

REPORT FOR: **CROWE VALLEY CONSERVATION AUTHORITY WATERSHED ADVISORY BOARD**

REGARDING: **ONTARIO REGULATION 041/24, PERMIT APPLICATION NO. 085/24 BEING:
PROPOSED ATV TRAIL WITHIN A WETLAND GREATER THAN TWO HECTARES
AND A WATERCOURSE**

DATE: **APRIL 17TH, 2025**

HEARING DATE	April 17 th , 2025
DATE APPLICATION RECEIVED	May 29 th , 2024
DATE HEARING REQUESTED	February 6 th , 2025
APPLICANT	Gary Bowen on behalf of John Bowen and Robert Bowen
LOCATION	Vacant Lot with no Civic Address (adjacent to Fire Route 59) Part of Lot 29, Concession 3 Township of Havelock-Belmont-Methuen ARN: 1531 010 006 49300
PROPOSAL	Construct a 130-metre-long, 4-metre-wide, 1-metre-deep ATV trail within a wetland greater than two hectares (ha) and a watercourse.
OVERVIEW	The proposed development does not conform to the CVCA's Watershed Planning and Regulations policies because: <ul style="list-style-type: none">▪ The proposed development does not conform as it would result in development within 30 metres of a wetland greater than two hectares.▪ The proposed new development is located within a wetland.▪ The proposed development is a new access route within a wetland.▪ The proposed development does not meet the definition of passive low-intensity use.

Executive Summary

An application for development has been submitted by Mr. Gary Bowen with regard to Ontario Regulation 41/24: Prohibited Activities Exemptions and Permits (see Appendix K). The application is requesting permission for development within a wetland greater than two hectares and a watercourse that does not conform to the CVCA's Policies. The proposal is for the construction of a 130-metre-long, 4-metre-wide, 1-metre-deep ATV trail. CVCA policies permit the construction of boardwalks and new development related to passive low-intensity recreational uses. **The trail does not meet the definition of passive low-intensity use and does not meet the requirements of the policies of the CVCA for development within a wetland. Therefore, staff recommend the application be denied.**

The proposed development does not conform to the following Policies of the CVCA (CVCA's Watershed Planning and Regulations Policies):

Policy 7.3.1

It is the policy of the CVCA that:

In general, development or interference shall not be permitted within any wetland.

Conformity: No - The proposed development does not conform as it is proposed to be located within a wetland.

Policy 7.3.2

In general, there shall be no development or interference within 30 metres of Provincially Significant Wetlands and wetlands greater than 2 hectares.

Conformity: No - The proposed development does not conform as it would result in development within 30 metres of a wetland greater than two hectares.

Policy 7.4.1.1

New development will not be permitted within a wetland, regardless of previous approvals provided under the Planning Act or other regulatory process (e.g., Building Code Act), except as outlined below.

Conformity: No - The proposed development does not conform as it is new development and is within a wetland.

Policy 7.4.1.5

New developments related to passive low-intensity recreational uses associated with public parks, outdoor recreation and education, trail systems or watercourse access points will be permitted within a wetland where it has been demonstrated that there will be no negative impact on the hydrologic functions of the wetland. An Environmental Impact Study may be required at the discretion of the CVCA. It must also be demonstrated that:

- a technical site-specific study demonstrates to the satisfaction of CVCA that all hazards/risks associated with flooding and/or unstable soils have been addressed; and
- inert material will be used. The proponent may be required to provide proof of the origin and quality of the material.

Conformity: No - The proposed development does not meet the CVCA definition of passive low-intensity use.

CVCA Policy Definition:

Passive Low Intensity Recreational Use Activities of non-intrusive nature. Includes, but are not limited to: non-motorized trails, boardwalks, watercourse access points, natural heritage appreciation, unserviced camping on public and institutional land and accessory uses.

Policy 7.4.1.9

New access routes will not be permitted in a wetland.

Conformity: No - The proposed development is a new access route within a wetland.

Background and Subject Lands

The subject property is located on a vacant lot with no civic address Part of Lot 29, Concession 3 and is located in the Township of Havelock-Belmont-Methuen. The property is adjacent to Fire Route 59 and is west of Cordova Lake.

The property is approximately 874,419.85 m², approximately 215 acres. A large portion of the property is mapped as wetlands of various sizes and two watercourses, with a portion of the property being regulated due to the Cordova Lake floodplain. This proposal focuses on the wetland greater than two hectares and a watercourse where the proposed development is located.

The property is a vacant lot with no existing structures or driveway access on the property.



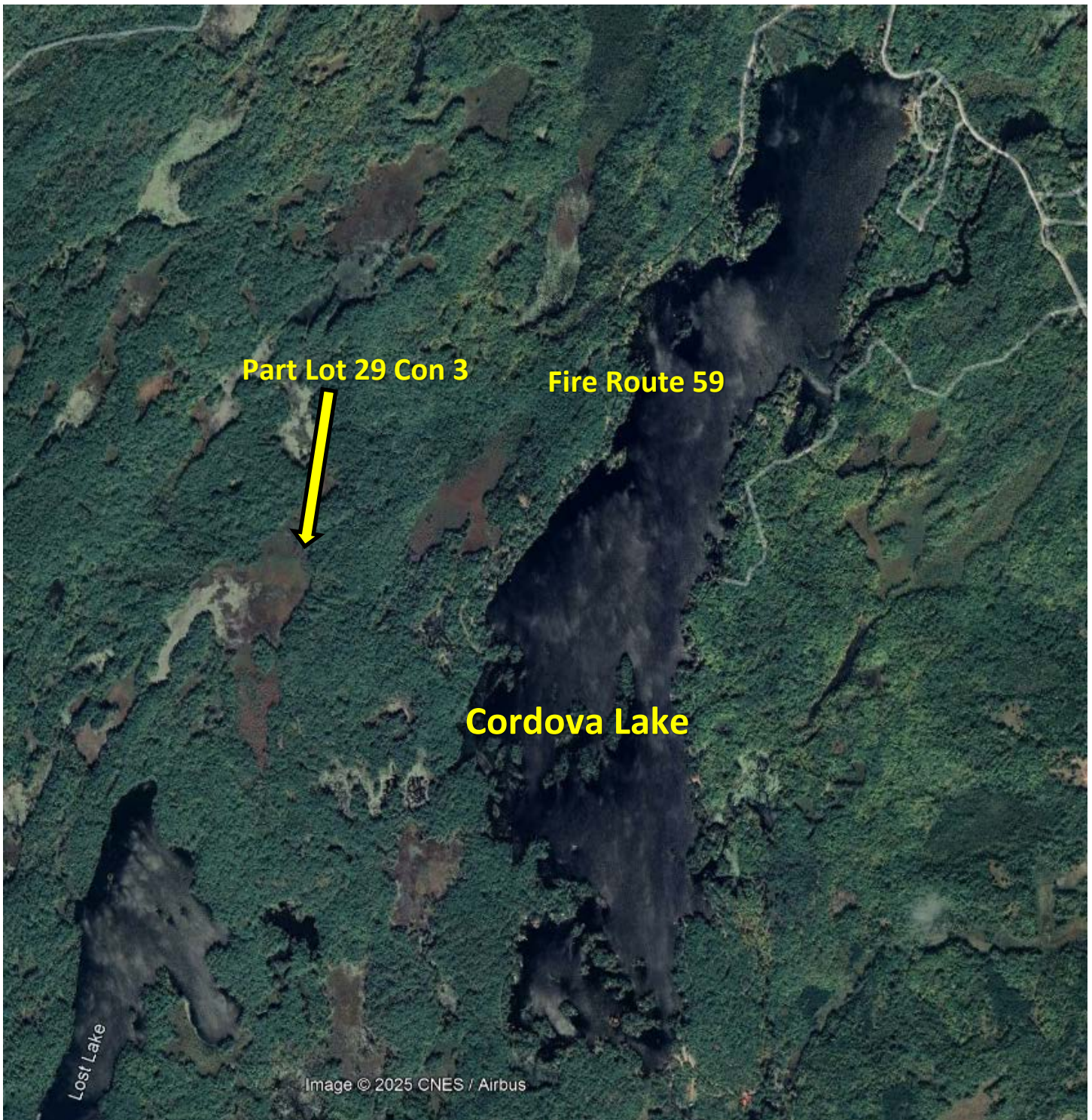


Figure 1: Aerial imagery of the property (Google Earth Pro, 2025)

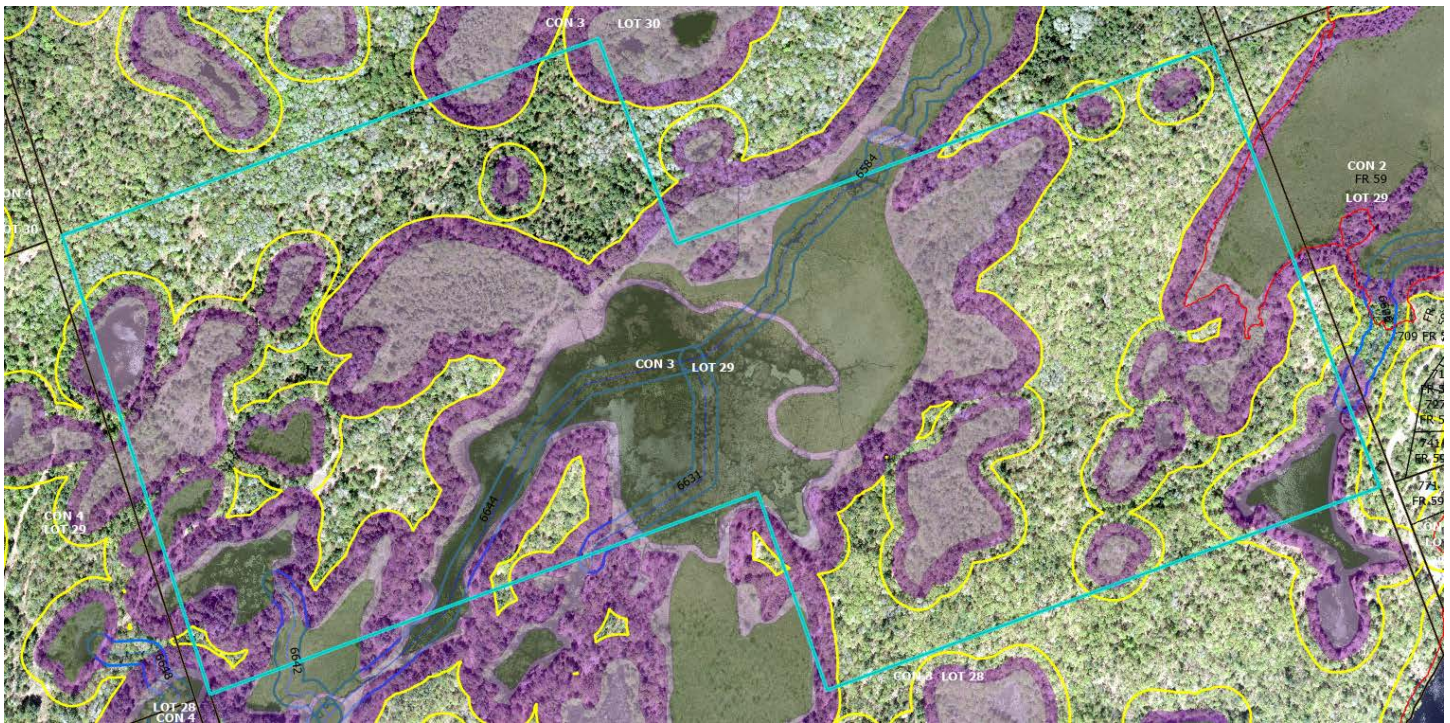


Figure 2: Aerial imagery of the property showing the natural hazards (green for wetlands, dark blue for watercourses, red for regulatory flood plain), associated setbacks (purple for wetlands and blue for watercourses) and the CVCA regulated area (yellow) (CVCA Regulations Mapping, 2025)

File History and Hearing Context

CVCA staff first met with John Bowen on September 01, 2023 to discuss the proposal and background of the property. John Bowen talked about his objectives, and how the existing trail that was used for many decades was no longer available to him as the neighbour was possibly selling the adjacent property. He discussed how his property has been used for hunting for many years and the goal is to continue using the northwest portion of his property for hunting purposes, which is separated by a large wetland (approximately 40 hectares in size). He explained that the existing trail was the only current access point used to date and now has to find an alternative solution to re-gain access to the northwest portion of the property. CVCA staff discussed the Regulation, the limitations for development within wetlands, permissible alternative options (e.g. boardwalk), the possibility of requiring an Environmental Impact Study (EIS), and recommended submitting a permit application.

On May 06, 2024, CVCA staff and the General Manager met with John Bowen to discuss the proposal again. John Bowen had brought in additional information about the property, including photographs, wetland analysis through the online Ontario Watershed Information Tool (OWIT), further explained the ATV trail proposal, and his concerns with the beavers and water levels limiting access. He also explained his background working with Hydro One and his experience building roadways for Hydro One access purposes. Also discussed was possible outcomes of the whole process, including a hearing with the CVCA Watershed Advisory Board and the Ontario Land Tribunal (OLT). CVCA staff discussed the Regulation, wetland criteria, the concerns for impacts to the control of flooding and impacts to the hydrological function of the wetland, the possibility of requiring an Environmental Impact Study or other technical studies. A site visit was then arranged with John Bowen for CVCA staff to go to the property.

On May 22, 2024 CVCA Staff conducted a site visit with John and Robert Bowen. During the site visit, CVCA staff reviewed the existing trail (no longer to be used) and the location of the proposed trail. This included crossing a section of a beaver dam and observing where the watercourse flows through the proposed trail location (refer to photos in appendix H).



Alternative options that CVCA could consider were mentioned during discussions throughout the site visit. Alternative options, such as purchasing the section of the neighbouring property to maintain access, but this was declined. Another recommendation was to make the trail two metres wide instead of four metres (two metres being the approximate width of the average ATV), which aligns with the CVCA boardwalk criteria, but this was also declined. Another suggestion was to use the existing snowmobile trails located along the west side of property, but this was again declined. At this point, CVCA staff recommended submitting a permit application and that an Environmental Impact Study/technical study of the hydrological function of the wetland would likely be required.

On May 29, 2024 CVCA received a permit application (#085/24) from John Bowen, Gary Bowen and Robert Bowen with written description of the proposed ATV trail. This permit application included the description of a 130 metres long by 4 metres wide by 1-metre deep ATV trail using native fill from the property, incorporating a section of existing beaver dam as part of the crossing, and installing a culvert being 60 centimetres in diameter and 5 metres in length. On June 19, 2024, CVCA completed their review of the application and responded to John Bowen, Robert Bowen and Gary Bowen, detailing that the proposal does not meet CVCA policies and that staff can not approve as proposed. CVCA policies were provided, alternative options were recommended and a technical report prepared by a qualified professional addressing hydrological function, culvert requirements, and a soil condition assessment was requested prior to going to a hearing, should they request one.

On January 13 2025, CVCA received a new application form (same proposal as original) with Gary Bowen being the new point of contact/applicant of the application and replaces John Bowen as the point of contact. In the same submission, CVCA also received an Environmental Impact Study completed by Gary Bowen (refer to appendix C), as well as a letter explaining the new application and EIS documents. January 30, 2025, CVCA responded to the new submission, summarizing the process and reviews up to this date to Gary Bowen. Additionally, CVCA requested further information regarding the trail proposal, more specifically the route of which is to be taken from the main road (Fire Route 59) to the wetland itself, and requested confirmation about the previous recommendations made during the review process/site visit with John Bowen. On February 03 2025, Gary Bowen replied to CVCA email and requests, confirming that the previous recommendations made by CVCA were not viable options. Limited explanations were provided to the CVCA. The original proposal of the ATV trail remained the proposed scope of work. Gary Bowen also confirmed that the trail leading from the roadway into the property and to the wetland was not yet determined, which is currently an outstanding item. The concern is that there are additional wetlands between Fire Route 59 and the main wetland, so CVCA does regulate these different sections of the property and would like to review the specific route that could possibly be taken is outside of any wetland and floodplain setbacks.

February 05 2025, CVCA reviewed and responded to the Gary Bowen detailing that the proposal does not meet CVCA policies, and that staff can not approve as proposed and provided hearing request information. The next day Gary Bowen confirms that they would like to proceed with a hearing.

Therefore, in summary, Gary Bowen's proposal Construct a new 130-metre-long, 4-metre-wide, 1-metre-deep ATV trail (approximately 520m³ of fill) within a wetland greater than two hectares, spanning a beaver dam and a watercourse, that it will impact the control of flooding and the hydrological function of the wetland. Therefore, staff recommend this application for denial.

Timeline

September 01 2023	CVCA staff met with John Bowen in office and discussed the proposal and background of the property. CVCA staff discussed the Regulation, the limitations for development within wetlands, permissible alternative options, and discussed the possibility of requiring an EIS and recommended submitting a permit application for further review.
May 06 2024	CVCA staff and General Manager met with John Bowen in office and discussed the proposal and further information about the property, the proposal and possible outcomes of the process. CVCA staff discussed the Regulation, wetland criteria, the possibility of requiring an EIS, and discussed setting up a site visit for CVCA staff to go to the property.
May 22 2024	CVCA Staff conducted a site visit with John and Robert Bowen. During the site visit, CVCA staff reviewed the existing trail (no longer to be used) and the area where the proposed trail will be. This included crossing a section of a beaver dam and observing where the watercourse flows. Alternative options that CVCA could considered were mentioned during discussions throughout the site visit.
May 29 2024	CVCA received permit application (#085/24) from John Bowen, Gary Bowen and Robert Bowen with written description of the proposed ATV trail.
June 19 2024	CVCA reviewed and responded to the John Bowen, Robert Bowen and Gary Bowen detailing that the proposal does not meet CVCA policies and that staff can not approve as proposed. CVCA policies were provided, alternative options were recommended and a technical report prepared by a qualified professional addressing hydrological function, culvert requirements, and a soil condition assessment was requested prior to going to a hearing.
January 13 2025	CVCA received a new application form (same proposal as original) with Gary Bowen being the new point of contact/applicant of the application and replaces John Bowen as the point of contact. At the same time, CVCA also received an Environmental Impact Study, a letter explaining the new application and EIS.
January 30 2025	CVCA responded to the new submission, summarizing the process/reviews up to this date to Gary Bowen. Additionally, CVCA requested further information regarding the trail proposal and requested clarification on previous recommendations made during the review process/site visit.
February 03 2025	Gary Bowen replied to CVCA email and requests.
February 05 2025	CVCA reviewed and responded to the Gary Bowen detailing that the proposal does not meet CVCA policies, that staff can not approve as proposed and provided hearing request information.
February 6, 2025	Gary Bowen requested hearing with CVCA Watershed Advisory Board.
February 25 2025	Gary Bowen confirmed request for hearing with CVCA Watershed Advisory Board.
March 19, 2025	CVCA issued Notice of Hearing to Gary Bowen. Notice included reasons for recommendation of refusal.



Proposal Description

As per the application information provided in the Environmental Impact Study (received 13 January 2025):

TIMING

The crossing will be installed when the site is as dry as possible and has maximum vegetation cover. Water levels can be manipulated through removing portions of the downstream beaver dam if necessary.

RETENTION OF EXISTING VEGETATION MATT

The crossing will be constructed on top of vegetation.

EXISTING BEAVER DAM

The dam will be incorporated into the crossing where it aligns.

CONSTRUCTION METHODOLOGY

- Fill will be locally sourced from pits located a minimum of 30 m from the edge of the wetland.
- Several types of fill will be piled and made available to use where appropriate.
- Prior to construction, silt fencing will be placed upstream and downstream of the proposed work site.
- Prior to construction, a straw bale sediment trap will be placed immediately downstream of the location the culvert will be installed at.
- The culvert will be at minimum 60 centimetres in diameter and 5 m long. Rip rap will be placed on the upstream end of the culvert.
- A layer of stone will be placed first in the location of the culvert prior to installation so that the culvert is just slightly lower (10%) than the bottom of the existing creek
- A beaver grate will be placed on the upstream culvert intake immediately after installation.
- Filter fabric will be placed on top of existing vegetation on the first and last 10-15 meters of the crossing, then sand/gravel fill will be added as required.
- Prior to placing fill on the remainder of the crossing, full-length trees (minus limbs) may be placed on top of the undisturbed vegetation to form corduroy.
- Filter fabric and/or limbs will be installed on top of the corduroy, then fill to an approximate depth of 1m.
- Should it be necessary to use corduroy, all exposed wood will be covered.
- Upon completion of the crossing, the straw bale and silt fence will be retained for 3-4 weeks until vegetation cover on disturbed areas is re-established.
- Native vegetation will quickly grow back on the site; seeding with non-native pasture mixes etc. is not recommended.

Applicability of the *Conservation Authorities Act, Ontario Regulation 41/24* and the Crowe Valley Conservation Authority's Watershed Planning and Regulations Policy Manual

Ontario Regulation 41/24 (see Appendix K), was made pursuant to section 28 of the *Conservation Authorities Act, R.S.O. 1990*.

The subject property is within an area regulated by the CVCA due to the presence of wetlands greater than two hectares, wetlands less than two hectares, two watercourses, and the 100-year flood hazard associated with Cordova Lake. The extent of the wetlands nearly covers a large portion of the property, with a small portion being the flood plain of Cordova Lake. (See map included in Appendix J).

The *Conservation Authorities Act* and *Ontario Regulation 41/24* contain various provisions related to wetlands.



The *Conservation Authorities Act* states:

Prohibited activities re watercourses, wetlands, etc.

28 (1) No person shall carry on the following activities, or permit another person to carry on the following activities, in the area of jurisdiction of an authority:

1. Activities to straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or to change or interfere in any way with a wetland.

2. Development activities in areas that are within the authority's area of jurisdiction and are,

i. hazardous lands

ii. **wetlands**

iii. river or stream valleys the limits of which shall be determined in accordance with the regulations,

iv. areas that are adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to an inland lake and that may be affected by flooding, erosion or dynamic beach hazards, such areas to be further determined or specified in accordance with the regulations, or

v. other areas in which development should be prohibited or regulated, as may be determined by the regulations.

Ontario Regulation 41/24 defines wetlands as:

"wetland" means land that,

(a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface,

(b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse,

(c) has hydric soils, the formation of which have been caused by the presence of abundant water, and

(d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which have been favoured by the presence of abundant water. ("terre marécageuse")

Ontario Regulation 41/24 contains the following sections dealing with river or stream valleys:

(3) For the purposes of subparagraph 2 v of subsection 28 (1) of the Act, other areas in which development activities are prohibited are the areas within an authority's area of jurisdiction that are within 30 metres of a wetland.

The *Conservation Authorities Act* states:

28.1 (1) An authority may issue a permit to a person to engage in an activity specified in the permit that would otherwise be prohibited by section 28, if, in the opinion of the authority, with any conditions specified in the regulations.

(a) the activity is not likely to affect the control of flooding, erosion, dynamic beaches or unstable soil or bedrock;

(b) the activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; and

(c) any other requirements that may be prescribed by the regulations are met.

Hearing Process and Role of the CVCA's Watershed Advisory Board

When an application for development does not conform to the CVCA policies, CVCA staff must recommend the application for denial. The applicant then has the ability to request a Hearing with the CVCA's Watershed Advisory Board. The Watershed Advisory Board is tasked with reviewing the application for development, considering the applicable CVCA policies that have not been satisfied, and ultimately making a decision as to whether the application is consistent with the tests of the Conservation Authorities Act.



Tests of the *Conservation Authorities Act*

Permits

28.1(1)

An authority may issue permission to a person to engage in an activity specified in the permit that would otherwise be prohibited by section 28, if, in the opinion of the authority,

- (a) the activity is not likely to affect **the control of flooding**, erosion, dynamic beaches or **unstable soil** or bedrock;
- (b) the activity is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property; and
- (c) any other requirements that may be prescribed by the regulations are met.

The CVCA Watershed Advisory Board may grant or refuse permission. Permission may be granted with or without conditions. The applicant will receive written notice of the decision. **The notice of decision must state the reasons for which the application was either approved or refused.** If the authority, after holding a hearing, refuses a permit or issues the permit subject to conditions, within 90 days after receiving the reasons for the authority's decision, the applicant may appeal this decision to the Ontario Land Tribunal.

CVCA Staff Recommendation

Based on the information submitted, CVCA staff recommend that the application be **denied** for the following reasons:

- The proposed ATV trail does not meet the definition of passive low intensity use in a wetland
- The proposed ATV trail would be new development within a wetland and within 30m of a wetland.
- The proposed ATV trail would be a new access route within a wetland.

The applicable policies from the CVCA Watershed Planning and Regulations Policy Manual are listed and detailed in the following section of this report. Policies sections that are not relevant to this application have been omitted. The CVCA's Planning and Regulations Policy Manual provides a framework for the CVCA and its staff to consistently administer its powers under the *Conservation Authorities Act* and *Ontario Regulation 41/24*. When reviewing development applications, the Authority must have regard for its objectives of preventing loss of life and minimizing property damage as a result of natural hazards.

Administrative Policies

The following sections speak to over-arching policies that every application must be tested against. Areas subject to the regulation include the wetlands and areas that could interfere with wetlands (30 metre setback).

3.8 General Regulation Policies

3.8.1 *That development, interference or alteration will not be permitted within a regulated area, except in accordance with the policies contained within this document. In the event of a conflict between the policies applicable to the development, interference or alteration, the most restrictive policy shall apply*

3.8.2 *That notwithstanding Policy 3.8.1, the CVCA's Board of Directors may grant permission for development, interference and/or alteration where the application provided evidence acceptable to the Board of Directors that documents the development and/or activity will have no adverse effect on the control of flooding, erosion, and unstable soil or bedrock with respect to river or stream valleys, hazardous land, wetland and areas of interference, or result in unacceptable interference with a watercourse or wetland.*

3.8.3 *That development, interference or alteration within a regulated area may be permitted where it can be demonstrated to the satisfaction of CVCA, through appropriate technical reports, assessments, site plans and/ or other documents as required by CVCA, that:*

- *there is no feasible alternative location for development outside the hazard;*



- *the development does not encroach further into the hazard than existing conditions;*
- *the risk to public safety is not increased;*
- *susceptibility to natural hazards is not increased and no new hazards are created (e.g. there will be no impacts on adjacent properties with respect to natural hazards);*
- *there are no adverse hydraulic or fluvial impacts on rivers, creeks, streams, or watercourses;*
- *negative or adverse hydrological impacts on natural features and functions, including wetlands, are avoided and mitigated as demonstrated by a qualified professional;*
- *intrusions on natural features, areas and systems contributing to hydrologic functions are avoided or mitigated as demonstrated by qualified professional;*
- *access for emergency works and maintenance of flood or erosion control works is available;*
- *sedimentation and erosion during construction and post-construction is minimized using best management practices including site, landscape, infrastructure and/or facility design (whichever is applicable based on the scale and scope of the project), construction controls, and appropriate remedial measures;*
- *the control of flooding, erosion, and unstable soil or bedrock will not be affected during and post development, interference or alteration; and*
- *proposed development is constructed, repaired and/or maintained in accordance with accepted engineering principles and approved engineering standards to the satisfaction of CVCA, whichever is applicable based on the structural scale and scope, and the purpose of the project.*

3.8.4 That notwithstanding Sections 3.8.1, 3.8.2 and 3.8.3, where there is an existing vacant lot of record, (including an infill lot), no new development will be permitted where the lot has no safe access, or is entirely within one or more of the following:

- a) the flood hazard (One Zone Policy Area), or erosion hazard of valley and stream corridors, other hazardous lands;
- b) a wetland; or
- c) any natural features, areas and systems contributing to hydrologic functions.

