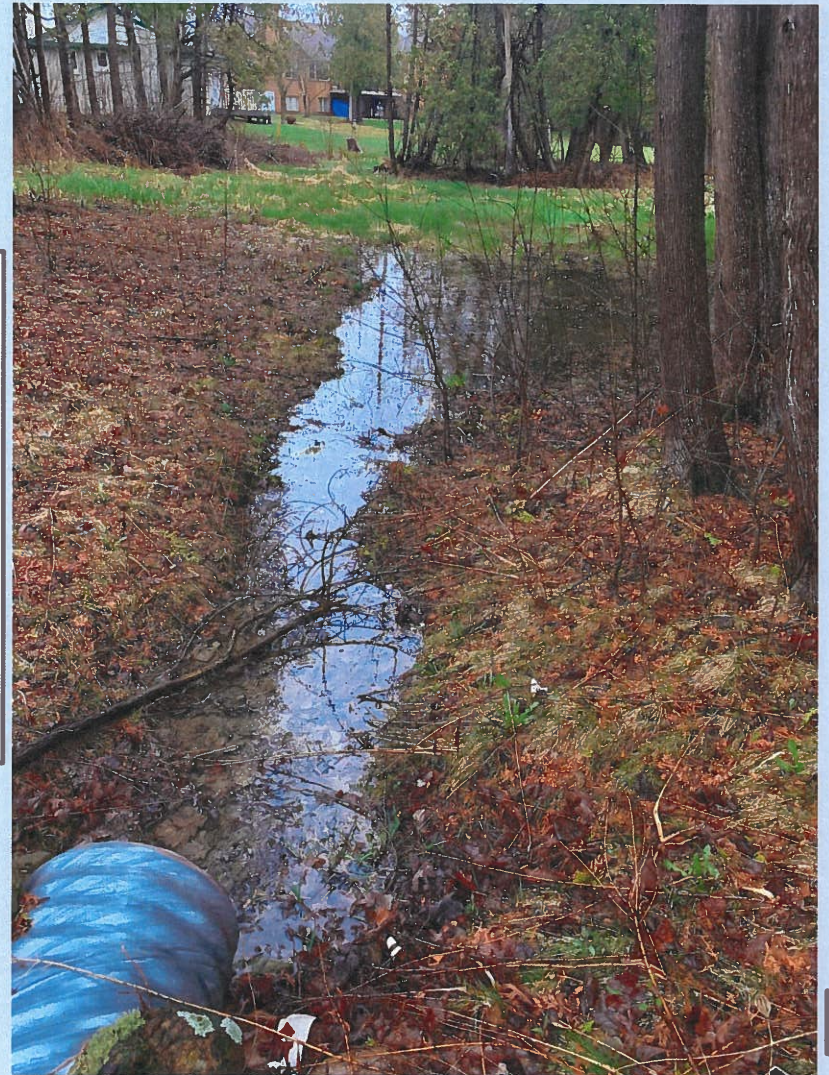






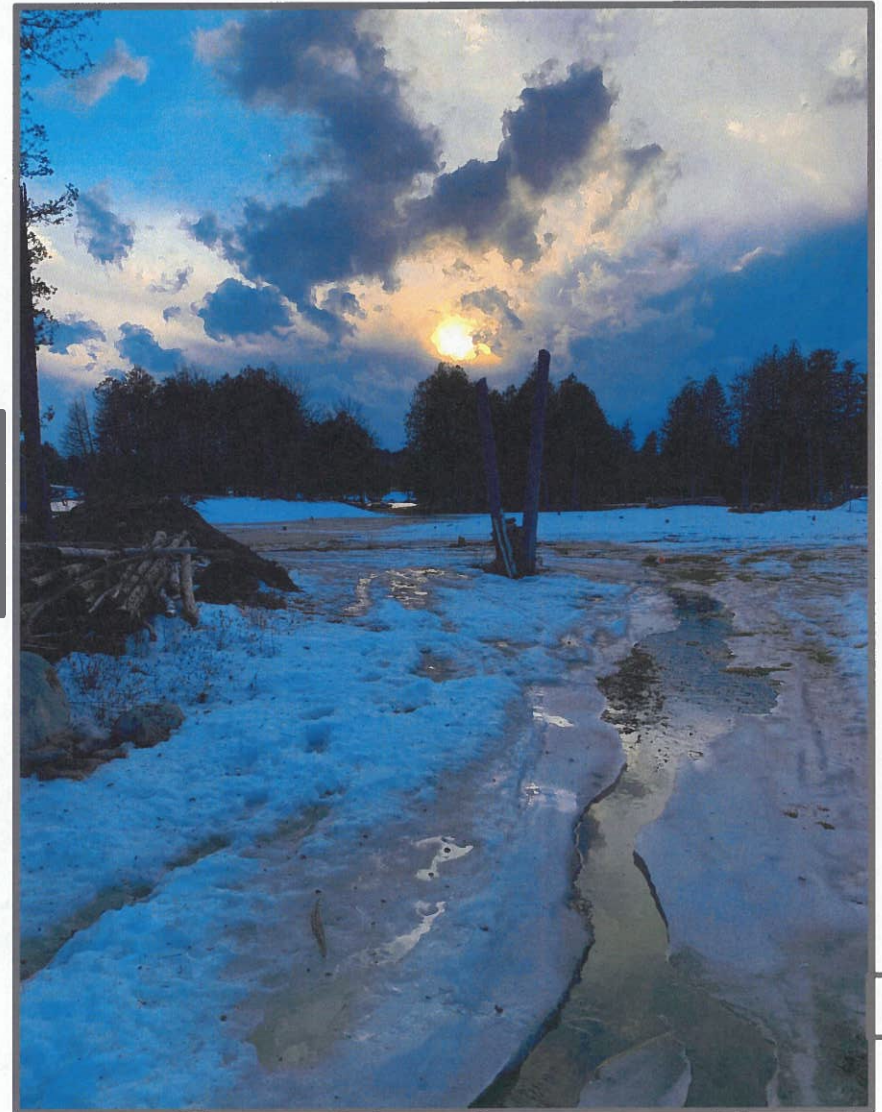


New Culvert
which directs
excess water
towards our
property at
4016 instead of
directly into the
river.





**Spring
Thaw
Issues**





Moving Forward

In conclusion, it **does not matter to us** who or what may be at fault with respect to the current drainage issues we have been experiencing since 2014. It is also not our intention to cause undue hardship for Kathryn Carrington and Dave Paterson. We are sure they are as concerned about potential flooding issues on their property as well. We do, however, expect there to be a satisfactory resolution to the current drainage problems we are experiencing before construction begins. The 2009 approval we signed at council stipulated that changes to the land located at 4034 would not impact our properties. It is clear from our documented history that we have valid concerns.