Specific Wetland Policies

The following sections speak to CVCA wetlands specific policies, areas subject to the regulation include wetlands and areas that could interfere with wetlands (30 metre setback).

Policy 7.3.1

It is the policy of the CVCA that:

In general, development or interference shall not be permitted within any wetland.

Conformity: No - The proposed development does not conform as it is proposed to be located within a wetland.

Policy 7.3.2

In general, there shall be no development or interference within 30 metres of Provincially Significant Wetlands and wetlands greater than 2 hectares.

Conformity: No - The proposed development does not conform as it would result in development within 30 metres of a wetland greater than two hectares.

Policy 7.4.1.1

New development will not be permitted within a wetland, regardless of previous approvals provided under the Planning Act or other regulatory process (e.g., Building Code Act), except as outlined below.

Conformity: No - The proposed development does not conform as it is new development and is within a wetland.

Policy 7.4.1.5

New developments related to passive low-intensity recreational uses associated with public parks, outdoor recreation and education, trail systems or watercourse access points will be permitted within a wetland where it has been demonstrated that there will be no negative impact on the hydrologic functions of the wetland.



An Environmental Impact Study may be required at the discretion of the CVCA. It must also be demonstrated that:

- a technical site-specific study demonstrates to the satisfaction of CVCA that all hazards/risks associated with flooding and/or unstable soils have been addressed; and
- inert material will be used. The proponent may be required to provide proof of the origin and quality of the material.

Conformity: No - The proposed development does not meet the CVCA definition of passive low- intensity use.

CVCA Policy Definition:

Passive Low Intensity Recreational Use Activities of non-intrusive nature. Includes, but are not limited to: non-motorized trails, boardwalks, watercourse access points, natural heritage appreciation, unserviced camping on public and institutional land and accessory uses.

Policy 7.4.1.9

New access routes will not be permitted in a wetland.

Conformity: No - The proposed development is a new access route within a wetland.

Flooding Hazard

Hazardous lands are defined in the *Conservation Authorities Act* as land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches and/or unstable soil or bedrock.

In Ontario, regulatory flood event standards are prescribed based on geography. In the CVCA watershed, the 100-year flood event is used. This is a frequency-based flood event that is determined through analysis of precipitation, snow melt, or combination thereof, having a return period of once every 100 years on average. That is not to say that a 100-year event cannot occur two years in a row or may not be experienced for 500 years – it is a statistical probability. Note: if a flood event is experienced that exceeds the current 100-year level, that observed event may be used.

The 100-year flood level for Cordova Lake is 217.46 metres (CGVD2013).

Flood Management Approach

The objective of Conservation Authorities in the planning and management of flood risk areas is to protect society, including all levels of government, from being forced to bear unreasonable social and economic burdens due to unwise individual choices. The management of flood susceptible lands involves the combination of three main program components:

- i) **prevention, by land use planning and regulation of development,**
- ii) protection, by applying structural and non-structural measures, and acquisition, and
- iii) emergency response, by flood forecasting/warning and flood/erosion disaster relief.

Over the long term, prevention is the preferred method for the management of flood plain lands.

Wetlands and Wetland Interference

Wetlands retain waters during periods of high water levels or peak flows (i.e. spring freshet and storm events) allowing the water to be slowly released into the watercourse, infiltrate into the ground, and evaporate. Additionally, wetlands within the floodplain of a watercourse provide an area for the storage of flood waters and reduce the energy associated with the flood waters. Wetland systems and water attenuation can lead to various organic soil conditions. Development activities can impact organic (unstable) soils through compaction, disturbance and erosion. Over 60 potential hydrological functions have been identified for wetlands when developing the Southern Ontario Wetland Evaluation System (OWES).



Development in wetlands will interfere with the hydrological function of wetlands. It is important to consider the linkages between small wetlands and headwater areas, impacts of storm water, and upstream constrictions to flow. Impacts to the hydrologic function of a wetland due to development within the “other areas” may also result from changes in imperviousness/infiltration due to a removal or change in vegetation, soil compaction during construction, disruption or alteration of groundwater flow paths due to underground construction, etc.

Discussion: Potential Control of Flooding Impacts

Hazard land and wetland management was delegated to Conservation Authorities by the Province of Ontario through the establishment of the *Conservation Authorities Act* and *Ontario Regulation 41/24*. The CVCA's Watershed Planning and Regulations Policies have been developed to assist CVCA staff with the administration of the Regulation. CVCA staff review development proposals in an effort to protect people and their property in areas susceptible to natural hazards.

Effective hazard management must occur on a comprehensive watershed basis. Therefore, site specific and individual development activities should be evaluated on an overall watershed basis, and in consideration of the effects of cumulative development over a long-term planning horizon (i.e. 100 years).

The proposed construction of an ATV trail being 4 metres wide by 130 metres long and 1-metre deep using locally sourced material with a culvert for ATV access to a portion of the property will have the total footprint of approximately 520 square metres, which will require a significant quantity of fill material. Additionally, a culvert being 60 centimetres in diameter by 5 metres in length will be installed to cross a watercourse within the wetland.

There are concerns that the proposed trail may impact the hydrological function of the wetland and may impact the control of flooding. Wetlands have flood attenuation characteristics that play an important role in the control of flooding. Construction of a road/trail placed on organic soils (unstable soils) and in an area susceptible to flooding could require significant ongoing maintenance and material being continually added to the wetland/floodplain. Continually adding material to repair or maintain the trail will impact the control of flooding. Impacts to flood control upstream and downstream if the beaver dam or the trail were to be impacted, altered or wash out/give way.

Additionally, changes and interference to wetland vegetation and using a section of an existing beaver dam can also impact the hydrological function of the wetland immediately and over time through erosion, compaction of organic soils, compaction/disturbance of the beaver dam, and wetland vegetation removal and disturbance. Changes to water flow and depth can increase runoff and alter the natural flow patterns, resulting in impacts to wetland hydrology.

Even though trails/roads are not permitted through a wetland, CVCA Policy allows an alternative option that could be approved is a boardwalk or footbridge, provided that it meets the applicable policies. The proposal is not considered passive low-intensity use. These were recommended options to the applicant. This should be factored into deliberations when considering the significant fill placement within the wetland which is at the forefront of this Hearing.

The proposed culvert has been reviewed by a professional engineer and the Environmental Impact Study was reviewed by qualified professionals (See Appendix C). This culvert review has assessed anticipated flooding forces in relation to the proposed structures and has been integrated into the design. The fact that the culvert was designed to meet 1:100-year flood conditions, it likely reduces impacts on the control of flooding and potential adverse impacts to upstream and downstream areas.

The CVCA enforces restrictions on development in wetlands to systematically reduce widespread risks to life and property during severe flood events. It is important to acknowledge that the CVCA's approach to development within wetlands is not always an outright prohibition. Some development is permitted to balance various needs and wants of our communities, while trying to achieve our mandated objective of wetland protection and management.



Summary

The proposed development does not conform with the CVCA's Policies because:

- The proposed development would result in development within 30 metres of a wetland greater than two hectares.
- The proposed new development is located within a wetland.
- The proposed development is a new access route within a wetland.
- The proposed development does not meet the definition of passive low-intensity use.

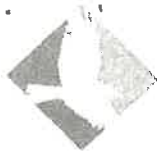
CVCA staff recommend that the application be **denied**, as it does not conform with the CVCA's Watershed Planning and Regulations policies and is likely to affect the control of flooding and interfere with the hydrological function of the wetland.



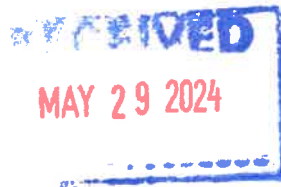
Table of Contents

Appendix A: Permit Application 085/24	Page 2
Appendix B: Revised Permit Application 085/24	Page 10
Appendix C: Cover Letter and Environmental Impact Study	Page 25
Appendix D: Qualifications for EIS	Page 67
Appendix E: CVCA Notice of Hearing	Page 72
Appendix F: CVCA Recommendation Letter for Denial	Page 75
Appendix G: CVCA Hearing Guidelines	Page 80
Appendix H: CVCA Site Visit Photos	Page 88
Appendix I: Correspondence	Page 99
Appendix J: CVCA Regulations Mapping	Page 127
Appendix K: Ontario Regulation 41/24	Page 129

Appendix A: Permit Application 085/24



Crowe Valley
Conservation



Date Received

085/24

May 29/24

PERMIT APPLICATION FORM

FOR A DEVELOPMENT, INTERFERENCE WITH WETLANDS AND ALTERATIONS TO SHORELINES AND WATERCOURSES PERMIT
(CONSERVATION AUTHORITIES ACT - ONTARIO REG. 159/06)

Contact Information (please print clearly)

Property Owner's Name(s):

John, Bowen, Rob Bowen, Gary Bowen

Mailing Address (Street, P.O. Box)

8 Bayswater Road

City

Postal Code

K8V 5P5

Telephone: Home

Work

Mobile

2264560644

Email

j.bowen83@yahoo.ca

Agent's Name(s):

**property owner's letter of authorization or signature to be attached*

N/A

Mailing Address (Street, P.O. Box)

City

Postal Code

Telephone: Home

Work

Mobile

Email

Is the Owner aware of this application?



Yes



No - Please explain: _____

Is a Planning Act application (minor variance, zoning by-law amendment) required for this development?



Yes



No

Location of Proposed Works (please ensure a map and driving directions are attached)

Lot

East Pt Lot 29

Concession

3

Municipality

Belmont Twp

Municipal Street Address

N/A FR 59

Assessment Roll Number

153101000 649300

Watercourse/Waterbody

unamed-

Existing Land Use (vacant, residential, etc.)

Vacant

Proposed Land Use

Vacant

This application must be accompanied by TWO COPIES of a detailed site plan and payment of a processing fee as determined by the Conservation Authority. The site plan MUST include the following information:

1. General location of property in relation to roads, etc.
2. Location and dimensions of all existing structures on property and a survey plan with lot dimensions.
3. Location of any waterway, open water, wetland, steep slope on or near the property and any drainage features (ditches/culverts).
4. Intended location and dimensions of fill, construction, or waterway alteration proposed.
5. Cross-section of proposal showing existing and final grade with elevations from the current water level of any nearby waterway, and elevations of the lowest structure opening if applicable.

Description of Works (please check all that apply)	
Construction of a Structure <input type="checkbox"/>	Interference with a Wetland <input checked="" type="checkbox"/>
Alter, Add to or Renovate a Structure <input type="checkbox"/>	Pond Construction, cleanout or repair <input type="checkbox"/>
Install a Septic System (please indicate type and volume of fill below) <input type="checkbox"/>	Watercourse Crossing (culvert, bridge) <input checked="" type="checkbox"/>
Place or Remove Fill Material (please indicate type and volume of fill below) <input checked="" type="checkbox"/>	Shoreline Protection (please indicate length of shoreline affected below) <input type="checkbox"/>
Type and Volume of Fill (m ³) 520	Length of Shoreline Affected (m)
Other	
What is the purpose of the work? Construct ATV trail across wetland in order to access the east and west half of lot 29	
Proposed Start Date: June 2024	Completion Date: November 2026

I/We the undersigned hereby certify to the best of my/our knowledge and belief that all of the above-noted, attached and/or supporting documentation and information is correct and true. I/we further solemnly declare that I/we have read and fully understand the contents of this application and specifically the terms and conditions on the following page, and the declaration written below.

By signing this application, consent is given to the Crowe Valley Conservation Authority, its employees and authorized representatives to access the property for the purposes of obtaining information and monitoring any approved works pursuant to Section 28(20) of the Conservation Authorities Act.

I, (please print name) John Bowson declare that the above information is correct to the best of my knowledge and I agree to abide by Ontario Regulation ~~15706~~ **41/24**

Signature: [Signature] Date: May 24, 2024
 NOTE: Signature or Written Authorization of Landowner is Mandatory. Landowner authorization form follows this page.

I am the: ☒ Owner ☐ Agent ☐ Contractor ☐ Other: _____

The information on this form is being collected, and will be used, for the purposes of administering a Regulation made pursuant to Section 28 of the Conservation Authorities Act, R.S.O. 1990 C27.

NOTE: Further information and studies may be required by the Crowe Valley Conservation Authority (CVCA) in order to process this file, the cost of which will be borne by the applicant or their agent. This information may include details related to wetlands, floodplains, hydraulics, slope stability or stream systems. Once completed, all studies become the property of the CVCA and the information may be used by the CVCA, its member municipalities and partners. In order for members of the public to view any studies, plans and reports related to your permit, a formal request under the **Municipal Freedom of Information Protection and Privacy Act**, RSO 1990, c.M.56, is required. Access is subject to statutory exemptions. The same is true should you wish to access any studies, plans and reports pertaining to other's permits. Insufficient information may delay the processing of your application. This application does not relieve the applicant of the obligation to secure any other necessary approvals. Fees are subject to change without notice.

Landowner Authorization

If this Application of Permit is to be submitted by a solicitor/ contractor/ agent on behalf of the owner(s), this Landowner Authorization must be completed and signed by the owner(s). If the owner is a corporation acting without agent or solicitor, the application must be signed by an officer of the corporation and the corporation's seal (if any) must be affixed.

NOTE TO OWNER(S)

Please note that the Crowe Valley Conservation Authority staff reserve the right to discuss any or all aspects of the permitting process with the property owner.

If the Application of Permit is to be prepared by a solicitor/ contractor/ agent, authorization should not be given until the Application of Permit and its attachments have been examined and approved by you the owner(s). All submissions are the responsibility of the owner(s).

I/ We _____

Print full name of owner

Hereby Authorize _____

Print full name of Solicitor/ Contractor/ Agent

To submit the enclosed Application of Permit to the Crowe Valley Conservation Authority and to provide any further information or material required by Authority Staff relevant to the Application of Permit for the purpose of obtaining a Permit to fill, construct or alter a watercourse in accordance with the requirements of the Ontario Regulations.

Signature of Owner(s) _____ Date _____

Signature of Solicitor/ Contractor/ Agent _____ Date _____

TERMS AND CONDITIONS

The Applicant, by acceptance and in consideration of the issuance of this Application of Permit, agrees to the following conditions:

1. The Owner and Applicant agrees:
 - a. to indemnify and save harmless, the CVCA and its officers, employees, or agents, from and against all damage, loss, costs, claims, demands, actions and proceedings, arising out of or resulting from any act or omissions of the Owner and Applicant or any of his/her agents, employees or contractors relating to any of the particulars, terms or conditions of this Application of Permit;
 - b. that this Application of Permit shall not release the Owner and Applicant from any legal liability or obligation and remains in force subject to all limitations, requirements and liabilities imposed by law;
 - c. that at all complaints arising from the proposed works authorized under this Application of Permit shall be reported immediately by the Owner and Applicant to the CVCA. The Owner and Applicant shall indicate any action which has taken place or is planned to be take, with regard to each complaint.
2. This Application of Permit shall not be assigned or assumed by any subsequent purchaser, transferee or grantee.
3. This Application of Permit does not absolve the Applicant of the responsibility of obtaining necessary permission from applicable federal, provincial or local agencies.
4. Should default be made by the Owner and Applicant in compliance with, or satisfaction of, the enumerated conditions and or submitted application, the CVCA may enter upon the property with respect to which conditional approval is granted and cause said conditions to be satisfied if necessary, the expense of which will be the sole responsibility of the Owner and Applicant.
5. The work shall be carried out as per the approved plans and specifications submitted in support of the application and as amended by the approval of this permit.
6. The Owner and Applicant agree to maintain all existing drainage patterns, and not to obstruct external drainage from other adjacent private or municipal lands.
7. The permit granted under this regulation is valid for TWO years from the date of issue and it is the responsibility of the Owner and Applicant to ensure that a valid permit is in effect at the time of works occurring.
8. The Owner and Applicant may appeal any or all of the stated conditions of the permit to the Board of the Conservation Authority.

PLEASE NOTE THAT ONLY THE FIRST THREE (3) PAGES OF THIS PACKAGE NEED TO BE RETURNED ALONG WITH SUPPORTING DOCUMENTATION. PLEASE DO NOT RETURN THE FOLLOWING PAGES WITH YOUR APPLICATION.



Legend

- Building as Symbol
- Building to Scale
- Airport
- Helipad / Hospital Helipad
- Seaplane Base
- Ferry Route
- Trail
- Bruce Trail
- Cowenbelt Route
- Rideau Trail
- Trans Canada Trail
- Voyageur Trail
- Waterfoot Trail
- Railway / Train Station
- Railway with Bridge
- Railway with Tunnel
- Road (Major - Minor)
- Winter Road
- Road with Bridge
- Road with Tunnel
- Primary, Range or 400 Series Highway
- Secondary Highway
- Tertiary Highway
- District, County, Regional or Municipal Road
- Toll Highway
- One Way Road
- Road with Permanent Blocked Passage
- Road with Address Name
- Hydro Line, Communication Line or Unknown Transmission Line
- Natural Gas Pipeline, Water Pipeline or Unknown Pipeline
- Spot Height
- Index Contour
- Contour
- Woods Area
- Wetland
- Waterbody
- Waterbody Elevation
- Watercourse
- Falls
- Rapids
- Rapids / Falls
- Rapids
- Rocks
- Lock Gate
- Dam / Hydro Wall
- Dam / Hydro Wall
- Provincial / State Boundary
- International Boundary
- Upper Tier / District
- Municipal Boundary
- Lower Tier / Single Tier
- Municipal Boundary
- Lot Line
- Indian Reserve
- Provincial Park
- National Park
- Conservation Reserve
- Military Land

0 1.3 km

Projection: Web Mercator

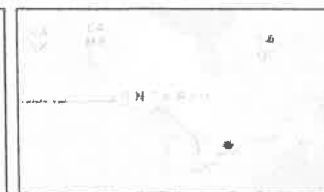


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Crossing Specifications- Bowen Application
Lot 29 Conc. 3 Belmont Twp.

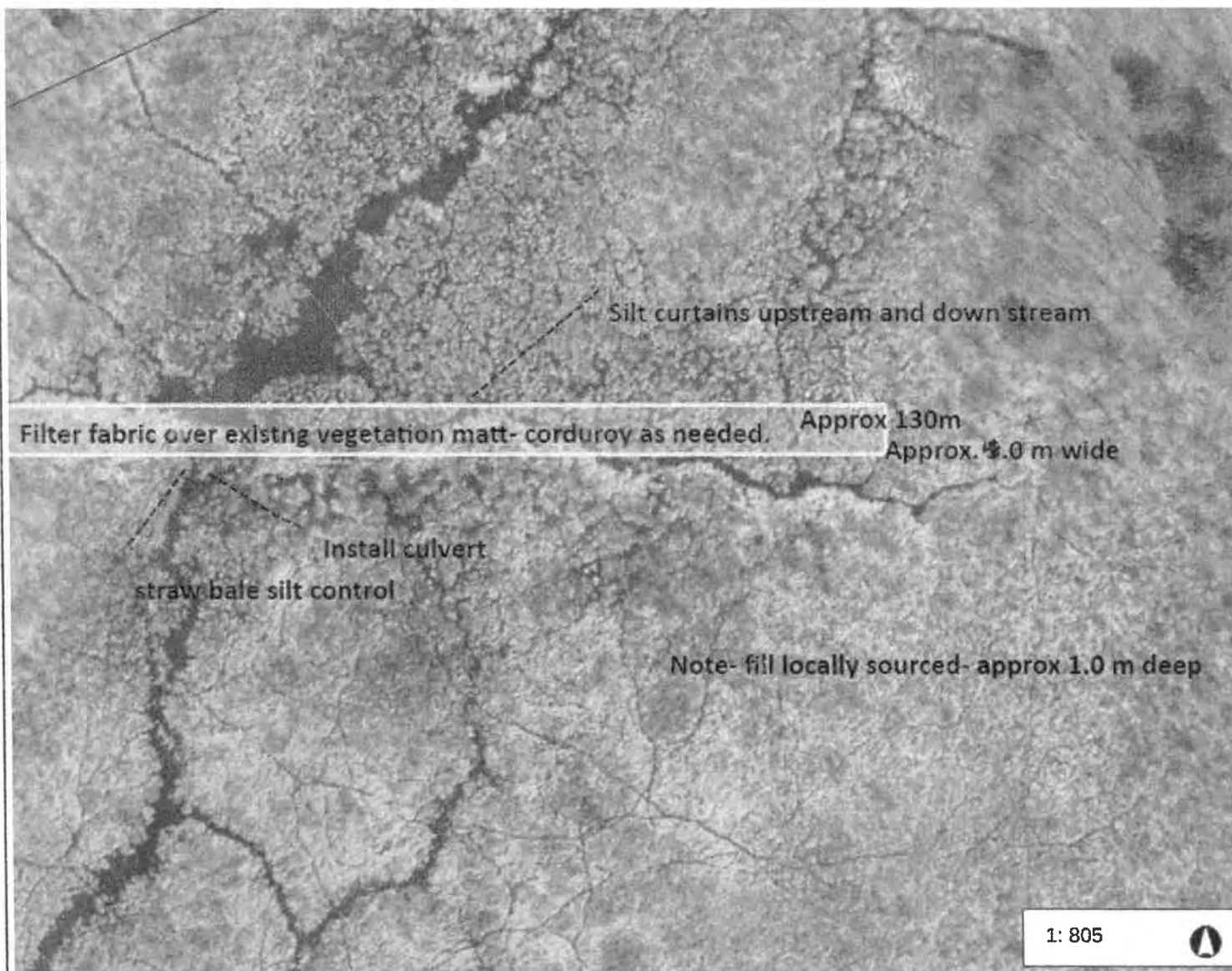
Timing- Crossing will be installed when the site is as dry as possible and maximum vegetation cover. Water levels can be manipulated through removing portions of the downstream beaver dam if necessary.

Retention of existing vegetation matt- crossing will be constructed on top of vegetation

Existing beaver dam- the dam will be incorporated into the crossing where it aligns.

Construction Methodology- Approx 130m x 4.0m x 1.0m

- Fill will be locally sourced from pits located a minimum of 30m from the edge of the wetland.
- Several types of fill will be piled and made available to use where appropriate.
- Prior to construction silt fencing will be placed upstream and downstream of the proposed work site.
- Prior to construction a straw bale sediment trap will be placed immediately downstream of the location the culvert will be installed
- Culvert will be at minimum 60 cm diameter and 5.0 m long.
- Rip rap will be placed on the upstream end of the culvert.
- A layer of stone will be placed first in the location of the culvert prior to installation so that the culvert is just slightly lower (10%) than the bottom of the existing creek
- A beaver grate will be placed on the upstream culvert intake immediately after installation.
- Filter fabric will be placed on top of existing vegetation on the first and last 10-15 meters of the crossing then sand/gravel fill added as required
- Prior to placing fill on the remainder of the crossing, full length trees (minus limbs) may be placed on top of the undisturbed vegetation to form corduroy.
- Filter fabric and/or limbs will be installed on top of the corduroy then fill to an approximate depth of 1.0 m
- Should it be necessary to use corduroy all exposed wood will be covered.
- Upon completion of the crossing the straw bale and silt fence will be retained for 3-4 weeks until vegetation cover on disturbed areas is reestablished.
- Native vegetation will quickly grow back on the site, seeding with non native pasture mixes etc. is not recommended.



Legend

Roads < 50,000

PRIV ; Private; PRIV

City Arterial

City Collector and Local

City Owned Unclassified

Provincial

County

Township

Water Access Only

Outside Roads < 50,000

Major Roads

Local Roads

Civic Address

☐ Parcel Fabric

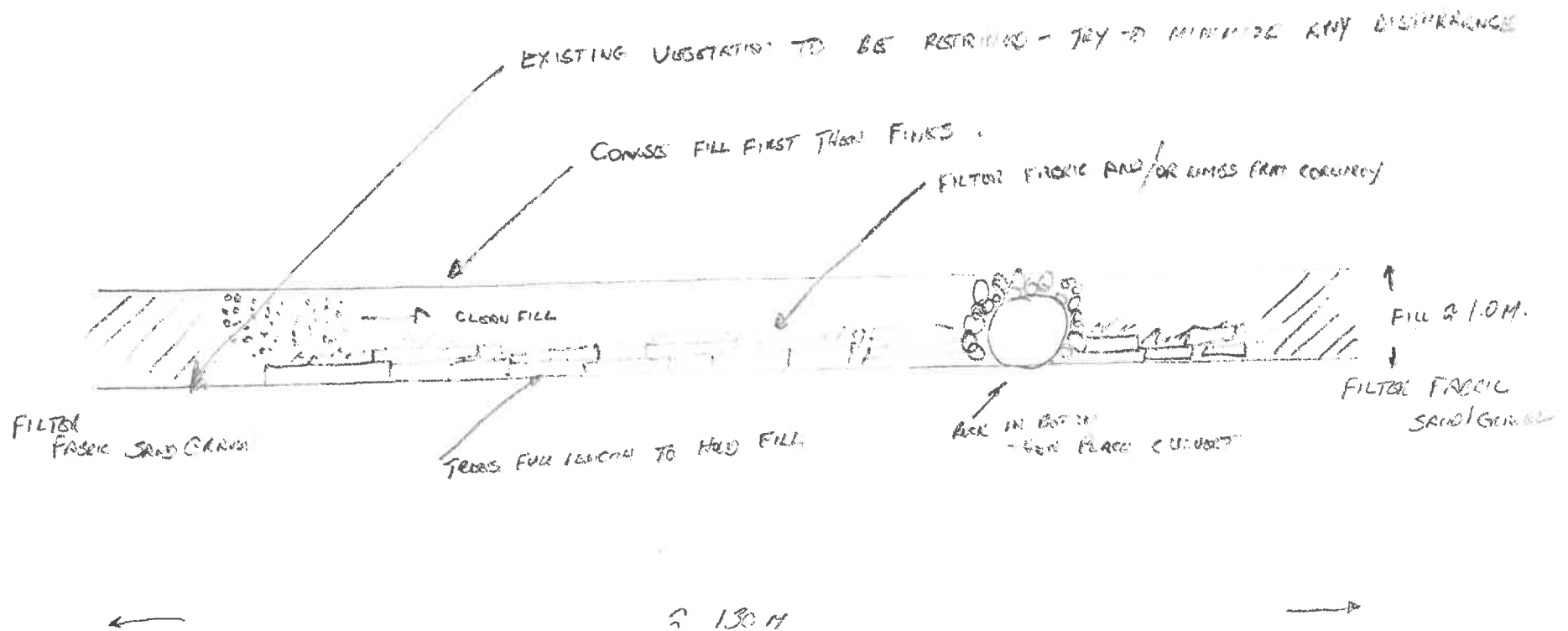
☐ Parcel First Nations - Canada

Notes

Bowen Crossing
East Part Lot 29 Conc.3 Belmont Twp.

40.9 0 20.44 40.9 Meters

CROSSING DRAWING - EMBANKMENT APPLICATION



Handwritten signature
21/2/20

Appendix B: Revised Permit Application 085/24

PERMIT APPLICATION FORM

PROHIBITED ACTIVITIES, EXEMPTIONS AND PERMITS (CONSERVATION AUTHORITIES ACT – ONTARIO REG. 41/24)

Please provide the completed Permit Application Form to info@crowevalley.com

Contact Information (please print clearly and legibly)		
Property Owner's Name(s):		
Mailing Address (Street, P.O. Box)	City	Postal Code
Telephone: Home	Work	Mobile
Email		
Agent's Name(s): <i>*property owner's letter of authorization or signature to be attached</i>		
Mailing Address (Street, P.O. Box)	City	Postal Code
Telephone: Home	Work	Mobile
Email		

Is the Owner aware of this application? Yes If No Please explain: _____

Have you contacted the municipality/township to determine if a Planning Act Application is required? Yes No

Is a Planning Act Application (minor variance or zoning by-law amendment) required for the proposed development? Yes No

Location of Proposed Works (please ensure a map and driving directions are attached)		
Lot	Concession	Municipality
Civic Address (i.e. 70 Hughes Lane)		
Assessment Roll Number (can be found on your tax bill)		Watercourse/Waterbody (i.e. Belmont Lake, Crowe River, creek)
Existing Land Use (vacant, residential, etc.)		Proposed Land Use

The processing fee will be determined by the Conservation Authority. The site plan and application MUST include the following:

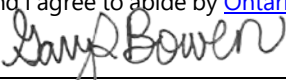
- General location of property in relation to roads, shoreline, natural features, etc.
- Location and dimensions of all existing structure(s) on property and a site plan with lot dimensions.**
- Location of any waterway, open water, wetland, steep slope on or near the property and any drainage features (ditches/culverts).
- Intended location and dimensions of fill, construction, or waterway alteration proposed.
- Cross-section of proposal showing existing and final grade with elevations from the current water level of any nearby waterway, and elevations of the lowest structure(s) opening if applicable.
- Current photographs of the property (shoreline, area of proposed development, etc.) with no snow on the ground.

Proposed Works (please complete all sections that apply)	
Section A, please refer to page 7: Construction of a new structure Add to an existing structure(s) Renovations resulting in a change in use of an existing structure(s) Alter an existing structure(s) New dock Replace existing dock	Section C, please refer to page 12: Watercourse Crossing (culvert)
	Section D, please refer to page 13: Shoreline Protection
Section B, please refer to page 11: Install Sewage System Place or Remove Fill Material	Section E: If proposing a bridge, please contact the CVCA office to determine permit application requirements Pond Construction, clean out or repair. Other: If you do not see your proposed active here, please contact the office for direction and information or see our website.
<p>Please provide a detailed description of the proposed works (If there is not sufficient space below, please provide the required information on a separate piece of paper and/or in the body of your email.)</p> <p>Example 1: Tear down existing one storey dwelling that is 10 metres from the shoreline of Crowe Lake. Build new two storey dwelling with covered deck and detached garage all being at least 25 metres from the shoreline of Crowe Lake.</p> <p>Example 2: Replace existing septic bed in same location as existing.</p> <p>Example : Complete 15 metres of shoreline protection using gabion stone.)</p>	

I/We the undersigned hereby certify to the best of my/our knowledge and belief that all of the above-noted, attached and/or supporting documentation and information is correct and true. I/we further solemnly declare that I/we have read and fully understand the contents of this application and specifically the terms and conditions on the following page, and the declaration written below.

By signing this application, consent is given to the Crowe Valley Conservation Authority, its employees and authorized representatives to access the property for the purposes of obtaining information and monitoring any approved works pursuant to Section 28(20) of the Conservation Authorities Act.

I, (please print name) _____ declare that the above information is correct to the best of my knowledge and I agree to abide by [Ontario Regulation 41/24](#).

Signature:  Date: _____

NOTE: Signature or Written Authorization of Landowner is Mandatory. Landowner authorization form follows this page.

I am the: ☐ Owner ☐ Agent ☐ Contractor ☐ Other: _____

The information on this form is being collected, and will be used, for the purposes of administering a Regulation made pursuant to Section 28 of the [Conservation Authorities Act, R.S.O. 1990 C27](#).

NOTE: Further information and studies may be required by the Crowe Valley Conservation Authority (CVCA) in order to process this file, the cost of which will be borne by the applicant or their agent. This information may include details related to wetlands, floodplains, hydraulics, slope stability or stream systems. Once completed, all studies become the joint property of the CVCA and the landowner and the information may be used by the CVCA, its member municipalities and partners. In order for members of the public to view any studies, plans and reports related to your permit, a formal request under the **Municipal Freedom of Information Protection and Privacy Act**, RSO 1990, c.M.56, is required. Access is subject to statutory exemptions. The same is true should you wish to access any studies, plans and reports pertaining to other's permits. Insufficient information may delay the processing of your application. This application does not relieve the applicant of the obligation to secure any other necessary approvals. Fees are subject to change without notice.

Landowner Authorization

If this Permit Application is to be submitted by a solicitor/ contractor/ agent on behalf of the owner(s), this Landowner Authorization must be completed and signed by the owner(s). If the owner is a corporation acting without agent or solicitor, the application must be signed by an officer of the corporation and the corporation's seal (if any) must be affixed.

NOTE TO OWNER(S)

Please note that the Crowe Valley Conservation Authority staff reserve the right to discuss any or all aspects of the permitting process with the property owner.

If the Permit Application is to be prepared by a solicitor/ contractor/ agent, authorization should not be given until the Permit Application and its attachments have been examined and approved by you the owner(s). All submissions are the responsibility of the owner(s).

I/ We _____

Print full name of owner

Hereby Authorize _____

Print full name of Solicitor/ Contractor/ Agent

To submit the enclosed Application of Permit to the Crowe Valley Conservation Authority and to provide any further information or material required by Authority Staff relevant to the Application of Permit for the purpose of obtaining a Permit to fill, construct or alter a watercourse in accordance with the requirements of Ontario Regulation 41/24.

Signature of Owner(s) _____ Date _____

Signature of Solicitor/ Contractor/ Agent _____ Date _____

TERMS AND CONDITIONS

The Applicant, by acceptance and in consideration of the issuance of this Permit Application agrees to the following conditions:

1. The Owner and Applicant agrees:
 - a. to indemnify and save harmless, the CVCA and its officers, employees, or agents, from and against all damage, loss, costs, claims, demands, actions and proceedings, arising out of or resulting from any act or omissions of the Owner and Applicant or any of his/her agents, employees or contractors relating to any of the particulars, terms or conditions of this Permit Application
 - b. that this Permit Application shall not release the Owner and Applicant from any legal liability or obligation and remains in force subject to all limitations, requirements and liabilities imposed by law;
2. This Permit Application shall not be assigned or assumed by any subsequent purchaser, transferee or grantee.
3. This Permit Application does not absolve the Applicant of the responsibility of obtaining necessary permission from applicable federal, provincial or local agencies.
4. Should default be made by the Owner and Applicant in compliance with, or satisfaction of, the enumerated conditions and or submitted application, the CVCA may enter upon the property with respect to which conditional approval is granted and cause said conditions to be satisfied if necessary, the expense of which will be the sole responsibility of the Owner and Applicant.
5. The work shall be carried out as per the approved plans and specifications submitted in support of the application and as amended by the approval of this permit.
6. The Owner and Applicant agree to maintain all existing drainage pattern(s), and not to obstruct external drainage from other adjacent private or municipal lands. Changes to existing drainage pattern(s) requires permission from the CVCA.
7. The permit granted under this regulation is valid for TWO years from the date of issue and it is the responsibility of the Owner and Applicant to ensure that a valid permit is in effect at the time of works occurring.
8. The Owner and Applicant may appeal any or all of the stated conditions of the permit to the Board of the Conservation Authority.

MINIMUM APPLICATION REQUIREMENTS

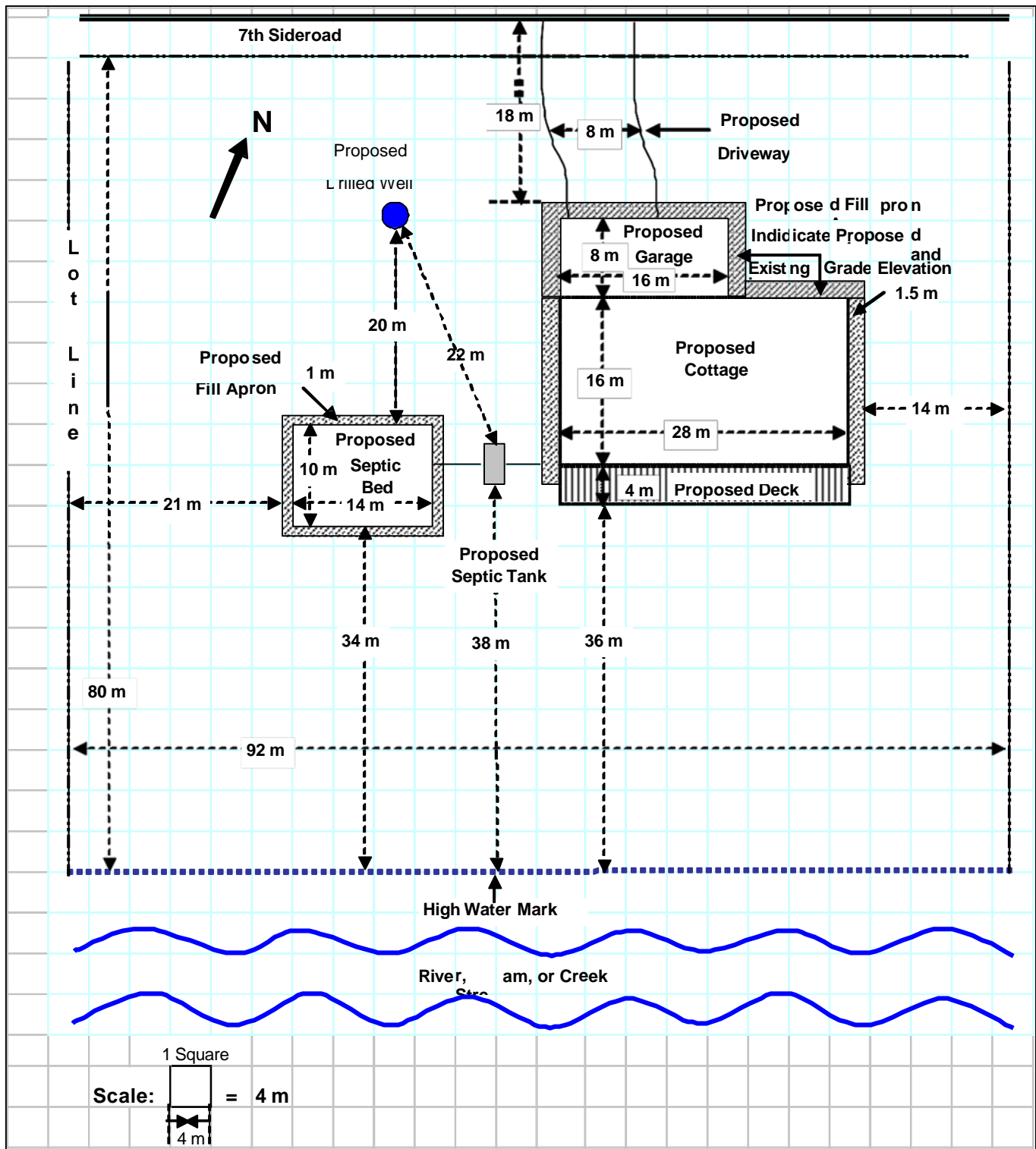
General Requirements

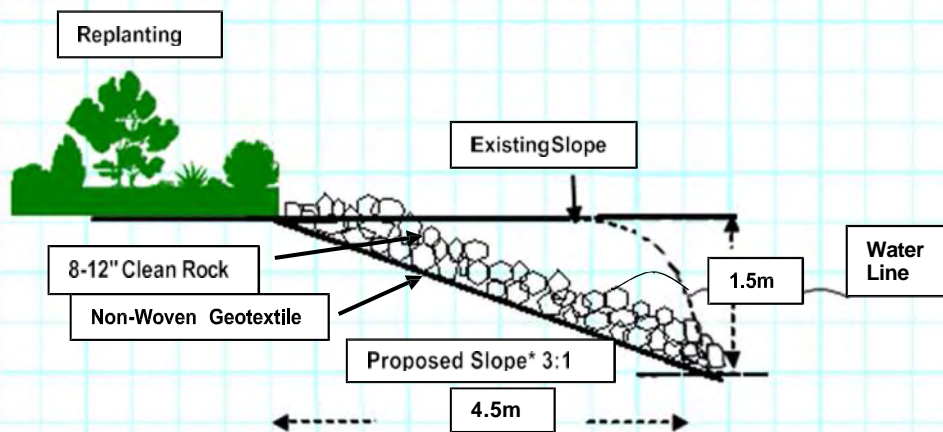
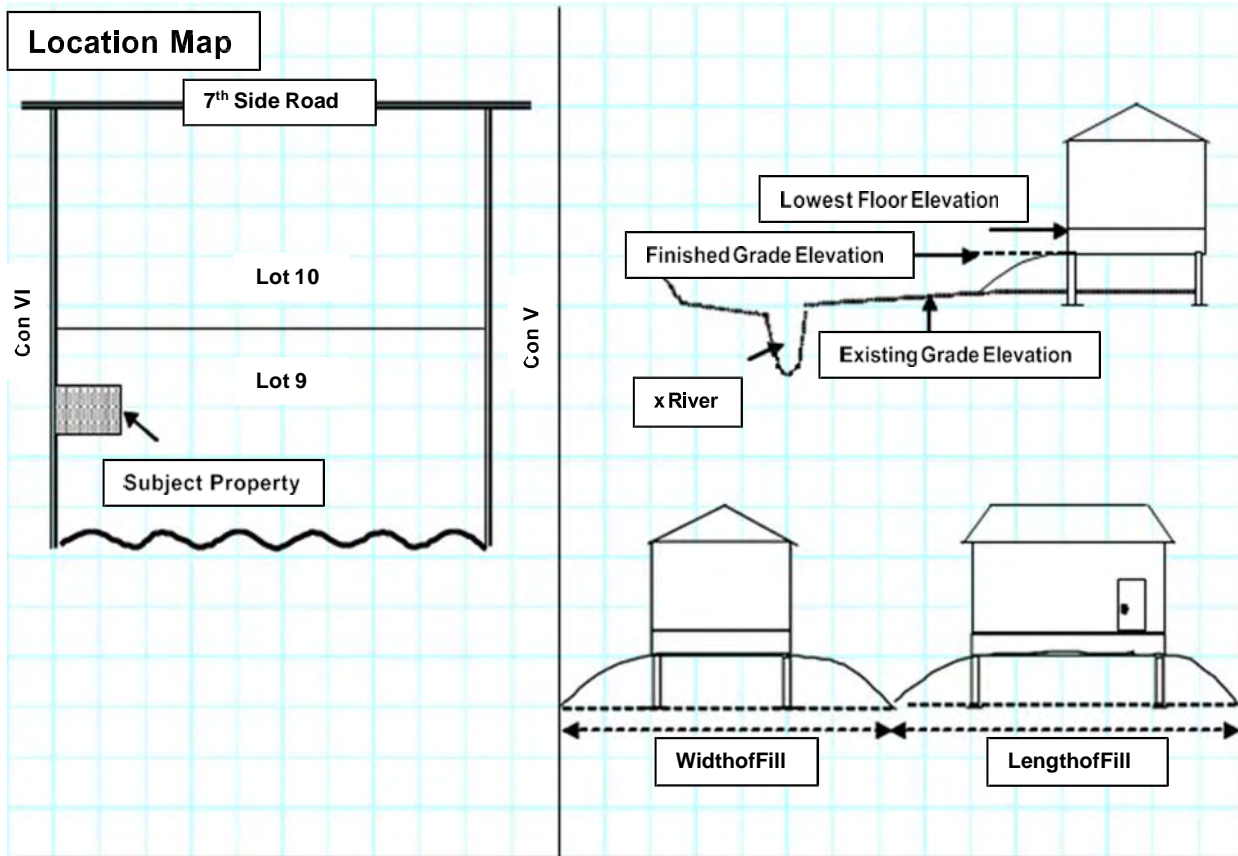
Your Checklist.

Please check off each of these items once they are completed.

	Completed application form signed and dated by landowner or authorized agent.
	Location map of subject property, and clear driving directions.
	Site Plan of property showing location, area and dimensions of existing structure(s), wells and septic systems to scale on the property.
	Location of any natural features on or adjacent to the property including: watercourses, shorelines, wetlands, ponds, drainage routes (including seasonal/annual spring flood areas), woodlots and valleys.
	Detailed design drawings of the proposed development (if available).
	Current photographs of the property (shoreline, area of proposed development, etc.) with no snow on the ground
	Do you own shoreline allowance? Yes No If no, please obtain a letter of permission from your municipality/township.
	<p>Detailed Site Plan (accurate & legible). Please provide measurements in metres or feet (not inches or millimeters). As an example measurement should read 37 feet 4 inches or 11.4 metres not 448 inches or 11,379 mm.</p> <p><i>If a site plan is not provided, your application will be considered incomplete and <u>WILL NOT BE PROCESSED.</u></i></p> <p>-If renovating or replacing or adding to an existing structure(s) please provide: (1) a site plan of the existing development, (2) a site plan of the proposed development and (3) a site plan of the proposed development overlaid on the existing development on three (3) separate site plans.</p> <p>Should your proposed development fall within a known or potential hazard (i.e. floodplain or erosion hazard)</p> <p>Additional information that may be required to process a permit application includes but is not limited to:</p> <ul style="list-style-type: none"> • Copy of a legal survey of the property; • Professionally prepared topographic survey, Lot Grading/Drainage Plan; • Flood Plain Analysis/Delineation Study, Hydrology/Hydraulic Analysis; • Environmental Impact Study, Planting or Vegetation Plan or Tree Retention Plan; • Hydrogeological Analysis, Fluvial Geomorphological Assessment, Meander Belt Allowance Assessment; • Stormwater Management Plan or Sediment and Erosion Control Plan; and/or, • Slope Stability/Erosion Study.

SAMPLE SITE PLAN





*Slopes must be 3:1 or gentler unless there is not enough space, the rise is less than 1m, or it is replacing a vertical wall.

Section A: Structure(s) (New or Altered).

In addition to the general requirements the following is required. If there is not sufficient space below, please provide the required information on a separate piece of paper and/or in the body of your email. If a portion is not applicable, please fill in as N/A. If it is determined that the proposed works are within the floodplain or erosion hazard additional information will be required, please see page 14.

Existing Dwelling (if applicable):

Size of main/ground level of existing dwelling. We will require both the square footage **and** footprint dimensions.
(i.e. square footage = 720 square feet, footprint = 36 foot by 20 foot):

Number of storey(s) of existing dwelling including second storey, basement (finished or unfinished), lofts, and crawlspace:

Size of additional storey(s)/loft of existing dwelling. We will require both the square footage **and** footprint dimensions

Size of basement (finished or unfinished) or crawlspace of existing dwelling. We will require both the square footage **and** footprint dimensions.

Distance from high water mark or natural feature(s), roadway, property lines, other structure(s) to existing dwelling:

Existing Deck/Porch/Veranda (if applicable):

Size of existing deck. We will require both the square footage **and** footprint dimensions.
(i.e. square footage = 144 square feet, footprint = 12 foot by 12 foot)_

Is the existing deck/porch/veranda covered or Uncovered

Distance from high water mark, natural feature(s), roadway, property lines, other structure(s) to existing deck/

porch/veranda: _____

Existing Garage (if applicable):

Size of existing garage We will require both the square footage **and** footprint dimensions.

(i.e. square footage = 240 square feet, footprint = 20 foot by 12 foot)

Is the existing garage attached Detached

Is the existing garage habitable? Yes No

Number of storey(s) of existing garage (if applicable): _____

Distance from high water mark, natural feature(s), roadway, property lines, other structure(s) to existing garage:

Proposed Dwelling (if applicable):

Size of proposed dwelling. We will require both the square footage **and** footprint dimensions.

(i.e. square footage = 1,200, footprint = 40 foot by 30 foot)

Number of storey(s) of proposed dwelling including second storey, basement, lofts, and crawlspace:

Size of additional storey(s)/loft of proposed dwelling. We will require both the square footage **and** footprint dimensions:

Size of basement or crawlspace of proposed dwelling. We will require both the square footage **and** footprint dimensions.

Distance from high water mark or natural feature(s), roadway, property lines, other structure(s) to proposed dwelling:

Proposed Deck/Porch/Veranda (if applicable):

Size of proposed deck. We will require both the square footage ***and*** footprint dimensions.
(i.e. square footage = 300 square feet, footprint = 15 foot by 20 foot).

Is the proposed deck/porch/veranda covered or Uncovered

Distance from high water mark, natural feature(s), roadway, property lines, other structure(s) to proposed deck/porch/veranda:

Proposed Garage (if applicable):

Size of proposed garage We will require both the square footage ***and*** footprint dimensions.
(i.e. square footage = 400 square feet, footprint = 20 foot by 20 foot)

Is the proposed garage Attached or Detached

Will the proposed garage be habitable? Yes No

Number of storey(s) of proposed garage, if more than one storey please provide details (i.e. loft, full second storey):

Distance from shoreline or natural feature(s), roadway, property lines, other structure(s) to proposed garage:

Section A(i): Accessory and Detached Structure(s) (i.e. boathouse(s), dock(s), shed(s), bunkie(s), etc.).
In addition to the general requirements the following is required. If there is not sufficient space below, please provide the required information on a separate piece of paper and/or in the body of your email. If a portion is not applicable, please fill in as N/A.

Existing Development (if applicable)

Size of existing development/structure(s). We will require both the square footage **and** footprint dimensions.
(i.e. square footage = 300 square feet, footprint = 20 foot by 15 foot)

Number of storey(s) of existing structure(s) (if applicable): _____

Distance from high water mark, natural feature(s), roadway, property lines, other structure(s):

Proposed Development (if applicable):

Size of proposed development/structure(s) We will require both the square footage **and** footprint dimensions.
(i.e. square footage = 500 square feet, footprint = 25 foot by 20 foot)

Distance from high water mark, natural feature(s), roadway, property lines, other structure(s):

Section B: Fill Placement, Grading or Sewage Systems (In addition to the general requirements the following is required)

Dimensions of the proposed fill area and the depth of fill required:

Description of proposed fill (e.g. crushed stone, sand, and/or mix):

Volume of fill (in cubic metres):

New Sewage System or Replacement of Existing

If replacing an existing septic system is this an emergency replacement? Yes No

Size of septic tank (if applicable): _____

If the sewage system is a replacement system is it the same size as the existing system? Yes No

If no, please explain the reason for the change in size: _____

Is the sewage system in a new location? Yes No

If yes, please explain: _____

Size (footprint dimensions) of septic bed: _____

If the sewage system is replacing a failed sewage system please explain (if known) why the existing sewage system failed:

Distance from high water mark, natural feature(s), edge of roadway, property lines, other structure(s) of the proposed

sewage system: _____

Section C: Culverts and Water Crossings. In addition to the general requirements the following is required, please check off once you have confirmed you have included the below. If the proposed works is a bridge, please contact the CVCA office for permit application requirements

	Statement and purpose of proposed works.
	Drawing showing in plain view and cross-sectional detail the existing and proposed watercourse or watercourse crossing including dimensions.
	Location, length, diameter, type and pipe invert for any proposed culvert(s).
	Details of staging construction (commencement, order of works, completion, etc.) if required.
	Drawing showing plan view and cross-sectional detail of existing and proposed shoreline including dimensions.
	Site restoration plan including planting details.
	Details of erosion and sediment control measures to be implemented prior to commencement of work and throughout construction period.

Please provide the following information:

Drawing showing in plain view and cross-sectional detail the existing and proposed watercourse or watercourse crossing detail including dimensions.

Is it replacing an existing culvert? Yes No

If yes, reason for culvert replacement: _____

Is the proposed culvert in the same location as the existing culvert? Yes No

If the proposed culvert is in different location, please provide details:

Length of existing culvert: _____ Diameter of existing culvert: _____

Length of proposed culvert: _____ Diameter of proposed culvert: _____

Type and pipe invert for any proposed culvert(s):

Same Number of Culvert(s)? Yes No

If no, please provide number of new culverts, sizes and reason for change:

Details of any proposed fill (i.e. rip rap) to be placed around culvert:

Length: _____

Width: _____

Volume: _____

Please provide a detailed de-watering plan: _____

Section D: Shoreline Works. In addition to the general requirements the following is required.

****Photographs of the shoreline are required (no snow), demonstrating that active erosion is taking place****

Have you considered a natural shoreline (i.e. planting of native plants, targeted placement of rocks, bioengineering)?

Yes No , if no please explain why: _____

Please explain, in detail, the erosion concern(s) you or your client are experiencing and why hardening of the shoreline is proposed: _____

Total length of shoreline: _____

Total length of shoreline with active erosion: _____

Total length of proposed shoreline works: _____

Height of existing shoreline embankment: _____

Height of proposed shoreline embankment: _____

Type of material (i.e. gabion stone, boulders): _____

Volume of material (cubic metres): _____

Is the material going on non-woven geotextile material? Yes No

Will the proposed works maintain the existing contours and height of the shoreline embankment? Yes No

If no, please explain: _____

Please indicate the proposed slope (check all that apply). Below we are requesting information on the proposed slope measured as run over rise, i.e. 3 Horizontal feet for every 1 foot of Vertical rise.

3H:1V or gentler 2H:1V 1H:1V Existing Retaining Wall Replacement

Replacement of existing retaining walls exceeding two tiers (greater than one metre in height) will require engineered drawings. New retaining walls are not permitted.

Please note: Bioengineering combines structural engineering principles with the use of vegetation for shoreline stabilization and erosion control. Hard material such as rocks, boulders, and armour stone do NOT qualify as bioengineering

Requirements for Development within the Floodplain and Erosion Hazard

New development will not be permitted within hazardous lands unless the proposed development is replacing an existing development or development that by its nature is within hazardous lands (i.e. docks by their nature are within the flood and erosion hazard). Development within hazardous lands that cannot be moved outside of the hazard will be subject to current CVCA Board Approved Policies (i.e. size limitations, floodproofing, additional engineering requirements, etc.).

Floodplain

If it has been determined that your proposed development is within the floodplain additional information and requirements will be requested as part of your permit application. Size restrictions will also be applied. As part of a complete application for development within a floodplain the CVCA will require the following:

- The applicant will have to demonstrate that there is no feasible alternative outside of the flood hazard. If there is room to move outside of the floodplain the existing footprint will not be honoured regardless of other approvals such as the Planning Act.
- An elevation survey, completed by an Ontario Land Surveyor, showing the following:
 - o Plot the 1:100-year floodplain in CGDV28 (please contact the CVCA office for the regulatory flood elevations)
 - Spot elevations (in 2m by 2m grid pattern.)
 - o Plot the 6 metre setback from the floodplain
 - o Elevations of the proposed build footprint taken in an "X" pattern (four corners and center)
 - o Elevations of the finished floor elevation of the main level, finished floor elevation of the crawlspace or basement and lowest opening into the proposed structure(s). Please see table below for floodproofing requirements.
 - o Elevations of the lowest level opening and finished floor elevation of existing structures (if applicable)

The minimum standards for floodproofing are based on the Regulatory Flood elevation. The following table depicts the minimum elevations for various features and structure(s):

Opening into structure(s)	Regulatory flood elevation +0.3m
Basement Floor	Regulatory flood elevation -1.0m
Fill places around buildings and structure(s)	Regulatory flood elevation
Electrical and Heating circuits	Regulatory flood elevation +0.3m
1st floor (main) on raised buildings and structure(s)	Regulatory flood elevation +0.3m
Access roads, parking areas	Regulatory flood elevation -0.3m
Pedestrian Access	Regulatory flood elevation -0.8m

Erosion Hazard

If it has been determined that your proposed development is within the erosion hazard additional information and requirements will be requested as part of your permit application. Size restrictions will also be applied. As part of a complete permit application for development within the erosion hazard the CVCA will require the following:

- The applicant will have to demonstrate that there is no feasible alternative outside of the erosion hazard (if there is room to move outside of the erosion hazard the existing footprint will not be honoured regardless of other approvals such i.e. the Planning Act).
- If there is no alternative outside of the erosion hazard, a geotechnical assessment, completed by a qualified professional, may be required to include the following:
 - o Toe erosion allowance
 - o Stable slope allowance
 - o Erosion access allowance. A minimum erosion access allowance of 6 metres is used from the top of stable slope (after accounting for toe erosion).
 - o A cross section showing the top of slope (after accounting for toe erosion)
 - o Completion of a slope inspection record and a slope stability rating chart (Tables 4.1 and 4.2 from the MNR Technical Guide – River & Stream Systems: Erosion Hazard Limit (2002). The results of these findings will determine the level of investigation required.
 - o Potential impacts of the proposed development on neighbouring properties
 - o Design bearing values
 - o Caisson/pile/foundation designs
 - o Potential for settlement
 - o Potential causes of instability
 - o Safe slopes of banks and excavation walls
 - o Soil stabilization methods and comparison of benefits
 - o Relation of hazards to proposed development
 - o Long-term stable slope crest position and inclination
 - o Factor of safety
 - o Failure surfaces
 - o Methods for soil erosion/sedimentation control
 - o Methods for minimizing impacts on vegetation and root systems

Appendix C: Cover Letter and Environmental Impact Study

Crowe Valley Conservation Authority
70 Hughes Lane P.O. Box 416
Marmora, Ontario K0K 2M0

January 11, 2025

Attn: Ms. Kelsey Davidson Regulations Officer

RE: Permit Application (085/24M)

Dear Ms. Davidson.

By way of introduction, I retired from the Toronto and Region Conservation Authority (TRCA) on December 31, 2019, after 20 years of service. Prior to joining the TRCA, I was employed at the Ontario Ministry of Environment for 12 years. .

I am now the technical lead and contact person for this permit application.

Early in 2024, my brothers John and Robert Bowen met with CVCA staff to discuss steps necessary to obtain a permit for this Atv crossing. They also attended a site visit with CVCA staff on May 22, 2024, to inspect the proposed location for the wetland crossing

Unfortunately, due to family and travel commitments I was unable to participate in these earlier meetings or the site visit.

On June 19, 2024, an email was received from CVCA indicating according to the CVCA policies staff were not allowed to approve projects that may interfere with a wetland. Only the Board of Directors could approve such work, and applicants would need to appear before a hearing. CVCA staff recommended additional studies be undertaken before a Board deputation.

Attached please find an Environmental Impact Study (EIS) which I authored to address the various technical studies that CVCA requested. The EIS report was prepared with input from Mr. Bruno Dobri P. Eng and Dr. William Booty (Retired Research Scientist Environment Canada).

The EIS has confirmed there will be no hydrologic impacts to adjacent wetlands and the sized culvert can safely convey flood flows. Construction and maintenance practises outlined in the EIS for the ATV crossing will ensure there will be minimal disturbances to adjacent wetlands. The replacement Atv crossing poses no risk for increased flooding or public safety.

Please advise, if there are any additional information you require from us.

I am available to meet with you in person to discuss this EIS study.

If the revised submission addresses the information CVCA requested, I would like to proceed with this wetland development application. If required, please proceed with scheduling a Board Hearing.

Thank you for all the technical assistance to date.



Gary Bowen
21 Ramsey Road
Port Hope, Ontario
L1A 4K9
905 786 2566

Environmental Impact Study
FOR AN
All-Terrain Vehicle Crossing of a Small Wetland
EAST HALF OF LOT 29 CONCESSION 3, BELMONT TOWNSHIP

PREPARED BY

Gary S. Bowen

*Retired Watershed Specialist and Great Lakes Advisor
Toronto and Region Conservation Authority*

WITH INPUT FROM

Mr. Bruno Dobri

*Dobri Engineering
Port Hope, Ontario*

Dr. William Booty

*Retired Research Scientist
Environment Canada*

JANUARY 7, 2025

SUMMARY

The investigation and analysis of relevant environmental data—combined with the required “professional” reviews of the proposed crossing location, the suitability of local fill materials, the crossing design, and construction methodologies—all indicate there are no constraints that would preclude building this ATV crossing. The requested engineering review has confirmed there will be no hydrologic impacts and the sized culvert can safely convey flood flows.

Operation and maintenance practises outlined for the ATV crossing will ensure there will be minimal disturbances to adjacent wetlands.

INTRODUCTION

A legal land survey of the northern property line between Lots 29 and 30 in 2022 determined the existing private All-Terrain Vehicle (ATV) trail was not on our property. This crossing has been in use for over 30 years without impacting the wetland. A new ATV crossing is required downstream on our property.

An ATV crossing of a wetland constructed with a trail bed built with locally sourced materials and a properly sized culvert should be preferred over multiple uncontrolled ATV crossings of a wetland, and as site water level conditions necessitate, draining the downstream wetland.

In early 2024, a meeting was held at Crowe Valley Conservation Authority (CVCA) office to discuss details pertaining to a permit application for the ATV crossing. Following this meeting, a site visit was arranged for May 22, 2024.

CVCA staff were met at the end of McMillian Road and guided on foot to the crossing site. CVCA staff took photographs and videos of the crossing site. Inspection of the crossing site involved walking most of the way across the wetland stopping at the creek. Information on the adjacent wetlands and hydrology of the drainage system were discussed on site along with the proposed construction techniques.

At the end of the site inspection, CVCA staff were notified that a preliminary application would be submitted for further consultation and for staff assistance in determining the fill fee.

On May 27, 2024, a preliminary submission was submitted to the CVCA for a permit application: (085/24M) Fire Road 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, Belmont Township, for a private ATV trail crossing of a small wetland.

On June 19, 2024, an email was received from CVCA staff denying the permit. CA staff said they could support, as an alternative, an elevated boardwalk. Staff also indicated the wetland development application could proceed by pursuing the permit via a Watershed Advisory Board Hearing. Staff recommended some additional studies that would be required for the hearing.

As responsible landowners, a revised an application for a crossing permit is being submitted to CVCA along with this Environment Impact Study (EIS).

The EIS was prepared by Gary Bowen, a retired watershed and Great Lakes scientist previously employed at the Toronto and Region Conservation Authority and the Ontario Ministry of The Environment.

Dr. William Booty, a retired Research Scientist (Environment Canada), and Mr. Bruno Dobri, P. Eng., were retained to address CVCA request that qualified professionals undertake the following reviews:

- Demonstrate that hydrological function of the wetland will not be impacted
- Assess the proposed culvert to determine adequate sizing
- Assess soil conditions where the trail is proposed and any proposed construction recommendations

STUDY AREA

The Site Map for the ATV crossing permit is depicted in **FIGURE 1**, prepared by Dobri Engineering. A more detailed map of the wetland crossing location prepared using the Peterborough County GIS Map 2.0 is presented in **FIGURE 2**. **FIGURE 3** is a recent image from Google Earth showing the location of the proposed new ATV crossing.

Active coordinates for Ontario Intensity Duration Frequency (IDF) DF Curve look up are:

44° 34' 45" N 77° 55' 44" W (44.579167, -77.845833)

The legal description of the property for this permit application is:

085/24M Fire Road 59 (ARN: 1531 010 006 49300)

Part Lot 29 (East) Concession 3, Belmont Township

This property has been in family ownership since 1929.

FIGURE 1
SITE MAP
DOBRI ENGINEERING

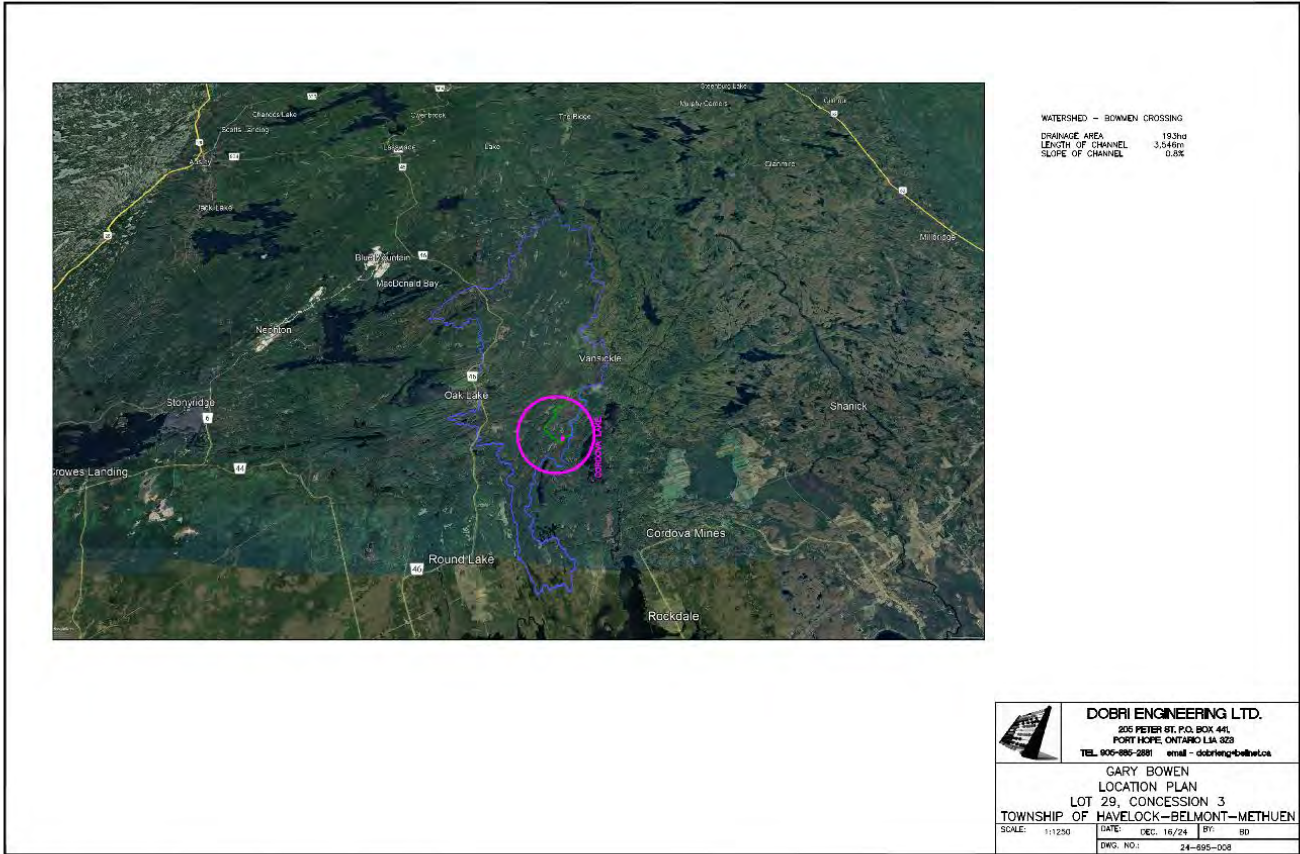


FIGURE 2
LOCATION OF CROSSING IN RED
PETERBOROUGH COUNTY GIS MAP 2.0



FIGURE 3

LOCATION OF PROPOSED ATV CROSSING
GOOGLE EARTH (2022)



CROSSING DESIGN AND CONSTRUCTION SPECIFICATIONS AS PER BOWEN PERMIT APPLICATION

Details on the crossing design were provided to CVCA at the initial meeting and in the preliminary application. This replacement wetland crossing will be 130 m long, 4 m wide, and built upon a bed of fill up to 1 m in depth.

Several reference documents for road construction and water crossing designs of swamps were reviewed for this design. These documents were prepared by various provincial agencies in consultation with utility operators, logging and mining officials, and local municipal road department superintendents. Additional guidelines for working around wetlands prepared by Ducks Unlimited were considered.

Further, our own knowledge and expertise were utilized. Gary and John Bowen have over 30 years of relevant professional experience. Gary was employed as a private sector consultant and scientist with the Ontario Ministry of Environment and the Toronto and Region Conservation Authority. John worked his entire career for Ontario Hydro as a Forestry Supervisor responsible for environmental oversight of transmission line right of ways across the province.

TABLE 1 CROSSING SPECIFICATIONS
BOWEN APPLICATION
LOT 29 CONC. 3 BELMONT TWP.

TIMING The crossing will be installed when the site is as dry as possible and has maximum vegetation cover. Water levels can be manipulated through removing portions of the downstream beaver dam if necessary.

RETENTION OF EXISTING VEGETATION MATT
The crossing will be constructed on top of vegetation.

EXISTING BEAVER DAM
The dam will be incorporated into the crossing where it aligns.

CONSTRUCTION METHODOLOGY

- Fill will be locally sourced from pits located a minimum of 30 m from the edge of the wetland.
- Several types of fill will be piled and made available to use where appropriate.
- Prior to construction, silt fencing will be placed upstream and downstream of the proposed work site.
- Prior to construction, a straw bale sediment trap will be placed immediately downstream of the location the culvert will be installed at.
- The culvert will be at minimum 60 cm in diameter and 5 m long.
- Rip rap will be placed on the upstream end of the culvert.
- A layer of stone will be placed first in the location of the culvert prior to installation so that the culvert is just slightly lower (10%) than the bottom of the existing creek.
- A beaver grate will be placed on the upstream culvert intake immediately after installation.
- Filter fabric will be placed on top of existing vegetation on the first and last 10–15 meters of the crossing, then sand/gravel fill will be added as required.
- Prior to placing fill on the remainder of the crossing, full-length trees (minus limbs) may be placed on top of the undisturbed vegetation to form corduroy.
- Filter fabric and/or limbs will be installed on top of the corduroy, then fill to an approximate depth of 1 m.
- Should it be necessary to use corduroy, all exposed wood will be covered.
- Upon completion of the crossing, the straw bale and silt fence will be retained for 3–4 weeks until vegetation cover on disturbed areas is re-established.
- Native vegetation will quickly grow back on the site; seeding with non-native pasture mixes etc. is not recommended.

FIGURE 4 is a schematic illustrating the crossing design. Since this ATV trail crossing does not require an engineering drawing, a sketch was prepared based upon a variety of recommended techniques, as documented in the reviewed crossing guidelines.

The location of the crossing site was inspected by Dr. William Booty. Dr. Booty has approved the site and the suitability of locally sourced materials for the trail and construction.

(APPENDIX 1)

Mr. Bruno Dobri, P. Eng., reviewed the crossing specifications and relevant local information as described in this EIS and submitted to the CVCA in our preliminary permit application. He reports no concerns in terms of hydrologic impacts and provided the requested engineered culvert sizing. Mr. Dobri has recommended that the crossing incorporate the existing beaver dam, where the construction alignment permits. (**APPENDIX 2**)

Equipment Operators hired to construct the crossing have been trained to work safely around water and are familiar with the requisite sediment and erosion controls. It is our recommendation that these equipment operators be allowed some flexibility to make minor modifications if unique site conditions are encountered.

John and Gary plan to be on site when the crossing is constructed to ensure the heavy equipment contractor adheres to all permit requirements.

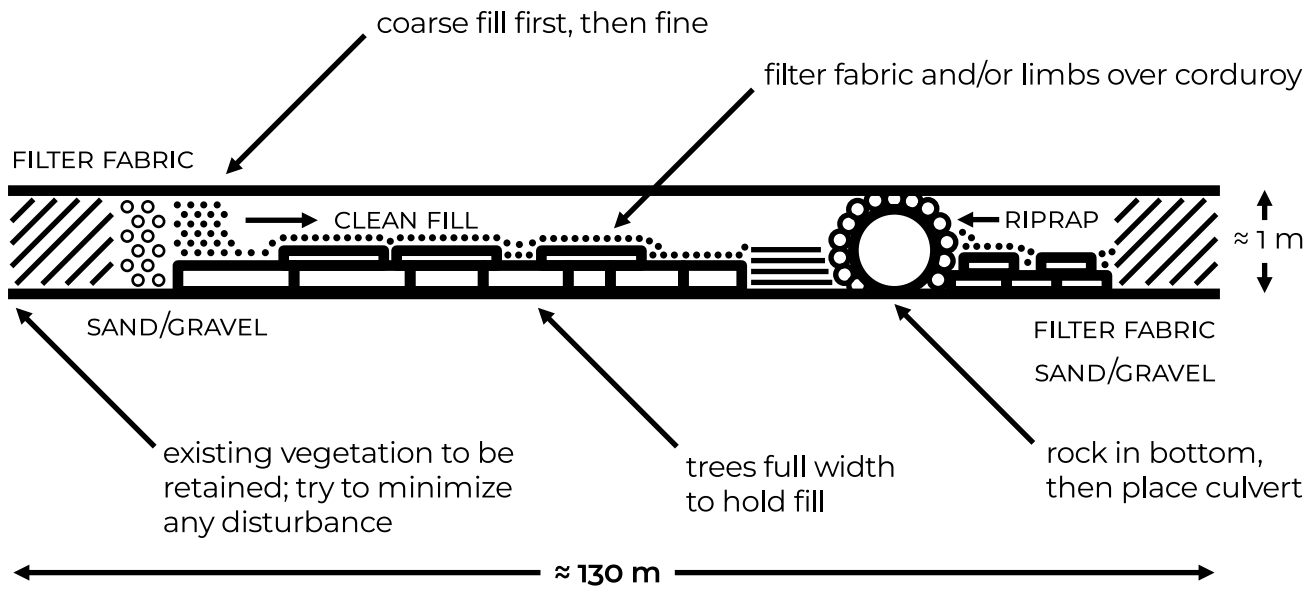
Post-construction site inspections will be carried out by ourselves. John and Gary have the professional qualifications to undertake this task, based upon our past work experience and environmental training. John was responsible for Ontario Hydro's right of way erosion controls. While employed at Ontario Ministry of Environment, Gary Bowen was involved in the development of the first stormwater water quality guideline and early versions of provincial sediment and erosion control guidelines for urban development.

Long-term oversight of the ATV crossing site will be undertaken by Robert Bowen; retired from Ontario Power Generation, he was responsible for operating hydroelectric power stations across the province. His duties as an Operating Supervisor included regulating water levels at these dam sites. Robert is a licensed fur trapper and when necessary, will control local beaver populations and/or remove sections of the downstream beaver dam to lower water levels following excessive runoff conditions.

FIGURE 4

CROSSING DIAGRAM

BASED ON SKETCH PREPARED BY JOHN BOWEN ON JULY 21, 2024



DESCRIPTION OF WETLANDS IN PROXIMITY OF THE ATV CROSSING

There are five wetlands near the crossing site. These wetlands are illustrated in **FIGURE 5**, which also includes, in tabular format, relevant information for each wetland. The crossing site is in wetland #3 as indicated on the drawing. All five wetlands are unevaluated. Neither wetland #3 nor the other four interconnected wetlands are identified as being Provincially Significant, a bog, or a fen.

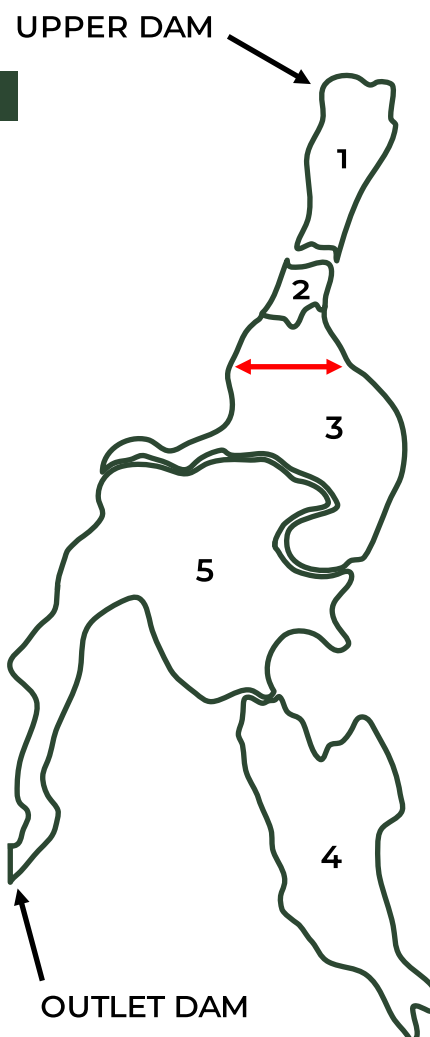
The five wetlands depicted in **FIGURE 5** are interconnected due to local topographic features and by water level control through beaver dams (at the outlet and upstream of the crossing site). The total surface area for the five wetlands is 24.1 ha. Wetland #3 (OGFID #70967387) has an area of 5.11 ha, which is about 24% of the (five) total wetlands.

FIGURE 5

WETLANDS IN PROXIMITY OF THE PROPOSED CROSSING

PROPOSED CROSSING IN RED

WETLAND	OGFID	AREA (m ²)	% OF AREA
1	70967332	16,807.3	7.9
2	70967376	4,431.9	2.1
3	70967387	51,164.5	23.9
4	70967473	51,929.8	24.3
5	70977415	89,748.8	41.9
TOTAL		214,082.3	



PHOTOGRAPH 1 is a drone picture of wetland #5, showing a viewpoint downstream from the crossing site. The outflow channel from wetland #3 is apparent. This photograph was taken in 2022 (a drought year).

PHOTOGRAPHS 2 and 3, both taken in 2024, illustrate the creek channel at the ATV crossing site (a view looking upstream from the crossing site).

PHOTOGRAPH 4 illustrates the local wetland vegetation community.

PHOTOGRAPH 5, taken from the top of the crossing site beaver dam, looks over wetland #5 towards the embayment (wetland #4) off to the southeast.

PHOTOGRAPH 1

DRONE PHOTO, WETLAND #5
2022



PHOTOGRAPH 2
CREEK AT PROPOSED CROSSING
SPRING 2024



PHOTOGRAPH 3
CREEK CHANNEL
SUMMER 2024



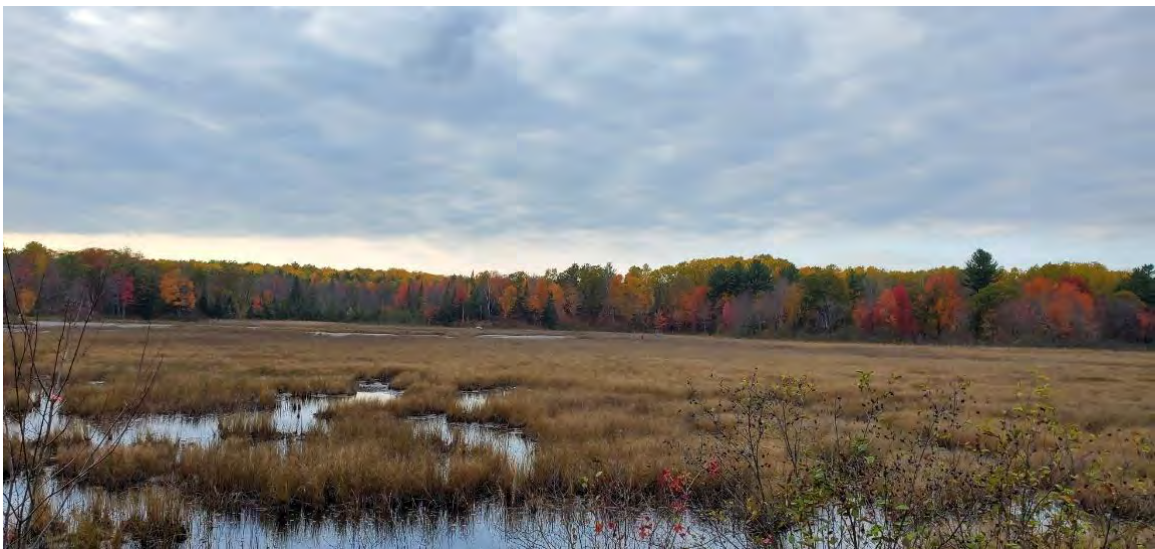
PHOTOGRAPH 4

VEGETATION AT PROPOSED CROSSING SITE



PHOTOGRAPH 5

TOP OF CROSSING BEAVER DAM LOOKING DOWNSTREAM
SEPTEMBER 2024



TOPOGRAPHIC FEATURES

Local topographic relief for the study area can be downloaded as high-resolution depictions of terrain elevations via the Canada Maps App (Google Play). This mapping app uses digital elevation data layers provided by Natural Resources Canada's Canadian Elevation Model which is based on airborne LIDAR. For this Digital Terrain Model (DTM) data sets, derived mapping for the crossing site include slope, aspect, shaded relief, colour relief and colour shaded relief.

The High-Resolution Digital Terrain Model illustrated in **FIGURE 6** is so detailed that all the beaver dams, creek channels, and emergent vegetation margin lines are depicted. This image provides an excellent perspective of the terrain features at the crossing site. It illustrates that wetland vegetation and glacial and lacustrine deposited sediments afford a good base for construction.

Detailed elevation profiles at the crossing site suggest a minimal number of trees and fill will be deposited in the wetland to secure a hard road base for the ATV trail. Additional DTM layers were obtained for the crossing site from the Peterborough County GIS platform and overlain with 2 m contours to assist Mr. Dobri in evaluating water level responses to the ATV trail bed profile (**FIGURE 7**).

Colour slope perspective images showcase the terrain features around our property (**FIGURE 8**) and afford a 3D perspective of local relief, with blue-black colours for the lowest elevations (deeper water areas in the wetlands). Yellow or pink colours present steep slopes aligned with rock ridges in the higher elevations. Of note are the abundance of depressions (wetlands) in this digital image.

FIGURE 6

DIGITAL TERRAIN MODEL: WETLANDS ADJACENT TO PROPOSED CROSSING
PROPOSED CROSSING IN RED

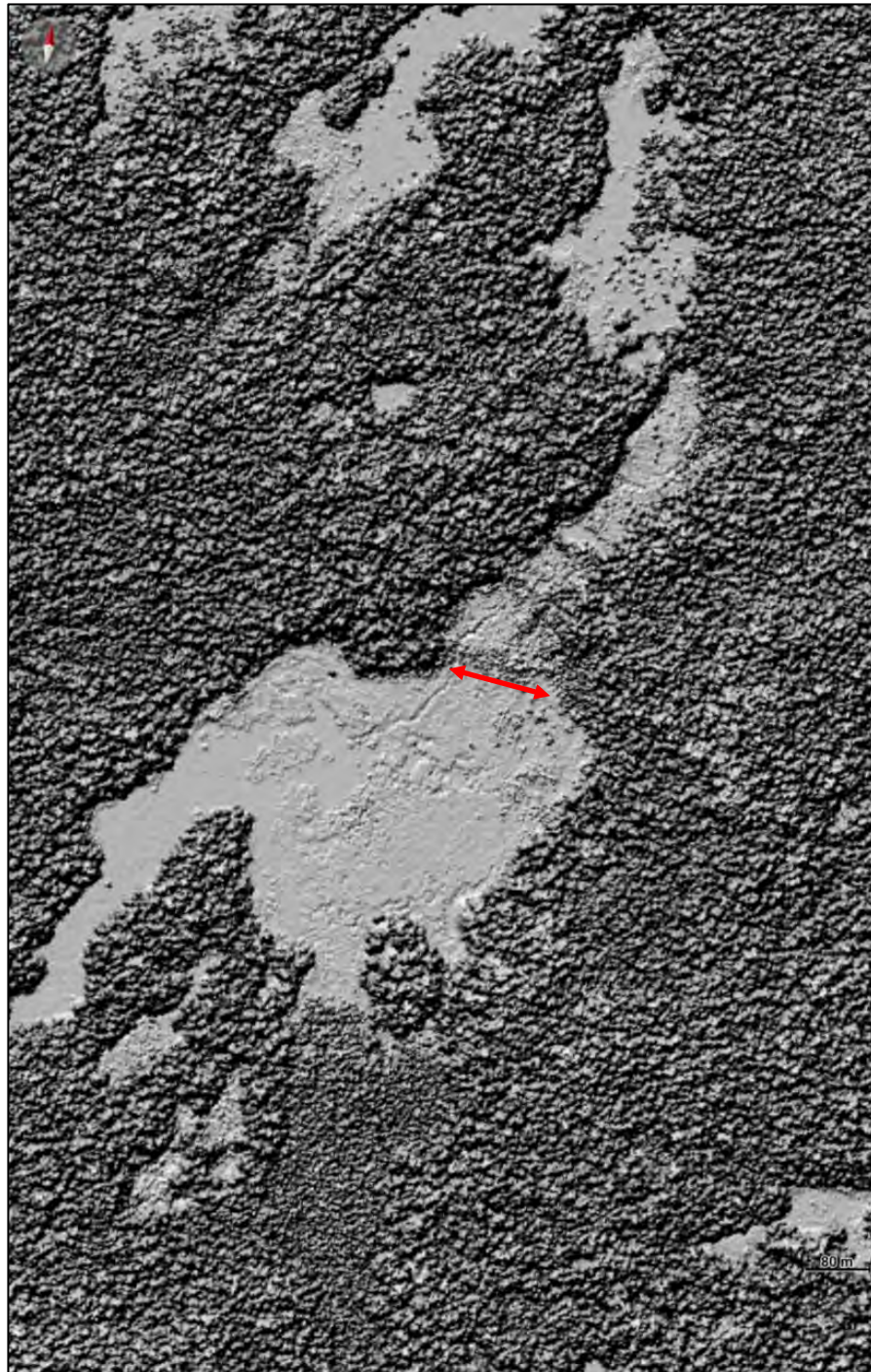


FIGURE 7

PETERBOROUGH COUNTY GIS DIGITAL TERRAIN MODEL, 2 M CONTOURS
PROPOSED CROSSING IN RED

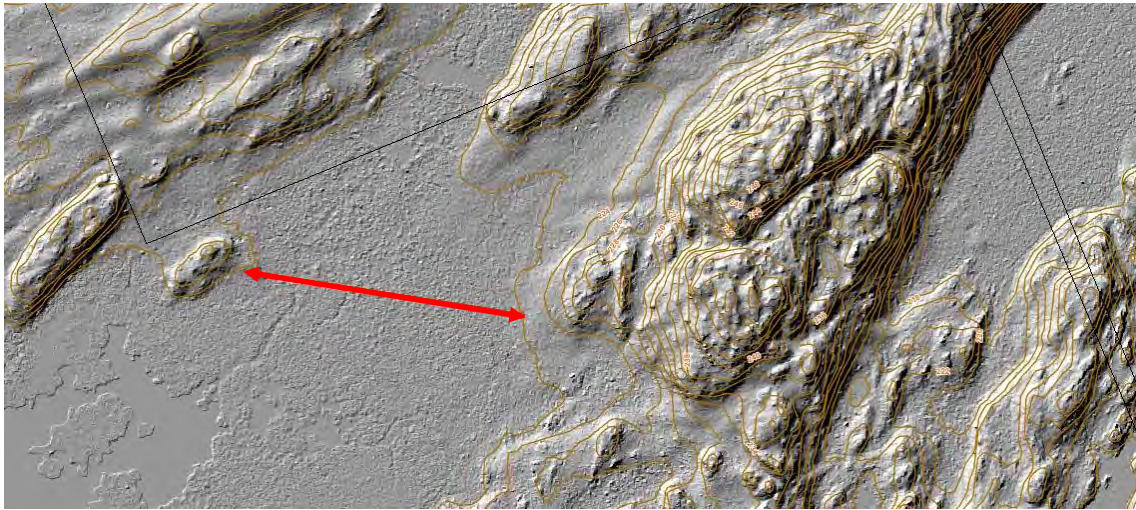
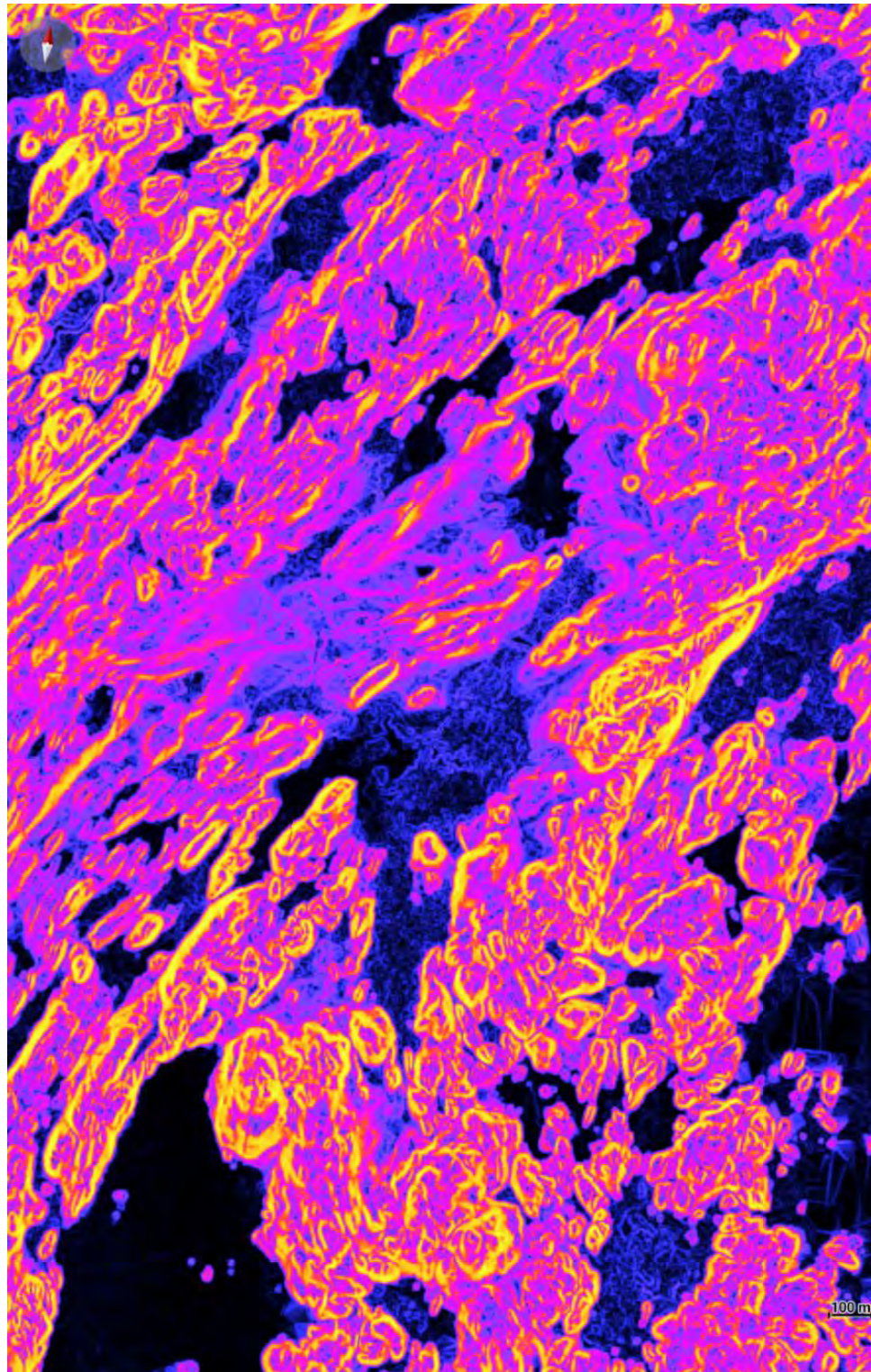


FIGURE 7

COLOUR SLOPE MAP SHOWCASING TERRAIN FEATURES

BOWEN PROPERTY



LOCAL ROLE OF BEAVER DAMS

Inflows to wetland #1 come from a large beaver pond upstream which overtops a beaver dam 2.7 m above the elevation of wetland #1. This steep elevation drop prevents water backing further upstream. Overall water level controls for the five wetlands are attributed to a 1.2 m beaver dam at the outlet of wetland #5. **PHOTOGRAPHS 6** and **7** illustrate conditions at the upper and lower dam sites in the early fall of 2024.

In previous years, the beavers have built a very substantive dam at the outlet, impounding wetland #5 and raising water levels in the other four wetlands. **PHOTOGRAPH 8**, taken in the 1970s, shows much higher water levels in this wetland. Row boats were required to navigate the wetland while trapping and hunting. At other times, during extreme drought conditions and in response to beaver population shifts, considerably less water is stored in the five wetlands.

PHOTOGRAPH 6

BEAVER DAM ABOVE WETLAND #1



PHOTOGRAPH 7

BEAVER DAM AT OUTLET OF WETLAND #5



PHOTOGRAPH 8

WETLAND #5 WITH PROPOSED CROSSING IN BACKGROUND
1970S; HIGH WATER YEARS



LOCAL FLORA AND FAUNA COMMUNITIES ASSOCIATED WITH THE CROSSING WETLAND

Following changes to the CA regulations in 2024, permit applicants are no longer required to undertake ecological studies of wetlands. From our professional knowledge and long-term observations, it can be stated the vegetation at the crossing site are representative of the wetland vegetation communities in Belmont Township. Fauna communities in the five are deemed to be healthy and representative for local habitat conditions. Local flora and fauna communities are more at risk due to climate change than from any disturbance associated with this ATV trail crossing.

WATERSHED CONTEXT

The proposed ATV crossing is in an unnamed tributary of the Otter Creek watershed. Drainage areas upstream of the crossing site, at the outlet of wetland #5, and for the entire Otter Creek were delineated using the Ontario GeoHub watershed tool. Maps showing the boundaries of each drainage were overlain on recent Google Earth Images as illustrated in **FIGURES 8, 9, and 10**. The GeoHub watershed tool kit provides key “water catchment” statistics presented in **TABLE 1**. These water resource related metrics were used by Mr. Dobri to assess hydrologic impacts and size the culvert.

The ATV crossing has a footprint 520 m² or 0.052 ha, which represents 0.027% of the drainage area above the crossing and 0.017% of the drainage area for all five of the local wetlands. This small footprint can not be deemed to present a significant shift in imperiousness or water storage based upon past experiences modelling several southern Ontario watersheds using the continuous Soil Watershed Assessment Tool (SWAT) model. Small instream structures with profiles akin to local beaver dams would have minor influences at a watershed scale. It should be noted offsetting receiving water features immediately downstream, in wetland #5 which has a large surface area and lots of depressional storage. The drainage area for watershed #5 is about 1.5 times larger than the crossing catchment (**TABLE 2**).

TABLE 2

WATERSHED METRICS FOR STUDY AREA WATERSHEDS ASSOCIATED WITH PROPOSED ATV CROSSING

	CROSSING	OUTLET FIVE WETLANDS	OTTER CREEK
Drainage area (km ²)	1.959	3.013	72.853
Shape factor	6.841	6.542	11.294
Length of main channel (km)	3.661	4.44	28.684
Maximum channel elevation (m)	248.55	248.55	298.71
Minimum channel elevation (m)	219.91	219.45	194.07
Slope of main channel (m/km)	7.82	6.55	3.65
Slope of main channel (%)	0.782	0.655	0.365
Area, lakes and wetlands (km ²)	0.418	0.634	17.45
Area, lakes (km ²)	0.296	0.421	4.841
Area, wetlands (km ²)	0.122	0.212	12.609

FIGURE 9

CATCHMENT WATERSHED ABOVE PROPOSED ATV CROSSING



FIGURE 10

WATERSHED CATCHMENTS, OUTLET OF WETLAND #5

INCLUDES CATCHMENT ABOVE PROPOSED CROSSING IN GREEN

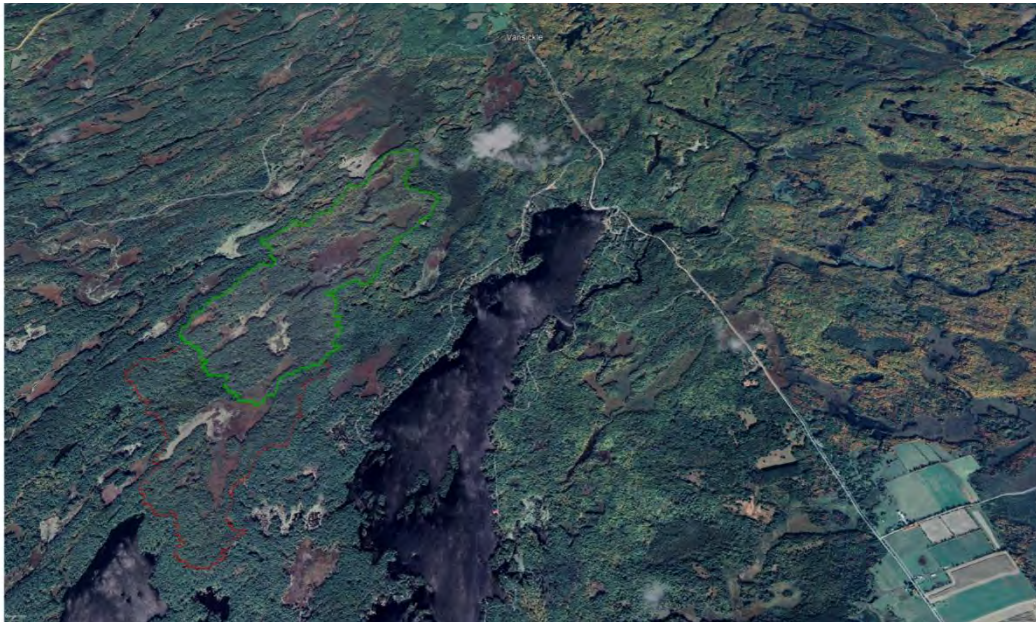


FIGURE 11
OTTER CREEK WATERSHED



RESPONSE TO CVCA RECOMMENDATION TO BUILD A BOARDWALK

The CVCA in their June 19, 2024, email indicate they could approve the construction of an elevated boardwalk across the wetland as a CA regulated, policy-compliant alternative to the proposed ATV trail bed. The utility of a boardwalk was investigated, and it was determined that this would not be acceptable on several grounds.

RATIONALE FOR REJECTING BOARDWALK

- A wooden boardwalk with these dimensions may require a building permit from the Township of Havelock Belmont Methuen HBM. It is anticipated an engineered, stamped design would be required (at considerable expense) to obtain a building permit.
- Cedar building materials for building a boardwalk with sufficient width to safely transport a side-by-side ATV would require four tandem truckloads of cedar logs.
- Four truckloads of logs would require timber harvesting of all the wetlands on our 350 ha property.
- The use of skidders to drag cedar tress out of the swamps and from riparian areas would impact far more wetland features than the footprint of the crossing (520 m²).
- The wooden board walk structure would have to be evaluated on cement peers as the local beavers would chew the wooden posts.
- Heavy equipment and instream work would be required to build this structure, otherwise the labour cost would be prohibitive.
- Large wooden boardwalks tend to be built along higher use public recreational trails with public or NGO funding.
- To our knowledge, wooden boardwalks have not been required along the ATV and snowmobile associations' trails within the CVCA.

APPENDIX 1

MEMO PREPARED BY DR. WILLIAM BOOTY, RETIRED RESEARCH SCIENTIST

1. There are a number of mounds of glacial till near the proposed crossing that can be used as a source of fill for the crossing. They consist of well-sorted, locally derived coarse sand and gravel (Precambrian metasediments). I personally visited the site with Gary Bowen in July 2024 to inspect the site of the crossing and to select the best sources of local bed materials, which are all outside of the 30-metre buffer zone of the wetland.
2. This material would provide transverse high transmissivity of water through the crossing bed and therefore would prevent significant issues to the watershed flows and locally to the wetlands along with a suitably sized culvert.
3. Any materials that might be eroded from the crossing bed would have minimal downstream implications to the wetlands.
4. A crossing of this size should have a negligible effect from a watershed perspective or locally to the downstream wetlands.

Dr. William G. Booty

2134 Caistor Centre Rd.
Caistor Centre, Ontario
L0R 1E0

(905) 957-1439
Bill.Booty@hotmail.ca

EDUCATION

1983 McMaster University, Hamilton
 Doctor of Philosophy in Geology

1977 McMaster University, Hamilton
 Master of Science in Geology

1975 University of Waterloo
 Hons. Bachelor of Science Earth Sciences

EMPLOYMENT HISTORY

2014–2016 **Senior Water Quality Modeler**
 Baird and Associates

2009–2014 **Section Head, Integrated Modelling Section**
 Watershed Hydrology and Ecology Research Division
 Water Science and Technology Directorate
 Environment Canada

1988–2009 **Research Scientist**
 National Water Research Institute
 Environment Canada

1983–1988 **Research Assistant Professor**
 Dept. of Civil and Environmental Engineering
 Clarkson University
 Potsdam, NY, USA

PROFESSIONAL EXPERIENCE

Dr. Booty led a team of scientists at Environment Canada for 25 years in the development of a wide range of watershed and lake models within a decision support system framework, with specific focus on water quality issues. These range from examining the impacts of pulp and paper, mining, oil and gas, toxic chemicals, municipal, and agricultural effluents, as well as atmospheric deposition and climate change impacts on stream and lake water quality across Canada and around the world.

APPENDIX 2

MEMO PREPARED BY MR. BRUNO DOBRI, P. ENG.

DATED DECEMBER 16, 2024

WETLAND CROSSING REPLACEMENT ATV CROSSING LOT 29, CONCESSION 3, BELMONT TOWNSHIP

Mr. Gary Bowen:

You provided me with a substantial amount of information on your property and adjacent land. The information included photos and available mapping of the area and a detailed description of the work you intend to perform with a sketch of the plan. In summary, you are using an existing ATV trail through the wetland to access your property. The existing trail includes an ATV crossing over your neighbour's property. You propose to construct a new crossing on your property (downstream of the existing crossing) and stop using the existing trail crossing.

You made an application to the Crowe Valley Conservation Authority (CVCA). Your application included the supporting documents that you provided to me. The information included your intended construction approach and an elevation sketch of the proposed crossing (both attached). The 600 mm CSP would have a minimum 600 mm (2') of cover. The crossing across the wetland would be approximately 130 m long. CVCA denied the application and requested sizing for the culvert and confirmation that the hydrological function of the wetland will not be impacted.

SITE SUMMARY

Upstream area	193 ha
Travel distance L	3,546 m
Travel slope S	0.80%
Runoff coefficient C	0.05 (wetlands/lakes)

CALCULATE THE TIME OF CONCENTRATION

$$T_c = 3.26(1.1-C) \frac{L^{0.5}}{S^{1/2}}$$
$$= 219.4 \text{ minutes}$$

MTO IDF DATA

Where I (mm/hr) = $A \times \left(\frac{t}{60}\right)^B$

RETURN PERIOD	REGRESSION CONSTANTS	
	A	B
2-year	21.4	-0.699
5-year	28.3	-0.699
10-year	32.9	-0.699
25-year	38.7	-0.699
50-year	43	-0.699
100-year	47.2	-0.699

CALCULATE THE PEAK FLOW AT THE PROPOSED CROSSING FOR VARIOUS STORM EVENTS

t (min)=	219.4	EVENT	2 YR	5 YR	10 YR	25 YR	50-YR	100-YR
C =	0.05	I (mm/hr)	8.65	11.43	13.29	15.64	17.37	19.07
A =	193 ha	Q (cm)	0.234	0.309	0.359	0.422	0.469	0.515

The selected design flow through the culvert is contingent on the intended use of the crossing. For example, a culvert under a driveway may only require conveyance of the peak flow during the five-year storm event, whereas a culvert under a roadway may require conveyance of the peak flow during the 25-year storm event. For the ATV crossing, a culvert conveying the peak flow during the five-year storm even would be sufficient, since the use is limited.

The estimated peak flow through the proposed culvert is 0.515 cm during the 100-year storm event. Install a 600 mm diameter CSP culvert at the proposed ATV trail crossing location. Using the MTO Design Chart 2.32: Inlet Control: Circular CSP and SPCSP, with 600 mm earth cover over the culvert, the flow through the culvert is 0.6 cm. The culvert will convey the calculated peak flow during the 100-year storm event, which exceeds normal design practice.

The proposed crossing will create a berm with the top elevation at approximately 222 m (masl) and a bottom elevation of approximately 220.5 m. The berm will be a minimum 1.2 m high and have a maximum top width of 4 m. The above is illustrated in the **ATTACHMENTS**.

Based on my analysis, I am of the opinion that relocating the existing ATV trail further south through the wetland and on your property will not negatively impact the existing wetland.

PREPARED BY:

Bruno Dobri, P. Eng.
Dobri Engineering Ltd.
205 Peter Street
PO Box 441
Port Hope, Ontario
L1A 3Z3



ATTACHMENTS

1. MTO IDF Curve Lookup
2. MTO Drainage Management Manual – Design Chart 1.07 Runoff Coefficients
3. MTO Drainage Management Manual – Design Chart 2.32: Inlet Control: Circular CSP

OTHER INCLUDED MATERIALS:

See prior pages.

FIGURE	1	Site map prepared by Dobri Engineering Ltd.
	2	Lot 29 Wetland; border and scale added by Dobri Engineering Ltd.
	3	Proposed ATV crossing site
	4	Crossing design diagram per sketch by John Bowen
	5	Marsh areas (Wetlands Ontario GeoHub)
	6	Digital Terrain Model of adjacent wetlands
	7	Digital Terrain Model, 2 m contours
	8	Colour slope map
	9	Catchment watershed above proposed ATV crossing
	10	Watershed catchments, outlet of wetland #5
	11	Otter Creek watershed

PHOTOGRAPH	1	Drone photo of wetland #5
	2	Creek at proposed crossing
	3	Creek channel in summer 2024
	4	Vegetation at proposed crossing site
	5	View from top of crossing beaver dam
	6	Beaver dam above wetland #1
	7	Beaver dam at outlet of wetland #5
	8	1970s photo of wetland #5

APPENDIX	1	Memo prepared by Dr. William Booty, retired research scientist
	2	Memo prepared by Mr. Bruno Dobri, P. Eng.

ATTACHMENT 1

MTO IDF CURVE LOOKUP

PAGE 1 OF 2

Active coordinate

44° 34' 45" N, 77° 50' 44" W (44.579167, -77.845833)

Retrieved: Fri, 06 Sep 2024 14:22:39 GMT



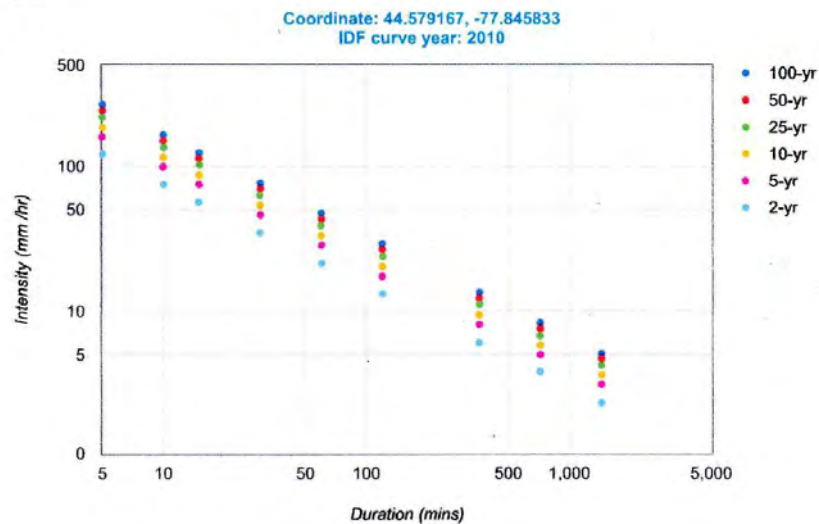
Location summary

These are the locations in the selection.

IDF Curve: 44° 34' 45" N, 77° 50' 44" W (44.579167, -77.845833)

Results

An IDF curve was found.



ATTACHMENT 1

MTO IDF CURVE LOOKUP

PAGE 2 OF 2

Coefficient summary

IDF Curve: 44° 34' 45" N, 77° 50' 44" W (44.579167,-77.845833)

Retrieved: Fri, 06 Sep 2024 14:22:39 GMT

Data year: 2010

IDF curve year: 2010

Return period	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
A	21.4	28.3	32.9	38.7	43.0	47.2
B	-0.699	-0.699	-0.699	-0.699	-0.699	-0.699

Statistics

Rainfall intensity (mm hr⁻¹)

Duration	5-min	10-min	15-min	30-min	1-hr	2-hr	6-hr	12-hr	24-hr
2-yr	121.6	74.9	56.4	34.7	21.4	13.2	6.1	3.8	2.3
5-yr	160.7	99.0	74.6	45.9	28.3	17.4	8.1	5.0	3.1
10-yr	186.9	115.1	86.7	53.4	32.9	20.3	9.4	5.8	3.6
25-yr	219.8	135.4	102.0	62.8	38.7	23.8	11.1	6.8	4.2
50-yr	244.2	150.5	113.3	69.8	43.0	26.5	12.3	7.6	4.7
100-yr	268.1	165.1	124.4	76.6	47.2	29.1	13.5	8.3	5.1

Rainfall depth (mm)

Duration	5-min	10-min	15-min	30-min	1-hr	2-hr	6-hr	12-hr	24-hr
2-yr	10.1	12.5	14.1	17.4	21.4	26.4	36.7	45.2	55.7
5-yr	13.4	16.5	18.6	23.0	28.3	34.9	48.5	59.8	73.7
10-yr	15.6	19.2	21.7	26.7	32.9	40.5	56.4	69.5	85.6
25-yr	18.3	22.6	25.5	31.4	38.7	47.7	66.4	81.8	100.7
50-yr	20.4	25.1	28.3	34.9	43.0	53.0	73.7	90.8	111.9
100-yr	22.3	27.5	31.1	38.3	47.2	58.2	80.9	99.7	122.9

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Last Modified: September 2016

ATTACHMENT 3

MTO DRAINAGE MANAGEMENT MANUAL DESIGN CHART 1.07 RUNOFF COEFFICIENTS

MTO Drainage Management Manual

Design Chart 1.07: Runoff Coefficients (Continued)

- Rural

Land Use & Topography ²	Soil Texture		
	Open Sand Loam	Loam or Silt Loam	Clay Loam or Clay
CULTIVATED			
Flat 0 - 5% Slopes	0.22	0.35	0.55
Rolling 5 - 10% Slopes	0.30	0.45	0.60
Hilly 10- 30% Slopes	0.40	0.65	0.70
PASTURE			
Flat 0 - 5% Slopes	0.10	0.28	0.40
Rolling 5 - 10% Slopes	0.15	0.35	0.45
Hilly 10- 30% Slopes	0.22	0.40	0.55
WOODLAND OR CUTOVER			
Flat 0 - 5% Slopes	0.08	0.25	0.35
Rolling 5 - 10% Slopes	0.12	0.30	0.42
Hilly 10- 30% Slopes	0.18	0.35	0.52
BARE ROCK	COVERAGE³		
	30%	50%	70%
Flat 0 - 5% Slopes	0.40	0.55	0.75
Rolling 5 - 10% Slopes	0.50	0.65	0.80
Hilly 10- 30% Slopes	0.55	0.70	0.85
LAKES AND WETLANDS	0.05		

² Terrain Slopes

³ Interpolate for other values of % imperviousness

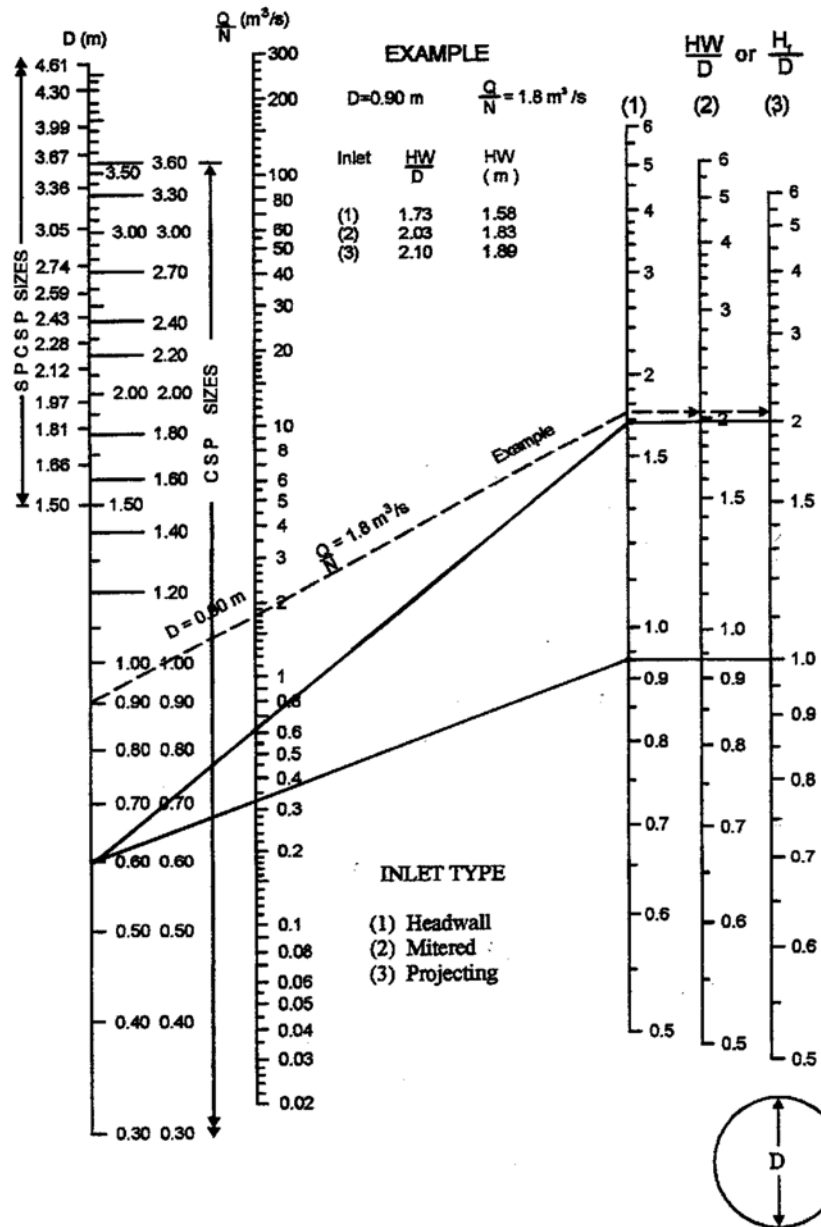
Sources: American Society of Civil Engineers - ASCE (1960)
U.S. Department of Agriculture (1972)

ATTACHMENT 4

DESIGN CHART 2.32: INLET CONTROL: CIRCULAR CSP

MTO Drainage Management Manual

Design Chart 2.32: Inlet Control: Circular CSP and SPCSP Culverts



Source: Herr (1977)

Appendix D: Qualifications for EIS

Gary S Bowen Curriculum Vitae

EMPLOYMENT

Retired Jan 1, 2020

2000 to 2019 Toronto and Region Conservation Authority

1988 to 2000 Ontario Ministry of Environment

1980 to 1988 Private Sector Environmental Consultant (Alberta & Ontario)

1976 to 1980 Research Assistant Trent University & Environment Canada.

EDUCATION

H. BSc. Biology, Trent University 1976.

PUBLICATIONS

25 + Coauthored Peer Reviewed Journal Publications

50 + Conference papers

75+ Technical reports and Memorandums

APPOINTMENTS

Canadian Advisor to the Great Lakes Fisheries Commission 2018 to 2019 retirement

Appointment by MNR with the endorsement of Conservation Ontario Board

SECONDMENTS

1998 TO 2000. Environment Canada. Watershed Management Coordinator CIDA Project Sao Paulo Brazil.

INVITED SCIENTIST (International Workshops and Meetings)

World Health, United Nations Global Environmental Monitoring Systems, United Nations Environment University. World Meteorological Organization (Water) and the World Bank

INVITED (Watershed, Fisheries, Water Quality and Lake Scientist)

Great Lakes Binational Programs: State of the Lake reporting, Nutrient Annex, Groundwater Annex, Lake Ecosystem Objectives, Lake Management Plan, Binational Management Committee, Lake Ontario Nutrient Loadings Study, International Year of Study for Lake Ontario (2004, 2008, 2012, 2016), Nearshore Framework.

Management Committee for the Toronto AOC 2004 to 2019.

Provincial Land use Policy and Master plans (Places to Grow, Pickering Central Development Plan, Seaton Community Plan, Oakridge Moraine Plan, Pickering Airport Lands Greenspace, and the Greater Toronto Airport Authority studies for a proposed Pickering Airport).

Oakridge Moraine Groundwater Research with the Geological Survey of Canada.

Walkerton Inquiry, Lake Ontario Source Water Collaborative, Technical advisor to Credit Toronto and Central Lake Ontario Source Protection Committee, Multi-Agency study developing Intake Protection Zones for Lake Ontario drinking water intakes.

Bring back the Salmon, Technical and Management Committee

Relevant Studies which I was the Technical Lead

13 years researching Lake Ontario Coastal Wetlands in Durham Region (Rouge, Frenchman's Bay Duffins and Carruthers)

Nearshore Water quality of Lake Ontario 2004 to 2019 in Durham Region.

Watershed Planning initiatives for the Rouge, Petticoat, Duffins and Carruthers Watersheds (2000 to 2019)

Water Quality and Climate Change Modelling studies (SWAT and AGNPS models) Humber, Don, Rouge, Duffins, Carruthers) 1990 to 2019.

Land to Lake Initiative: Promoting linkages between actions on the land and a healthy Lake Ontario 2017 to 2019.

Development of Nutrient Loading studies for Lake Ontario (Chaired a Task Force to coordinate multi agency actions to measure water quality and streamflow for key tributaries to Lake Ontario 2017-2019).

Investigated trends in water quality of the Toronto Harbour to track progress for delisting of the Toronto Area of Concern 2014-2018.

Post Retirement 2020 to 2023

Mentoring Research Scientists who were continuing the various research efforts I had underway when I retired.

Citizen appointment to an Advisory Committee established by Town of Port Hope to develop a Master Plan for the lower Ganaraska River and Waterfront.

Retained by Environment and Climate Change Canada in 2023 to research and report on approaches for tracking the washup of algae on the shores of Lake Ontario.

Qualifications For Preparing The ATV Crossing EIS

I have over 40 years of professional experience that has afforded me an opportunity to work across Canada and Internationally. My career has advanced through the private sector and while working for several government agencies. Starting out with junior roles as a field technician and ending as a senior manager, overseas TRCA program delivery across Durham and York Regions; while leading collaborative research studies with Federal and Provincial scientists and academic institutions.

Being a large Conservation Authority the TRCA hires senior staff who are assigned to be point persons, (a similar role to the General Manager at neighbouring CA) for key watersheds. My job was to coordinate the multitude of programs delivered by TRCA's engineering, plan review, ecology, restoration, and parks staff. Upon retirement I reported directly to the CAO and had established professional relationship with the TRCA Board members and the elected councillors, CAO, and Department Heads at local and regional municipalities. I also was responsible for government liaison with Provincial and Federal elected officials and senior staff with Provincial Ministries and Federal Departments.

I had a role assisting the municipalities, landowners, developers, and NGOs when they raised specific concerns while engaging the TRCA staff on permit applications. This role provided me unique opportunity to better understand the frustrations faced by local landowners and the development community. I worked diligently to find ways to help resolve conflicts and at same time achieve solutions that met regulatory acceptance.

In addition to overseeing conservation program delivered by the TRCA, I would participate in outside projects when partnership support from the TRCA was requested. I worked on a number of Conservation Ontario led initiatives such as the Walkerton Inquiry, Drinking Water Source Protection, and emerging Great Lakes policy.

I was also responsible for overseeing the development of watershed plans for four watersheds in the Durham portion of TRCA's jurisdiction (Rouge, Petticoat Duffins and Carruthers watersheds). While employed at the MOE I developed guidance documents for stormwater quality management, sediment and erosion controls, and watershed planning.

In the early 2000s, when the Federal government were planning to build the Pickering Airport, Transport Canada invited me to join a technical working group, who were assisting the Greater Toronto Airport Authority with their Pickering airport design studies. I also worked with Transport Canada staff to develop a green space master plan for the surplus expropriated federal lands. These lands have all been transferred to the new Urban Rouge National Park.

While employed at MOE and TRCA , I participated in an advisory capacity during the development of several Provincial Plans (Places to Grow , Central Pickering Development Plan, Seaton Master Plan, and the Oakridges Moraine Plan)

My technical expertise was also called upon for major environmental assessments and regulatory approvals pertaining to infrastructure needs of York and Durham Region and local area municipalities.

My technical areas of expertise have expanded over time from limnology and fisheries surveys to more advanced hydrology studies linking surface and groundwater flows systems, and to advancement of predictive modelling of watershed and nearshore environments of Lake Ontario.

Since 2004, I directed research investigating water quality linkages between watersheds, coastal wetlands, and nearshore environments of Lake Ontario in Western Durham (from the Rouge River east to Carruthers Watershed). Through these efforts, I became involved in numerous Binational Plans for Lake Ontario and lake wide studies of nutrient loading, nutrient targets and the establishment of ecosystem objectives and nearshore management framework to support public use and enjoyment.

My academic training includes course work in geography, ecology, hydrology, limnology, chemistry, physics, fisheries, general botany, freshwater algae, marine biology, and statistics.

While employed at the MOE and TRCA, I received specialized and on the job training in stream hydrology and groundwater monitoring, water quality assessment, and the application of emerging technology such as GIS, remote sensing, terrain mapping and computer modelling. Additional training includes methodologies for calculating water budgets, engineering design storms, flood return periods, related sizing of storm water management ponds, bridges and culverts openings, flood forecast modelling and flood plain mapping.

I have extensive firsthand experience studying the water quality, sediment transport, nutrient loadings, and hydrologic regimes of Lake Ontario coastal wetlands. In addition, I participated in several wetland restoration projects at TRCA. While working at the MOE in the 1990s, I investigated the utility of constructed wetlands for treating, stormwater runoff, municipal sewage, and industrial effluent discharges.

I was appointed by MNR as a Canadian Advisor to the Great Lakes Fisheries Commission in 2018, and was at my retirement a longstanding member of management committees for Bring Back the Atlantic salmon Program, the Binational Lake Ontario Lake wide Management team, and the Toronto Area of Concern.

Appendix E: CVCA Notice of Hearing

NOTICE OF HEARING

IN THE MATTER OF

The Conservation Authorities Act,
R.S.O. 1990, Chapter 27

AND IN THE MATTER OF a permit application made by Mr. John Bowen, Mr. Robert Bowen, and Mr. Gary Bowen (Application #085/24) to the Crowe Valley Conservation Authority pursuant to section 28.1, subsection 5 of the Act

CVCA Permit Application #085/24

TAKE NOTICE THAT a Hearing before the Watershed Advisory Board of the Crowe Valley Conservation Authority will be held under Section 28.1, Subsection 5 of the Conservation Authorities Act by virtual meeting (Google Meet) on the **17th day of April, 2025 at 9:00a.m.** with respect to the application made by **Mr. John Bowen, Mr. Robert Bowen, and Mr. Gary Bowen** to permit development within an area regulated by the Conservation Authority. The property is located north of Cordova Lake in the Township of Havelock-Belmont-Methuen and is identified as East Part Lot 29, Concession 3 (ARN: 1531-010-006-49300). The property is considered vacant lands. The property is regulated by the Authority due to the presence of a wetland greater than two hectares, two watercourses, wetlands less than two hectares, and the Regulatory flood plain of Cordova Lake. The development activities proposed are the construction of an ATV trail (four metres wide; 130 metres long; one-metre deep) within a wetland greater than two hectares and the installation of a culvert in a watercourse. The application is recommended for refusal on account that it is likely to affect the control of flooding by means of altering a wetland.

TAKE NOTICE THAT you are invited to make a delegation and submit supporting written material to the Watershed Advisory Board of the Crowe Valley Conservation Authority for the meeting of **Thursday April 17th, 2025**. You have indicated you intend to appear on this date. Written submissions will be required no later than **Thursday April 3rd, 2024 by 3pm** to allow CVCA staff and CVCA Watershed Advisory Board members adequate time for review prior to the Hearing. Failure to provide this information by the specified date may result in the Hearing to be postponed and rescheduled.

TAKE NOTICE THAT this Hearing is governed by the provisions of the Statutory Powers Procedure Act. Under the Act, a witness is automatically afforded a protection that is similar to the protection of the Ontario Evidence Act. Evidence that a witness gives may not be used in subsequent civil proceedings or in prosecutions against the witness under a Provincial Statute. It does not relieve the witness of the obligation of this oath since matters of perjury are not affected by that automatic affording of the protection. The significance is that the legislation is Provincial and cannot affect Federal matters. If a witness requires the protection of the Canada Evidence Act, that protection must be obtained in the usual manner. The Ontario Statute requires the tribunal to draw this matter to the attention of the witness, as this tribunal has no knowledge of the effect of any evidence that a witness may give.

TAKE NOTICE THAT you should notify the Authority if you believe the electronic format of the Hearing is likely to cause significant prejudice. The Authority shall assume that the applicant has no objection to the electronic Hearing format if no notification is received.

TAKE NOTICE THAT if you do not attend this Hearing, the Watershed Advisory Board of the Conservation Authority may proceed in your absence, and you will not be entitled to any further notice in the proceedings.

AND TAKE NOTICE THAT Crowe Valley Conservation Authority staff are recommending refusal of the application on account that it does not conform to the CVCA's Watershed Planning and Regulations Policies, specifically:

1. That the development proposed is within a wetland on vacant lands.
2. That the development proposed constitutes a new access route within a wetland on vacant lands.
3. That the development proposed does not meet the definition of passive low-intensity recreational use in a wetland (which the CVCA may permit in cases where criteria specified in CVCA policy are met).

Reasons for recommending the application be refused:

The CVCA applies the above policy criteria to ensure that development activities will not have adverse impacts on wetlands, which are recognized as important natural flood control features in the watershed. These policies are approved by the CVCA Board of Directors and are designed to ensure that the control of flooding, erosion, or unstable soil or bedrock, or might jeopardize the health or safety of persons or result in the damage or destruction of property, will not be affected by development (as per Ontario Regulation 41/24, pursuant to Part VI of the Conservation Authorities Act, R.S.O 1990, as amended). Development activity that does not conform with the CVCA's wetland policies are expected to affect the control of flooding and is likely to impair the hydrological function of the wetland.

Dated the 19 March 2025



Tim Pidduck
General Manager / Secretary-Treasurer
Crowe Valley Conservation Authority

On behalf of the CVCA Watershed Advisory Board

Appendix F: CVCA Recommendation Letter for Denial

March 19, 2025

Attention:

John Bowen, Robert Bowen, Gary Bowen
21 Ramsay Road
Port Hope, ON
L1A 4K9

**Re: Permit Application 085/24
Vacant Lot with no Civic Address (adjacent to Fire Route 59)
Part of Lot 29, Concession 3
Township of Havelock-Belmont-Methuen
ARN: 1531 010 006 49300**

Dear Mr. John Bowen, Mr. Robert Bowen, and Mr. Gary Bowen,

Upon review of your permit application to construct 130-metre-long, 4-metre-wide, 1-metre-deep ATV trail within a wetland greater than two hectares (ha) and a watercourse, Crowe Valley Conservation Authority (CVCA) staff will be making the following recommendation to the CVCA Watershed Advisory Board:

That Permit Application #085/24 be denied.

The proposed development does not conform to Ontario Regulation 41/24 and the CVCA's Watershed Planning and Regulations policies. These policies have been established by the CVCA to administer Ontario Regulation 41/24.

The subject property is within the Regulation Limit as described in subsection 28(1) of the *Conservation Authorities Act* and Ontario Regulation 41/24. Subsection 2 (1) of Ontario Regulation 41/24 states:

(3) For the purposes of subparagraph 2 v of subsection 28 (1) of the Act, other areas in which development activities are prohibited are the areas within an authority's area of jurisdiction that are within 30 metres of a wetland.

The majority of the property is identified as a wetland greater than two hectares (ha). The property is also regulated due to the presence of wetlands less than two hectares, two watercourses, and the regulatory flood plain of Cordova Lake. The primary consideration is the adverse impacts on the wetland greater than two hectares, the watercourse, and the control of flooding.

In regard to conformity with the CVCA's Watershed Planning and Regulations (O. Reg. 41/24) policies, this application does not conform to the following: 3.8.1, 3.8.3, 3.8.4, 7.3.1, 7.3.2, 7.4.1.1, 7.4.1.5 and 7.4.1.9. These policies speak generally to development within a wetland and specifically to the interference of a wetland. These policies are expanded on below in regard to your application.

Policy 3.8.1

It is the policy of the CVCA that:

That development, interference or alteration will not be permitted within a regulated area, except in accordance with the policies contained within this document. In the event of a conflict between the policies applicable to the development, interference or alteration, the most restrictive policy shall apply.

Conformity: No - The proposed development does not conform as it is proposed to be located within a regulated area - within a wetland.

Policy 3.8.3

It is the policy of the CVCA that:

That development, interference or alteration within a regulated area may be permitted where it can be demonstrated to the satisfaction of CVCA, through appropriate technical reports, assessments, site plans and/ or other documents as required by CVCA, that:

- **there is no feasible alternative location for development outside the hazard;**
- **the development does not encroach further into the hazard than existing conditions;**
- **the risk to public safety is not increased;**
- **susceptibility to natural hazards is not increased and no new hazards are created (e.g. there will be no impacts on adjacent properties with respect to natural hazards);**
- **there are no adverse hydraulic or fluvial impacts on rivers, creeks, streams, or watercourses;**
- **negative or adverse hydrological impacts on natural features and functions, including wetlands, are avoided and mitigated as demonstrated by a qualified professional;**
- **intrusions on natural features, areas and systems contributing to hydrologic functions are avoided or mitigated as demonstrated by qualified professional;**
- **access for emergency works and maintenance of flood or erosion control works is available;**
- **sedimentation and erosion during construction and post-construction is minimized using best management practices including site, landscape, infrastructure and/or facility design (whichever is applicable based on the scale and scope of the project), construction controls, and appropriate remedial measures;**
- **the control of flooding, erosion, and unstable soil or bedrock will not be affected during and post development, interference or alteration; and**
- **proposed development is constructed, repaired and/or maintained in accordance with accepted engineering principles and approved engineering standards to the satisfaction of CVCA, whichever is applicable based on the structural scale and scope, and the purpose of the project.**

Conformity: No – There appears to be an alternative location outside of the hazard/wetland, and; that it is new development within a hazard/wetland.

Policy 3.8.4

It is the policy of the CVCA that:

That notwithstanding Sections 3.8.1, 3.8.2 and 3.8.3, where there is an existing vacant lot of record, (including an infill lot), no new development will be permitted where the lot has no safe access, or is entirely within one or more of the following:

- a) the flood hazard (One Zone Policy Area), or erosion hazard of valley and stream corridors, other hazardous lands;**
- b) a wetland; or**
- c) any natural features, areas and systems contributing to hydrologic functions.**

Conformity: No - The proposed development does not conform as it is proposed to be located within a wetland.

Policy 7.3.1

It is the policy of the CVCA that:

In general, development or interference shall not be permitted within any wetland.

Conformity: No - The proposed development does not conform as it is proposed to be located within a wetland.

Policy 7.3.2

In general, there shall be no development or interference within 30 metres of Provincially Significant Wetlands and wetlands greater than 2 hectares.

Conformity: No - The proposed development does not conform as it would result in development within 30 metres of a wetland greater than two hectares.

Policy 7.4.1.1

New development will not be permitted within a wetland, regardless of previous approvals provided under the Planning Act or other regulatory process (e.g., Building Code Act), except as outlined below.

Conformity: No - The proposed development does not conform as it is new development and is within a wetland.

Policy 7.4.1.5

New developments related to passive low-intensity recreational uses associated with public parks, outdoor recreation and education, trail systems or watercourse access points will be permitted within a wetland where it has been demonstrated that there will be no negative impact on the hydrologic functions of the wetland. An Environmental Impact Study may be required at the discretion of the CVCA. It must also be demonstrated that:

- **a technical site-specific study demonstrates to the satisfaction of CVCA that all hazards/risks associated with flooding and/or unstable soils have been addressed; and**
- **inert material will be used. The proponent may be required to provide proof of the origin and quality of the material.**

Conformity: No - The proposed development does not meet the CVCA definition of passive low-intensity use.

CVCA Policy Definition:

Passive Low Intensity Recreational Use Activities of non-intrusive nature. Includes, but are not limited to: non-motorized trails, boardwalks, watercourse access points, natural heritage appreciation, unserviced camping on public and institutional land and accessory uses.

Policy 7.4.1.9

New access routes will not be permitted in a wetland.

Conformity: No - The proposed development is a new access route within a wetland.

On account of the application not conforming to the policies outlined above, CVCA staff will recommend to the CVCA Watershed Advisory Board that the application be denied.

If you do not agree with the staff recommendation and would like to proceed with your application as submitted, you are entitled to the opportunity for a Hearing before the CVCA Watershed Advisory Board in accordance with Section 28.1(5) of the Conservation Authorities Act. On February 25th, 2025 you made this request.

CROWE VALLEY CONSERVATION AUTHORITY
PLANNING & REGULATIONS

70 Hughes Lane PO Box 416
Marmora, Ontario K0K 2M0
(613) 472-3137 crowevalley.com

There is to be full disclosure from both parties prior to the Hearing. The Regulations Officer and yourself shall exchange written reports two weeks prior to the Hearing. Subsequently, this may affect the timing and scheduling of the Hearing. If such information is not received two weeks prior to the meeting date, the Hearing will be rescheduled to occur at the next scheduled meeting date.

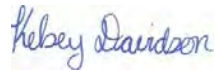
In order to avoid apprehension of bias, which could jeopardize the Hearing, it is recommended that you do not contact any member of the CVCA Watershed Advisory Board prior to the Hearing. If any communication occurs between yourself and a CVCA Watershed Advisory Board Member, you should contact the CVCA office immediately.

At the Hearing you may be represented by counsel or an agent, and you may call and examine witnesses and present evidence and submissions to the Board. Should you request a Hearing but do not attend, the Hearing will proceed in your absence and you will not be entitled to any further notice in the proceedings. Please see the enclosed CVCA Hearing Guidelines document for your reference.

If you have any questions please contact me at 613-472-3137 or via email at:

kelsey.davidson@crowevalley.com

Sincerely,



Kelsey Davidson
Regulations Officer

Enclosed: 2024 CVCA Hearing Guidelines.

Appendix G: CVCA Hearing Guidelines

1.0 PURPOSE OF HEARING GUIDELINES:

The purpose of the Hearing Guidelines is to reflect the changes to the 1998 Conservation Authorities Act. The Act requires that the applicant be party to a hearing by the local Conservation Authority Board, or Executive Committee (sitting as a Hearing Board) as the case may be, for an application to be refused or approved with contentious conditions. Further, a permit may be refused if in the opinion of the Authority the proposal adversely affects the control of flooding, pollution or conservation of land, and additional erosion and dynamic beaches. The Hearing Board is empowered by law to make a decision, governed by the Statutory Powers Procedures Act. It is the purpose of the Hearing Board to evaluate the information presented at the hearing by both the Conservation Authority staff and the applicant and to decide whether the application will be approved with or without conditions or refused.

These guidelines have been prepared as an update to the October 1992 hearing guidelines and are intended to provide a step-by-step process to conducting hearings required under Section 28 (12), (13), (14) of the Conservation Authorities Act. Similar to the 1992 guidelines, it is hoped that the guidelines will promote the necessary consistency across the Province and ensure that hearings meet the legal requirements of the Statutory Powers Procedures Act without being unduly legalistic or intimidating to the participants.

2.0 PREHEARING PROCEDURES

2.1 Apprehension of Bias

In considering the application, the Hearing Board is acting as a decision-making tribunal. The tribunal is to act fairly. Under general principles of administrative law relating to the duty of fairness, the tribunal is obliged not only to avoid any bias but also to avoid the appearance or apprehension of bias. The following are three examples of steps to be taken to avoid apprehension of bias where it is likely to arise.

- (a) No member of the Authority taking part in the hearing should be involved, either through participation in committee or intervention on behalf of the applicant or other interested parties with the matter, prior to the hearing. Otherwise, there is a danger of an apprehension of bias which could jeopardize the hearing.
- (b) If material relating to the merits of an application that is the subject of a hearing is distributed to Board members before the hearing, the material shall be distributed to the applicant at the same time. The applicant may be afforded an opportunity to distribute similar pre-hearing material.
- (c) In instances where the Authority (or Executive Committee) requires a hearing to help it reach a determination as to whether to give permission with or without conditions or refuse a permit application, a final decision shall not be made until such time as a hearing is held. The applicant will be given an opportunity to attend the hearing before a

decision is made; however, the applicant does not have to be present for a decision to be made.

Individual Conservation Authorities shall develop a document outlining their own practices and procedures relating to the review and reporting of Section 28 applications, including the role of staff, the applicant and the Authority or Executive Committee as well as, the procedures for the hearing itself. Such policy and procedures manual shall be available to the members of the public upon request. These procedures shall have regard for the above information and should be approved by the Conservation Authority Board of Directors.

2.2 Application

The right to a hearing is required where staff is recommending refusal of an application or where there is some indication that the Authority or Executive Committee may not follow staff's recommendation to approve a permit or the applicant objects to the conditions of approval. The applicant is entitled to reasonable notice of the hearing pursuant to the Statutory Powers Procedures Act.

2.3 Notice of Hearing

The Notice of Hearing shall be sent to the applicant within sufficient time to allow the applicant to prepare for the hearing. To ensure that reasonable notice is given, it is recommended that prior to sending the Notice of Hearing, the applicant be consulted to determine an agreeable date and time based on the local Conservation Authority's regular meeting schedule.

The Notice of Hearing must contain the following:

- (a) Reference to the applicable legislation under which the hearing is to be held (i.e., the Conservation Authorities Act).
- (b) The time, place and the purpose of the hearing.
- (c) Particulars to identify the applicant, property and the nature of the application which are the subject of the hearing.

Note: If the applicant is not the landowner but the prospective owner, the applicant must have written authorization from the registered landowner.

- (d) The reasons for the proposed refusal or conditions of approval shall be specifically stated. This should contain sufficient detail to enable the applicant to understand the issues so he or she can be adequately prepared for the hearing.

It is sufficient to reference in the Notice of Hearing that the recommendation for refusal or conditions of approval is based on the reasons outlined in previous correspondence or a hearing report that will follow.

- (e) A statement notifying the applicant that the hearing may proceed in the applicant's absence and that the applicant will not be entitled to any further notice of the proceedings.

Except in extreme circumstances, it is recommended that the hearing not proceed in the absence of the applicant.

- (f) Reminder that the applicant is entitled to be represented at the hearing by counsel, if desired.

It is recommended that the Notice of Hearing be directed to the applicant and/or landowner by registered mail. Please refer to Appendix A for an example Notice of Hearing.

2.4 Presubmission of Reports

If it is the practice of the local Conservation Authority to submit reports to the Board members in advance of the hearing (i.e., inclusion on an Authority/Executive Committee agenda), the applicant shall be provided with the same opportunity. The applicant shall be given two weeks to prepare a report once the reasons for the staff recommendations have been received. Subsequently, this may affect the timing and scheduling of the staff hearing reports.

2.5 Hearing Information

Prior to the hearing, the applicant shall be advised of the local Conservation Authority's hearing procedures upon request.

3.0 HEARING

3.1 Public Hearing

Pursuant to the Statutory Powers Procedure Act, hearings are required to be held in public. The exception is in very rare cases where public interest in public hearings is outweighed by the fact that intimate financial, personal or other matters would be disclosed at hearings.

3.2 Hearing Participants

The Conservation Authorities Act does not provide for third party status at the local hearing. While others may be advised of the local hearing, any information that they provide should be incorporated within the presentation of information by, or on behalf of, the applicant or Authority staff.

3.3 Attendance of Hearing Board Members

In accordance with case law relating to the conduct of hearings, those members of the Authority who will decide whether to grant or refuse the application must be present during the full course of the hearing. If it is necessary for a member to leave, the hearing must be adjourned and resumed when either the member returns or if the hearing proceeds, even in the event of an adjournment, only those members who were present after the member left can sit to the conclusion of the hearing.

3.4 Adjournments

The Board may adjourn a hearing on its own motion or that of the applicant or Authority staff where it is satisfied that an adjournment is necessary for an adequate hearing to be held.

Any adjournments form part of the hearing record.

3.5 Orders and Directions

The Authority is entitled to make orders or directions to maintain order and prevent the abuse of its hearing processes. A hearing procedures example has been included as Appendix B.

3.6 Information Presented at Hearings

- (a) The Statutory Powers Procedure Act, requires that a witness be informed of his right to object pursuant to the Canada Evidence Act. The Canada Evidence Act indicates that a witness shall be excused from answering questions on the basis that the answer may be incriminating. Further, answers provided during the hearing are not admissible against the witness in any criminal trial or proceeding. This information should be provided to the applicant as part of the Notice of Hearing.
- (b) It is the decision of the hearing members as to whether information is presented under oath or affirmation. It is not a legal requirement. The applicant must be informed of the above, prior to or at the start of the hearing.
- (c) The Board may authorize receiving a copy rather than the original document. However, the Board can request certified copies of the document if required.
- (d) Privileged information, such as solicitor/client correspondence, cannot be heard. Information that is not directly within the knowledge of the speaker (hearsay), if relevant to the issues of the hearing, can be heard.
- (e) The Board may take into account matters of common knowledge such as geographic or historic facts, times measures, weights, etc or generally recognized scientific or technical facts, information or opinions within its specialized knowledge without hearing specific information to establish their truth.

3.7 Conduct of Hearing

3.7.1 Record of Attending Hearing Board Members

A record shall be made of the members of the Hearing Board.

3.7.2 Opening Remarks

The Chairman shall convene the hearing with opening remarks which generally; identify the applicant, the nature of the application, and the property location; outline the hearing

procedures; and advise on requirements of the Canada Evidence Act. Please reference Appendix C for the Opening Remarks model.

3.7.3 Presentation of Authority Staff Information

Staff of the Authority presents the reasons supporting the recommendation for the refusal or conditions of approval of the application. Any reports, documents or plans that form part of the presentation shall be properly indexed and received.

Staff of the Authority should not submit new information at the hearing as the applicant will not have had time to review and provide a professional opinion to the Hearing Board.

Consideration should be given to the designation of one staff member or legal counsel who coordinates the presentation of information on behalf of Authority staff and who asks questions on behalf of Authority staff.

3.7.4 Presentation of Applicant Information

The applicant has the opportunity to present information at the conclusion of the Authority staff presentation. Any reports, documents or plans which form part of the submission should be properly indexed and received.

The applicant shall present information as it applies to the permit application in question. For instance, does the requested activity affect the control of flooding, erosion, dynamic beach or conservation of land or pollution. The hearing does not address the merits of the activity or appropriateness of such a use in terms of planning.

- The applicant may be represented by legal counsel or agent, if desired
- The applicant may present information to the Board and/or have invited advisors to present information to the Board
- The applicant(s) presentation may include technical witnesses, such as an engineer, ecologist, hydrogeologist etc.

The applicant should not submit new information at the hearing as the Staff of the Authority will not have had time to review and provide a professional opinion to the Hearing Board.

3.7.5 Questions

Members of the Hearing Board may direct questions to each speaker as the information is being heard. The applicant and /or agent can make any comments or questions on the staff report.

Pursuant to the Statutory Powers Procedure Act, the Board can limit questioning where it is satisfied that there has been full and fair disclosure of the facts presented. Please note that the courts have been particularly sensitive to the issue of limiting questions and there is a tendency to allow limiting of questions only where it has clearly gone beyond reasonable or proper bounds.

3.7.6 Deliberation

After all the information is presented, the Board may adjourn the hearing and retire in private to confer. The Board may reconvene on the same date or at some later date to advise of the Board's decision. The Board members shall not discuss the hearing with others prior to the decision of the Board being finalized.

4.0. DECISION

The applicant must receive written notice of the decision. The applicant shall be informed of the right to appeal the decision within 30 days upon receipt of the written decision to the Minister of Natural Resources.

It is important that the hearing participants have a clear understanding of why the application was refused or approved. The Board shall itemize and record information of particular significance which led to their decision.

4.1 Notice of Decision

The decision notice should include the following information:

- (a) The identification of the applicant, property and the nature of the application that was the subject of the hearing.
- (b) The decision to refuse or approve the application. A copy of the Hearing Board resolution should be attached.

It is recommended that the written Notice of Decision be forwarded to the applicant by registered mail. A sample Notice of Decision and cover letter has been included as Appendix D.

4.2 Adoption

A resolution advising of the Board's decision and particulars of the decision should be adopted.

5.0 RECORD

The Authority shall compile a record of the hearing. In the event of an appeal, a copy of the record should be forwarded to the Minister of Natural Resources/Mining and Lands Commissioner. The record must include the following:

- (a) The application for the permit.
- (b) The Notice of Hearing.
- (c) Any orders made by the Board (e.g., for adjournments).

- (d) All information received by the Board.
- (e) The minutes of the meeting made at the hearing.
- (f) The decision and reasons for decision of the Board.
- (g) The Notice of Decision sent to the applicant

Appendix H: CVCA Site Visit Photos
Taken: May 22, 2024



Figure 1: Looking northwest towards the wetland.



Figure 2: Looking northeast towards the wetland.



Figure 3: Looking north towards the existing trail off the subject property.



Figure 4: Looking northeast towards a wetland from the existing trail off the subject property.



Figure 5: Looking north towards the existing trail off the subject property.



Figure 6: Looking southeast towards the entrance of the proposed trail.



Figure 7: Looking towards the entrance of the proposed trail.



Figure 8: Looking northwest towards the proposed trail.



Figure 9: Looking southwest towards the wetland.



Figure 10: Looking north towards the proposed trail.



Figure 11: Looking north towards the proposed trail and culvert area.



Figure 12: Looking towards the proposed trail.



Figure 13: Looking south towards the wetland and the proposed trail.



Figure 14: Looking northeast towards the wetland.



Figure 15: Looking west towards the wetland.



Figure 16: Looking north towards the proposed trail and culvert location.



Figure 17: Looking north towards the proposed trail and the open watercourse.



Figure 18: Looking northeast towards the open watercourse.



Figure 19: Looking north towards the proposed trail and the open watercourse.



Figure 20: Looking south towards the proposed trail and the open watercourse (left).

Appendix I: Correspondence

Kelsey Davidson

From: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Sent: June 19, 2024 4:46 PM
To: 'j.bowen83@yahoo.ca'
Cc: Info
Subject: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Good afternoon John, Rob, and Gary,

Thank you for your permit application 085/24 on Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM for your proposed ATV trail.

You have proposed constructing a trail being 4 metres wide by 130 metres long by 1-metre deep crossing through a wetland to access a portion of your vacant property.

Under the *Conservation Authorities Act*, the CVCA administers Ontario Regulation 41/24. Under the Regulation, the CVCA regulates development activities in wetlands and areas adjacent to wetlands. The CVCA Board has approved a set of policies for the administration of the Regulation.

As per the CVCA Board-approved Policy, your proposed development currently does not meet policy and can not be approved by staff as proposed. CVCA policy states:

7.3.1 In general, development and interference shall not be permitted within wetlands.

7.4.2.1 Development shall not be permitted within the setback of a wetland on vacant land.

It is our understanding you want to construct a trail 4 metres wide by 130 metres long using locally sourced material with a culvert for ATV access to a portion of your property. The total footprint of the proposed trail will be 520 square metres and will require a significant quantity of fill material. Additionally, a culvert being 60cm in diameter by 5 metres in length will be installed to cross a watercourse within the wetland.

There are concerns that the proposed trail may impact the hydrological function of the wetland and may impact the control of flooding. Wetlands have flood attenuation characteristics that play an important role in the control of flooding. Construction of a road/trail placed on organic soils (unstable soils) and in an area susceptible to flooding could require significant ongoing maintenance and material being continually added to the wetland/floodplain. Continually adding material to repair or maintain the trail will impact the control of flooding.

Trails/roads are not permitted through a wetland, but an alternative option that could be approved is a boardwalk or footbridge, provided that it meets the following policies.

7.4.1.5 New developments related to passive low-intensity recreational uses associated with public parks, outdoor recreation and education, trail systems or watercourse access points will be permitted within a wetland where it has been demonstrated that there will be no negative impact on the hydrologic and ecological functions of the wetland. An Environmental Impact Study may be required at the discretion of the CVCA. It must also be demonstrated that:

- the wetland is not a bog or fen, or part of a Provincially Significant Wetland;*
- a technical site-specific study demonstrates to the satisfaction of CVCA that all hazards/risks associated with flooding and/or unstable soils have been addressed;*

- *inert material will be used. The proponent may be required to provide proof of the origin and quality of the material to ensure the control of pollution and the conservation of land are not adversely affected.*

7.4.1.5a Development associated with new boardwalks (e.g. narrow, raised wooden planked trails) or footbridges may be permitted within a wetland if it has been demonstrated to the satisfaction of CVCA that:

- *the proposed works satisfy Section 7.4.1.5;*
- *the control of flooding, erosion, pollution or the conservation of land will not be affected;*
- *the interference on the natural features and hydrologic and ecological functions of the wetland has been deemed to be acceptable by CVCA; and*
- *the following are adhered to:*
 - a) *the footprint of the development in the wetland is minimized;*
 - b) *the boardwalk must be raised over flood levels;*
 - c) *the boardwalk has a maximum width of 1.5 metres; and*
 - d) *the boardwalk is constructed with materials that will not affect the natural environment*

We recommend the following suggestions/recommendations to meet CVCA policy:

- Amend the proposed trail to meet Passive Low-Intensity Recreational Uses policy (i.e. boardwalk)
 - In regard to Policy 7.4.1.5a above, CVCA staff may consider approval of a 2-3m wide boardwalk in an effort to accommodate this unique scenario.

In summary, at this time the CVCA staff are not able to grant permission to support the proposed development as submitted in application 085/24. The proposed trail is within a wetland and does not currently meet the requirements of Ontario Regulation 41/24 and the current Crowe Valley Conservation Watershed Planning and Regulations Policy, as approved by the CVCA Board.

If you wish to proceed with the development activity as proposed, you have the option to request a hearing with the Crowe Valley Conservation Authority Watershed Advisory Board. At the hearing, the Board will assess the application to determine if the proposed development activity is likely to affect the control of flooding.

Should you decide to proceed with a hearing, CVCA staff recommend that the following information be provided for the Board to consider during the Hearing:

- Technical report(s) prepared by qualified professional(s):
 - Demonstrating that the hydrological function of the wetland will not be impacted
 - Assess the proposed culvert to determine adequate sizing
 - Assessment of the soil condition where the trail is proposed and any construction recommendations

Please let me know if you have any questions or require additional information regarding the hearing process or about the additional information.

Thanks,

Kelsey Davidson
Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

www.CroweValley.com

Any maps/screen shots provided in emails are produced by Crowe Valley Conservation Authority with data supplied under licence by the Ontario Geospatial Data Exchange and local County data. These maps/screen shots have been created for demonstrative purposes only and are not to be used as an official source of data.

Disclaimer: This is intended for the addressee indicated above. It may contain information that is privileged, confidential, or otherwise protected from disclosure under the Municipal Freedom of Information and Privacy Protection Act. If you have received this in error, please notify us immediately.

Kelsey Davidson

From: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Sent: January 30, 2025 3:30 PM
To: 'Gary Bowen'
Subject: RE: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Good afternoon Gary,

Thank you for submitting your EIS for the proposed ATV Trail. I am currently reviewing your EIS report submission.

Since you are taking over this application as technical lead (as per your letter dated January 11th), please see my summary below of the proposal up to this moment:

- Site Visit conducted on 22 May 2024
- Received your EIS report (currently under review)
 - o One factor it did not address was the access trail to get equipment/material to the wetland. It does appear there are various wetlands on the property and it would be helpful if we could get some clarification on this plan/route to the proposed trail.
- Previous CVCA recommendations discussed at various points of this application review process:
 - o Purchase the section of neighbouring property that has the existing trail to maintain access – this was turned down as not a realistic option
 - o Use the current snowmobile/atv trail that appears to access the property – this was turned down as not a realistic option
 - o Use a 2 metre wide trail instead of 4 metres (wide enough for one ATV to pass while minimizing wetland disturbance) – this was turned down as not a realistic option

As the new technical lead and contact person, please confirm if any these recommendations would be considered as possible options.

We will require the opportunity to adequately review your submission and provide feedback. I will reach out to you as soon as I have further direction/feedback for you. In the meantime, we are deliberating if a peer review is required or not of your report. As supporting documentation to your EIS report, can you please provide us with a copy of your CV (curriculum vitae)?

Additionally, please keep in mind is that you may require a MNRF permit for development within a watercourse.

Please let me know if you have any further questions.

Thanks,

Kelsey Davidson
Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0
Tel: 613-472-3137 Fax: 613-472-5516

www.CroweValley.com

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From: Gary Bowen [mailto:gsbowen2@gmail.com]

Sent: January 13, 2025 10:03 AM

To: kelsey.davidson@crowevalley.com

Subject: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Ms. Davidson

Please find an Environmental Impact Study that I prepared to address the technical studies CVCA staff recommended along with a covering letter and permit application form. I was not certain if we needed to fill this form out again?

This report was prepared with input from a Professional Water Resources Engineer and a retired Environment and Climate Change Canada Research Scientist.

All three of us have extensive experience modelling water resources of southern Ontario watersheds.

The small Atv crossing of the wetland on our property has been demonstrated to pose no flood or public safety risk and it will have no hydrologic impacts on adjacent wetlands.

I am available to meet in person if you would like to discuss this EIS.

In the attached letter, notice is given that we would like to proceed with the wetland development application.

Please advise you need additional information for the permit application or require any original tables, figures or mapping from the EIS.

In closing, the assistance CVCA staff provided is appreciated.

Gary Bowen

Kelsey Davidson

From: Gary Bowen <gsbowen2@gmail.com>
Sent: February 3, 2025 10:36 AM
To: Kelsey Davidson
Subject: Re: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail
Attachments: Qualifications For Preparing EIS.pdf; Bowen CV.pdf

Kelsey

Thank you for your email of January 30, 2025, in which you advised us that you were in the process of reviewing the EIS report submission. I am open to meeting in person to discuss the EIS once your review is complete.

Please find a copy of my *curriculum vitae* and a summary note that outlines my relevant professional experience and qualifications.

Response to Previous CVCA Recommendations

As stated on site, there are no acceptable alternatives to relocating this Atv crossing.

This property has been in family ownership since 1929, and we were able to access both the east and west parts of Lot 20 Con.3. for almost one hundred years.

The recent registered land survey has necessitated the need to relocate the wetland crossing.

We believe land ownership comes with a responsibility to respect property boundaries.

Our focus for the permit application is on maintaining continuity of established ATV trail alignments within Lot 29 Con 3.

Response to question you raise in the email of January 30, 2025

1. At this time, we are uncertain on an exact route that we will use to access the crossing site and will contact the CVCA if any upgrades to the existing trail will be necessary within thirty meters of a wetland. Our plan was to consider construction equipment needs, access logistics and related construction costs following approval of the permit.

2. We have confirmation from Mr. Bruno Dobri P. Eng that he foresees no flood related and public safety issue with our plans to relocate and build a new 4 m wide ATV crossing 100m downstream. As stated in the EIS, Mr. Dobri agrees that there are no significant hydrologic risks to adjacent wetlands.

3. The 4m width of the crossing design is a compromise from the 5m width originally discussed on site. Please note that modern side by side ATVs are 1.6 to 1.8 m wide. In the future newer vehicles may be wider for better stability control. Thus, a 2m wide crossing poses a real risk for unsafe passage. From a design "hydrologic" perspective, the width of the Atv crossing is not a significant factor. The key design features as reviewed by Mr. Dobri are the water level storage associated with a 1m height profile and an engineered sized culvert.

4. The additional 2 m crossing width poses a small shift in the footprint of adjacent wetlands and follows similar design standards used on ATV and snowmobile association trails across the CVCA jurisdiction.

Thank you for your update.

Gary Bowen

On Thu, Jan 30, 2025 at 3:34 PM Kelsey Davidson <kelsey.davidson@crowevalley.com> wrote:

Good afternoon Gary,

Kelsey Davidson

From: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Sent: February 4, 2025 4:08 PM
To: 'Gary Bowen'
Subject: RE: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Good afternoon Gary,

Thank you for providing that information for us to review.

The next step in the process is to pay for the permit application fee. Based on the proposal description, the outstanding fee is \$2,140 for *proposed fill placement inside a hazard*.

To proceed with payment, you can pay by contacting myself or the office at 613-472-3137. We accept cash, cheque, credit card, and e-transfer.

Once we receive the permit application fee payment, we can proceed to the next step of the application review process.

Thanks,

Kelsey Davidson
Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

www.CroweValley.com

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Disclaimer: This is intended for the addressee indicated above. It may contain information that is privileged, confidential, or otherwise protected from disclosure under the Municipal Freedom of Information and Privacy Protection Act. If you have received this in error, please notify us immediately.

From: Gary Bowen [mailto:gsbowen2@gmail.com]
Sent: February 3, 2025 10:36 AM
To: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Subject: Re: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Kelsey

Thank you for your email of January 30, 2025, in which you advised us that you were in the process of reviewing the EIS report submission. I am open to meeting in person to discuss the EIS once your review is complete.

Please find a copy of my *curriculum vitae* and a summary note that outlines my relevant professional experience and qualifications.

Kelsey Davidson

From: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Sent: February 5, 2025 3:07 PM
To: 'Gary Bowen'
Subject: RE: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Good afternoon Gary,

Under the Conservation Authorities Act, the CVCA administers Ontario Regulation 41/24. Under the Regulation, the CVCA regulates development activities in wetlands and areas adjacent to wetlands. The CVCA Board has approved a set of policies for the administration of the Regulation.

As per the CVCA Board-approved Policy, your proposed development currently does not meet policy and can not be approved by staff as proposed. CVCA policy states:

7.3.1 In general, development and interference shall not be permitted within wetlands.

7.4.2.1 Development shall not be permitted within the setback of a wetland on vacant land.

It is our understanding you want to construct a trail 4 metres wide by 130 metres long by 1-metre in depth using locally sourced material with a culvert for ATV access to a portion of your property. The total footprint of the proposed trail will be 520 square metres and will require a significant quantity of fill material. Additionally, a culvert being 60cm in diameter by 5 metres in length will be installed to cross a watercourse within the wetland.

There are concerns that the proposed trail may impact the hydrological function of the wetland and may impact the control of flooding. Wetlands have flood attenuation characteristics that play an important role in the control of flooding. Construction of a road/trail placed on organic soils (unstable soils) and in an area susceptible to flooding could require significant ongoing maintenance and material being continually added to the wetland/floodplain. Continually adding material to repair or maintain the trail will impact the control of flooding.

In summary, at this time the CVCA staff are not able to grant permission to support the proposed development as submitted in application 085/24. The proposed trail is within a wetland and does not currently meet the requirements of the Conservation Authorities Act, Ontario Regulation 41/24 and the current Crowe Valley Conservation Watershed Planning and Regulations Policy, as approved by the CVCA Board.

If you wish to proceed with the development activity as proposed, you have the option to request a hearing with the Crowe Valley Conservation Authority Watershed Advisory Board. At the hearing, the Board will assess the application to determine if the proposed development activity is likely to affect the control of flooding, and/or is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property.

Please see the following information for the hearing process, should you choose to pursue this avenue:

CVCA Hearing Request Process

1) The applicant must submit an application deemed to be complete by the CVCA (including applicable fee payment and any technical requirements).

Outstanding: Permit application fee was received on 5 February 2025 for the permit #085/24 application.

Fee: The hearing fee is \$600 – outstanding.

2) The applicant is to confirm in writing (email is acceptable) that they are requesting a hearing.

Outstanding: Please contact the CVCA identifying that you are requesting a hearing.

3) The CVCA will provide the applicant with a list of possible dates for a hearing.

We will advise you of the next available hearing date as soon as that information becomes available to us.

4) Once a date is selected, CVCA issues a Notice of Hearing. The Notice of Hearing will include:

- a. Reference to the applicable legislation to which the hearing is to be held (Conservation Authorities Act).
- b. Time, place and purpose of the hearing. (Until further notice, all hearings are being held electronically.)
- c. Particulars which identify the applicant and reasons for the proposed refusal.
- d. Hearing conduct and procedural information.

5) The CVCA will then provide the applicant with a report detailing the reasons for refusal.

6) The applicant must be given a minimum of 2 weeks to prepare a report once the above reasons have been received.

7) The applicant's report must be received 2 weeks prior to the hearing date in order for all documents to be properly indexed and received and to allow for sufficient time for staff to review and provide professional opinion to the Hearing Board.

Please note: all information to be presented at the hearing is to be submitted a minimum of 14 days prior to the meeting date. The information that CVCA staff will present will be made available to you at least 14 days in advance. After this, no new information can be presented at the hearing.

Please let me know if you have any questions or require additional information regarding the hearing process or about the additional information.

Thanks,

Kelsey Davidson
Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

www.CroweValley.com

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Disclaimer: This is intended for the addressee indicated above. It may contain information that is privileged, confidential, or otherwise protected from disclosure under the Municipal Freedom of Information and Privacy Protection Act. If you have received this in error, please notify us immediately.

From: Gary Bowen [mailto:gsbowen2@gmail.com]

Sent: February 3, 2025 10:36 AM

To: Kelsey Davidson <kelsey.davidson@crowevalley.com>

Subject: Re: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Kelsey Davidson

From: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Sent: February 25, 2025 10:16 AM
To: 'Gary Bowen'
Subject: RE: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Good morning Gary,

The next available date to book your Hearing is April 17, 2025 at 9am. Please confirm if you would like to proceed with this date.

Thanks,

Kelsey Davidson
Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

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From: Gary Bowen [mailto:gsbowen2@gmail.com]
Sent: February 6, 2025 2:39 PM
To: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Subject: Re: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Kelsey

Please be advised that the Hearing fee has been paid and that we wish to proceed with the Board Hearing.

Thank you for the assistance provided to date on this permit application.

In addition to the material you are required to provide us, could you also include CVs for CVCA staff who have reviewed our technical studies and/or are working on the permit application and the hearing.

Gary Bowen

Kelsey Davidson

From: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Sent: March 11, 2025 3:15 PM
To: 'Gary Bowen'
Subject: RE: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Good afternoon Gary,

I am confirming we received I got your notice about the hearing date/time.

I will be following up with you in the near future with some additional hearing information.

In the meantime, as noted previously that the potential route to get access the wetland is unknown and outstanding at this time. Can you please explore this further and if possible, provide any additional details regarding the access route two weeks prior to the hearing. This factor is currently noted as an outstanding item requiring further investigation.

Please let me know if you have any questions.

Thanks,

Kelsey Davidson
Regulations Officer

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From: Gary Bowen [mailto:gsbowen2@gmail.com]
Sent: March 6, 2025 4:26 PM
To: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Subject: Re: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Can you confirm that you got our notice accepting the hearing date and time.

When can we expect additional information?

Thanks

Gary

On Tue., Feb. 25, 2025, 10:20 Kelsey Davidson, <kelsey.davidson@crowevalley.com> wrote:

Good morning Gary,

The next available date to book your Hearing is April 17, 2025 at 9am. Please confirm if you would like to proceed with this date.



Thanks,

Kelsey Davidson

Regulations Officer

Crowe Valley Conservation

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From: Gary Bowen [mailto:gsbowen2@gmail.com]

Sent: February 6, 2025 2:39 PM

To: Kelsey Davidson <kelsey.davidson@crowevalley.com>

Subject: Re: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Kelsey Davidson

From: Gary Bowen <gsbowen2@gmail.com>
Sent: March 16, 2025 12:46 PM
To: Kelsey Davidson
Subject: Re: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Kelsey

I was surprised you considered the potential route to the wetland as an outstanding item. The matter was addressed in my email to you dated February 3, 2025. At that time I informed you that

“ At this time , we are uncertain on an exact route that we will use to access the crossing site and will contact the CVCA if any upgrades to the existing trail will be necessary within 30 meters of a wetland. Our plan was to consider construction equipment needs, access logistics and related construction costs following approval of the permit”

Gary Bowen

On Tue, Mar 11, 2025 at 3:34 PM Kelsey Davidson <kelsey.davidson@crowevalley.com> wrote:

Good afternoon Gary,

I am confirming we received your notice about the hearing date/time.

I will be following up with you in the near future with some additional hearing information.

In the meantime, as noted previously that the potential route to get access to the wetland is unknown and outstanding at this time. Can you please explore this further and if possible, provide any additional details regarding the potential access route two weeks prior to the hearing. This factor is currently noted as an outstanding item requiring further investigation.

Please let me know if you have any questions.



Thanks,

Kelsey Davidson

Regulations Officer

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From: Gary Bowen [mailto:gsbowen2@gmail.com]

Sent: March 6, 2025 4:26 PM

To: Kelsey Davidson <kelsey.davidson@crowevalley.com>

Subject: Re: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Can you confirm that you got our notice accepting the hearing date and time.

When can we expect additional information?

Thanks

Gary

On Tue., Feb. 25, 2025, 10:20 Kelsey Davidson, <kelsey.davidson@crowevalley.com> wrote:

Good morning Gary,

The next available date to book your Hearing is April 17, 2025 at 9am. Please confirm if you would like to proceed with this date.



Thanks,

Kelsey Davidson

Regulations Officer

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From: Gary Bowen [mailto:gsbowen2@gmail.com]

Sent: February 6, 2025 2:39 PM

To: Kelsey Davidson <kelsey.davidson@crowevalley.com>

Subject: Re: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Kelsey

Please be advised that the Hearing fee has been paid and that we wish to proceed with the Board Hearing.

Thank you for the assistance provided to date on this permit application.

In addition to the material you are required to provide us, could you also include CVs for CVCA staff who have reviewed our technical studies and/or are working on the permit application and the hearing.

Gary Bowen

.

On Wed, Feb 5, 2025 at 3:11 PM Kelsey Davidson <kelsey.davidson@crowevalley.com> wrote:

Good afternoon Gary,

Under the Conservation Authorities Act, the CVCA administers Ontario Regulation 41/24. Under the Regulation, the CVCA regulates development activities in wetlands and areas adjacent to wetlands. The CVCA Board has approved a set of policies for the administration of the Regulation.

As per the CVCA Board-approved Policy, your proposed development currently does not meet policy and can not be approved by staff as proposed. CVCA policy states:

7.3.1 In general, development and interference shall not be permitted within wetlands.

7.4.2.1 Development shall not be permitted within the setback of a wetland on vacant land.

It is our understanding you want to construct a trail 4 metres wide by 130 metres long by 1-metre in depth using locally sourced material with a culvert for ATV access to a portion of your property. The total footprint of the proposed trail will be 520 square metres and will require a significant quantity of fill material. Additionally, a culvert being 60cm in diameter by 5 metres in length will be installed to cross a watercourse within the wetland.

There are concerns that the proposed trail may impact the hydrological function of the wetland and may impact the control of flooding. Wetlands have flood attenuation characteristics that play an important role in the control of flooding. Construction of a road/trail placed on organic soils (unstable soils) and in an area susceptible to flooding could require significant ongoing maintenance and material being continually added to the wetland/floodplain. Continually adding material to repair or maintain the trail will impact the control of flooding.

In summary, at this time the CVCA staff are not able to grant permission to support the proposed development as submitted in application 085/24. The proposed trail is within a wetland and does not currently meet the requirements of the Conservation Authorities Act, Ontario Regulation 41/24 and the current Crowe Valley Conservation Watershed Planning and Regulations Policy, as approved by the CVCA Board.

If you wish to proceed with the development activity as proposed, you have the option to request a hearing with the Crowe Valley Conservation Authority Watershed Advisory Board. At the hearing, the Board will assess the application to determine if the proposed development activity is likely to affect the control of flooding, and/or is not likely to create conditions or circumstances that, in the event of a natural hazard, might jeopardize the health or safety of persons or result in the damage or destruction of property.

Please see the following information for the hearing process, should you choose to pursue this avenue:

CVCA Hearing Request Process

1) The applicant must submit an application deemed to be complete by the CVCA (including applicable fee payment and any technical requirements).

Outstanding: Permit application fee was received on 5 February 2025 for the permit #085/24 application.

Fee: The hearing fee is \$600 – outstanding.

2) The applicant is to confirm in writing (email is acceptable) that they are requesting a hearing.

Outstanding: Please contact the CVCA identifying that you are requesting a hearing.

3) The CVCA will provide the applicant with a list of possible dates for a hearing.

We will advise you of the next available hearing date as soon as that information becomes available to us.

4) Once a date is selected, CVCA issues a Notice of Hearing. The Notice of Hearing will include:

- a. Reference to the applicable legislation to which the hearing is to be held (Conservation Authorities Act).
- b. Time, place and purpose of the hearing. (Until further notice, all hearings are being held electronically.)
- c. Particulars which identify the applicant and reasons for the proposed refusal.
- d. Hearing conduct and procedural information.

5) The CVCA will then provide the applicant with a report detailing the reasons for refusal.

6) The applicant must be given a minimum of 2 weeks to prepare a report once the above reasons have been received.

7) The applicant's report must be received 2 weeks prior to the hearing date in order for all documents to be properly indexed and received and to allow for sufficient time for staff to review and provide professional opinion to the Hearing Board.

Please note: all information to be presented at the hearing is to be submitted a minimum of 14 days prior to the meeting date. The information that CVCA staff will present will be made available to you at least 14 days in advance. After this, no new information can be presented at the hearing.

Please let me know if you have any questions or require additional information regarding the hearing process or about the additional information.



Thanks,

Kelsey Davidson

Regulations Officer

Crowe Valley Conservation

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From: Gary Bowen [mailto:gsbowen2@gmail.com]

Sent: February 3, 2025 10:36 AM

To: Kelsey Davidson <kelsey.davidson@crowevalley.com>

Subject: Re: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Kelsey

Thank you for your email of January 30, 2025, in which you advised us that you were in the process of reviewing the EIS report submission. I am open to meeting in person to discuss the EIS once your review is complete.

Please find a copy of my *curriculum vitae* and a summary note that outlines my relevant professional experience and qualifications.

Response to Previous CVCA Recommendations

As stated on site, there are no acceptable alternatives to relocating this Atv crossing.

This property has been in family ownership since 1929, and we were able to access both the east and west parts of Lot 20 Con.3. for almost one hundred years.

The recent registered land survey has necessitated the need to relocate the wetland crossing.

We believe land ownership comes with a responsibility to respect property boundaries.

Our focus for the permit application is on maintaining continuity of established ATV trail alignments within Lot 29 Con 3.

Response to question you raise in the email of January 30, 2025

1. At this time, we are uncertain on an exact route that we will use to access the crossing site and will contact the CVCA if any upgrades to the existing trail will be necessary within thirty meters of a wetland. Our plan was to consider construction equipment needs, access logistics and related construction costs following approval of the permit.

2. We have confirmation from Mr. Bruno Dobri P. Eng that he foresees no flood related and public safety issue with our plans to relocate and build a new 4 m wide ATV crossing 100m downstream. As stated in the EIS, Mr. Dobri agrees that there are no significant hydrologic risks to adjacent wetlands.

3. The 4m width of the crossing design is a compromise from the 5m width originally discussed on site. Please note that modern side by side ATVs are 1.6 to 1.8 m wide. In the future newer vehicles may be wider for better stability control. Thus, a 2m wide crossing poses a real risk for unsafe passage. From a design "hydrologic" perspective, the width of the Atv crossing is not a significant factor. The key design features as reviewed by Mr. Dobri are the water level storage associated with a 1m height profile and an engineered sized culvert.

4. The additional 2 m crossing width poses a small shift in the footprint of adjacent wetlands and follows similar design standards used on ATV and snowmobile association trails across the CVCA jurisdiction.

Thank you for your update.

Gary Bowen

On Thu, Jan 30, 2025 at 3:34 PM Kelsey Davidson <kelsey.davidson@crowevalley.com> wrote:

Good afternoon Gary,

Thank you for submitting your EIS for the proposed ATV Trail. I am currently reviewing your EIS report submission.

Since you are taking over this application as technical lead (as per your letter dated January 11th), please see my summary below of the proposal up to this moment:

- Site Visit conducted on 22 May 2024
- Received your EIS report (currently under review)

o One factor it did not address was the access trail to get equipment/material to the wetland. It does appear there are various wetlands on the property and it would be helpful if we could get some clarification on this plan/route to the proposed trail.

- Previous CVCA recommendations discussed at various points of this application review process:
 - o Purchase the section of neighbouring property that has the existing trail to maintain access – this was turned down as not a realistic option
 - o Use the current snowmobile/atv trail that appears to access the property – this was turned down as not a realistic option
 - o Use a 2 metre wide trail instead of 4 metres (wide enough for one ATV to pass while minimizing wetland disturbance) – this was turned down as not a realistic option

As the new technical lead and contact person, please confirm if any these recommendations would be considered as possible options.

We will require the opportunity to adequately review your submission and provide feedback. I will reach out to you as soon as I have further direction/feedback for you. In the meantime, we are deliberating if a peer review is required or not of your report. As supporting documentation to your EIS report, can you please provide us with a copy of your CV (curriculum vitae)?

Additionally, please to keep in mind is that you may require a MNRF permit for development within a watercourse.

Please let me know if you have any further questions.



Thanks,

Kelsey Davidson

Regulations Officer

Crowe Valley Conservation

[70 Hughes Lane](#) P.O. Box 416 Marmora, ON K0K 2M0

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From: Gary Bowen [mailto:gsbowen2@gmail.com]

Sent: January 13, 2025 10:03 AM

To: kelsey.davidson@crowevalley.com

Subject: Permit Application 085/24 - Fire Route 59 (ARN: 1531 010 006 49300), Part Lot 29 Concession 3, HBM - Proposed ATV Trail

Ms. Davidson

Please find an Environmental Impact Study that I prepared to address the technical studies CVCA staff recommended along with a covering letter and permit application form. I was not certain if we needed to fill this form out again?

This report was prepared with input from a Professional Water Resources Engineer and a retired Environment and Climate Change Canada Research Scientist.

All three of us have extensive experience modelling water resources of southern Ontario watersheds.

The small Atv crossing of the wetland on our property has been demonstrated to pose no flood or public safety risk and it will have no hydrologic impacts on adjacent wetlands.

I am available to meet in person if you would like to discuss this EIS.

In the attached letter, notice is given that we would like to proceed with the wetland development application.

Please advise you need additional information for the permit application or require any original tables, figures or mapping from the EIS.

In closing, the assistance CVCA staff provided is appreciated.

Gary Bowen

Kelsey Davidson

From: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Sent: March 19, 2025 3:58 PM
To: 'Gary Bowen'
Cc: Tim Pidduck
Subject: Permit 085/24 - BOWEN - Notice of Hearing and Denial Letter
Attachments: Notice of Hearing_BOWEN.PDF; Recommendation for Denial_BOWEN_CVCA Permit 085_24.pdf; Hearing Guidelines.pdf

Good afternoon John, Robert, and Gary,

In preparation of your upcoming Hearing request with the CVCA Watershed Advisory Board regarding permit application 085/24 – Proposed ATV Trail at Part of Lot 29, Concession 3, Township of Havelock-Belmont-Methuen ARN: 1531 010 006 49300, please see the attached Notice of Hearing and Recommendation of Denial Letter.

Date of Hearing: April 17, 2025
Time of Hearing: 9am
The Hearing will be held virtually (link to be provided at a later date)
Disclosure of documents due: April 3, 2025 by 3pm

Please send forth a list of people attending the Hearing, as we will make a note of attendees in the Hearing minutes.

Please let me know if you have any questions.

Thanks,

Kelsey Davidson
Regulations Officer

Crowe Valley Conservation

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Kelsey Davidson

From: Gary Bowen <gsbowen2@gmail.com>
Sent: March 31, 2025 3:08 PM
To: kelsey.davidson@crowevalley.com; tim.pidduck@crowevalley.com
Subject: Bowen Submissions for the April 17th Watershed Advisory Board Hearing for Permit # 085/24
Attachments: Kelsey April 3.docx; Hearing Board Report April 3.docx; Crossing Planning .docx; April 3 WABH Power Point Bowen.pdf; Bowen Permit #08524 Environmental Impact Study.pdf

Kelsey

Please find attached the five documents which we prepared for the April 17th Hearing submission.

These documents are listed below in the order in which they are cited.

Files for the Bowen Submission April 17th Watershed Advisory Committee Hearing include:

1. Covering letter dated April 3, 2025, addressed to yourself.
2. April 3, 2025, Letter Report for the Chair and Board that outlines our position for the Hearing.
3. Technical Memo by John Bowen that describes the process to design the replacement ATV crossing.
4. April 3, 2025, Summary Power Presentation which outlines impacts from the replacement ATV crossing.
5. Environmental Impact Study dated January 7, 2025.

I would like to point out descriptive errors in the CVCA Notice of Hearing.

The East part of Lot 29 is located to the West of Cordova Lake not to the North as stated.

Please note the ATV crossing is located outside of the Flood Plain of Cordova Lake.

It is in an entirely different Subwatershed of the Crowe River; a tributary of Otter Creek.

A large ridge that runs through the center of our lot is the topographic divide.

The lengthy description of regulated areas in the East Part of Lot 29 implies the flood regulatory aspects of our permit application are very complex when this is not the case.

We ask that this be corrected, so that the Board members understand what is specifically regulated by CVCA at the replacement crossing location.

Uncorrected statements in the Notice of Hearing establish a false impression of regulatory complexity for the permit application.

Please edit the description to identify regulatory specifics of the permit application location only.

Our understanding is the regulatory issues for Permit #085/24 application are: development within a wetland and the installation of a single culvert in an intermittent watercourse.

We do not need any additional permits for the property.

If you have any questions, please contact me.

Confirmation of receiving this email and the five attachments is requested.

Thank you again for your assistance with the permit application.

Gary Bowen

Kelsey Davidson

From: Gary Bowen <gsbowen2@gmail.com>
Sent: April 1, 2025 3:28 PM
To: kelsey.davidson@crowevalley.com; tim.pidduck@crowevalley.com
Subject: Please find PDF versions of the three Word documents sent yesterday
Attachments: Kelsey April 3.pdf; Crossing Planning .pdf; Hearing Board Report April 3.pdf

Kelsey

I meant to send you the three Word documents saved as PDF files.

Would you be so kind as to use these PDF versions of the correspondence instead of the Word documents. The content should be the same.

If you have any questions on the five files we sent for the Hearing please contact me.

Is there anything we need to discuss before April 17th, I am available.

Gary Bowen

Kelsey Davidson

From: Kelsey Davidson <kelsey.davidson@crowevalley.com>
Sent: April 2, 2025 3:19 PM
To: 'Gary Bowen'; 'tim.pidduck@crowevalley.com'
Subject: RE: Bowen Submissions for the April 17th Watershed Advisory Board Hearing for Permit # 085/24

Good afternoon Gary,

Thank you for your submission and response.

I will review your comments and get back to you as soon as I can.

Please note - for your awareness, we *may* have to postpone your Hearing in the event that the office transitions into a flood warning status. The delay may only be 1-2 weeks but will depend on CVCA Board availability. I will keep you updated.

Thanks,

Kelsey Davidson
Regulations Officer

Crowe Valley Conservation

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From: Gary Bowen [mailto:gsbowen2@gmail.com]
Sent: March 31, 2025 3:08 PM
To: kelsey.davidson@crowevalley.com; tim.pidduck@crowevalley.com
Subject: Bowen Submissions for the April 17th Watershed Advisory Board Hearing for Permit # 085/24

Kelsey

Please find attached the five documents which we prepared for the April 17th Hearing submission.

These documents are listed below in the order in which they are cited.

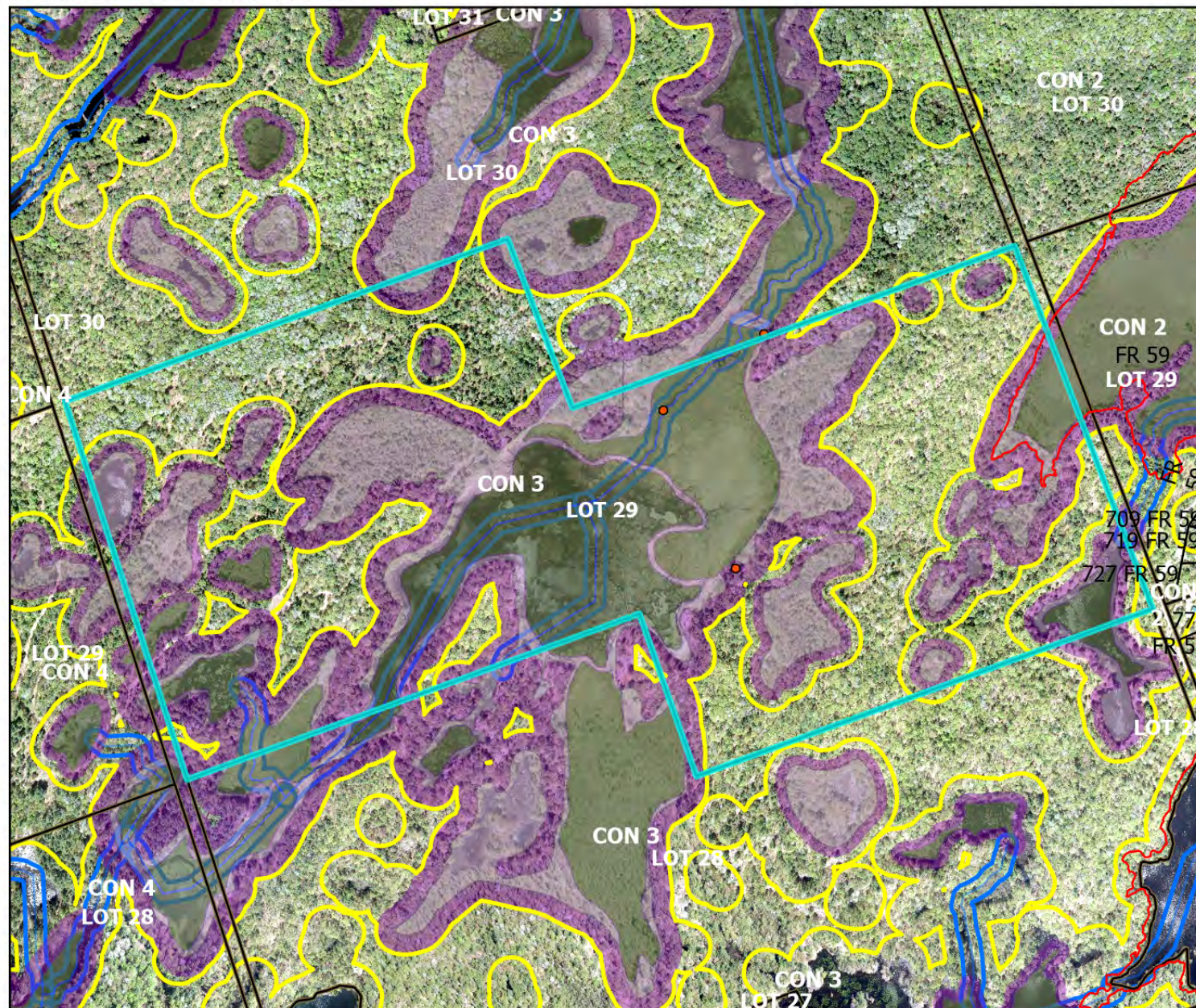
Files for the Bowen Submission April 17th Watershed Advisory Committee Hearing include:

1. Covering letter dated April 3, 2025, addressed to yourself.

Appendix J: CVCA Regulations Mapping

Gary Bowen
Vacant Lot (No civic address)
Part Lot 29, Concession 03
Township of Havelock-Belmont-Methuen
ARN: 1531 010 006 49300

CROWE VALLEY CONSERVATION AUTHORITY
Permit 085/24



LEGEND

- Roads
- Watercourses
- 1:100 Year Regulatory Flood Elevation (217.46 masl CGVD 2013)
- Waypoints
- MNRF Wetlands
- Wetlands
- Wetland Setback
- CVCA Regulated Area
- Watercourse Setback
- Subject Property
- Peterborough County Parcels

02 April 2025

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0 120 240 480 Metres

0 250 500 1,000 Feet



APPENDIX K: ONTARIO REGULATION 41/24
PROHIBITED ACTIVITIES, EXEMPTIONS AND PERMITS

ONTARIO REGULATION 41/24

made under the

CONSERVATION AUTHORITIES ACT

Made: December 5, 2023

Filed: February 16, 2024

Published on e-Laws: February 16, 2024

Published in *The Ontario Gazette*: March 2, 2024

PROHIBITED ACTIVITIES, EXEMPTIONS AND PERMITS

Table of contents

Definitions

1. (1) In section 28 of the Act and in this Regulation,

“development activity” means,

- (a) the construction, reconstruction, erection or placing of a building or structure of any kind,
- (b) any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,
- (c) site grading, or
- (d) the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere; (“activité d’aménagement”)

“hazardous land” means land that could be unsafe for development because of naturally occurring processes associated with flooding, erosion, dynamic beaches or unstable soil or bedrock; (“terrain dangereux”)

“watercourse” means a defined channel, having a bed and banks or sides, in which a flow of water regularly or continuously occurs; (“cours d’eau”)

“wetland” means land that,

- (a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface,
 - (b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse,
 - (c) has hydric soils, the formation of which have been caused by the presence of abundant water, and
 - (d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which have been favoured by the presence of abundant water. ("terre marécageuse")
- (2) The definition of "wetland" in subsection (1) does not include periodically soaked or wet land used for agricultural purposes which no longer exhibits a wetland characteristic referred to in clause (c) or (d) of that definition.

Prohibited activities, subparagraph 2 iii of s. 28 (1) of the Act

2. (1) For the purposes of subparagraph 2 iii of subsection 28 (1) of the Act, river or stream valleys include river or stream valleys that have depressional features associated with a river or stream, whether or not they contain a watercourse, the limits of which are determined as follows:

1. Where the river or stream valley is apparent and has stable slopes, the valley extends from the stable top of the bank, plus 15 metres, to a similar point on the opposite side.
2. Where the river or stream valley is apparent and has unstable slopes, the valley extends from the predicted long term stable slope projected from the existing stable slope or, if the toe of the slope is unstable, from the predicted location of the toe of the slope as a result of stream erosion over a projected 100-year period, plus 15 metres, to a similar point on the opposite side.
3. Where the river or stream valley is not apparent, the valley extends,
 - (i) to the furthest of the following distances:
 - A. the distance from a point outside the edge of the maximum extent of the flood plain under the applicable flood event standard to a similar point on the opposite side, and

B. the distance from the predicted meander belt of a watercourse, expanded as required to convey the flood flows under the applicable flood event standard to a similar point on the opposite side, and

(ii) an additional 15-metre allowance on each side, except in areas within the jurisdiction of the Niagara Peninsula Conservation Authority.

(2) For the purposes of subparagraph 2 iv of subsection 28 (1) of the Act, areas adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to inland lakes that may be affected by flooding, erosion or dynamic beach hazards include,

(a) the area starting from the furthest offshore extent of the authority's boundary to the furthest of the following distances:

(i) the 100-year flood level, plus the appropriate allowance for wave uprush, and, if necessary, for other water-related hazards, including ship-generated waves, ice piling and ice jamming, except in respect of Wanapitei Lake in the Nickel District Conservation Authority, the applicable flood event standard for that lake being the one set out in item 1 of Table 16 of Schedule 1,

(ii) the predicted long-term stable slope projected from the existing stable toe of the slope or from the predicted location of the toe of the slope as that location may have shifted as a result of shoreline erosion over a 100-year period, and

(iii) where a dynamic beach is associated with the waterfront lands, an allowance of 30 metres inland to accommodate dynamic beach movement, except in the areas within the jurisdictions of the Mattagami Region Conservation Authority, the Nickel District Conservation Authority and the North Bay-Mattawa Conservation Authority where the allowance is 15 metres inland; and

(b) the area that is an additional 15 metres allowance inland from the area described in clause (a).

(3) For the purposes of subparagraph 2 v of subsection 28 (1) of the Act, other areas in which development activities are prohibited are the areas within an authority's area of jurisdiction that are within 30 metres of a wetland.

Applicable Flood Event Standards

3. The applicable flood event standards with respect to an authority, for the purposes of paragraph 3 of subsection 2 (1) and to determine the maximum susceptibility to flooding

of lands or areas in the area of jurisdiction of an authority are the standards specified in Schedule 1 as those standards are described in Schedule 2.

Maps of regulated areas

4. (1) An authority shall develop maps depicting the areas within the authority's area of jurisdiction where development activities are prohibited under paragraph 2 of subsection 28 (1) of the Act which shall be filed at the head office of the authority and made available to the public on the authority's website, and by any other means that the authority considers advisable.

(2) At least once annually, the authority shall,

- (a) review the maps referred to in subsection (1) and determine if updates to the maps are required;
- (b) make and file such updates to the maps at its head office if required; and
- (c) make the updated maps available to the public on its website and by any other means it considers advisable.

(3) Where new information or analysis becomes available that may result in significant updates to the areas where development activities are prohibited under paragraph 2 of subsection 28 (1) of the Act, including enlargements or reductions to such areas, the authority shall ensure that stakeholders, municipalities and the public are notified of the proposed changes in any manner that the authority considers advisable, including making any relevant information or studies available online at least 30 days prior to an authority meeting during which the proposed changes are on the agenda.

(4) Where significant changes to the areas where development activities are prohibited have been made in accordance with subsection (3), the authority shall promptly update the maps described in subsection (1).

(5) For greater certainty, in case of a conflict regarding the boundaries of the areas where development activities are prohibited under paragraph 2 of subsection 28 (1) of the Act, the description of those areas in that paragraph and in section 2 of this Regulation prevail over the depiction of the areas in the maps referred to in subsection (1) of this section.

Exceptions

5. Paragraph 2 of subsection 28 (1) of the Act does not apply to,

- (a) the construction, reconstruction, erection or placement of,
 - (i) a seasonal or floating dock that,
 - (A) is 10 square metres or less,
 - (B) does not require permanent support structures, and
 - (C) can be removed in the event of flooding,
 - (ii) a rail, chain-link or panelled fence with a minimum of 75 millimetres of width between panels, that is not within a wetland or watercourse,
 - (iii) agricultural in-field erosion control structures that are not within and that do not have any outlet of water directed or connected to a watercourse, wetland or river or stream valley,
 - (iv) a non-habitable accessory building or structure that,
 - (A) is incidental or subordinate to the principal building or structure,
 - (B) is 15 square metres or less, and
 - (C) is not within a wetland or watercourse, or
 - (v) an unenclosed detached deck or patio that is 15 square metres or less, is not placed within a watercourse or wetland and does not utilize any method of cantilevering;
- (b) the installation of new tile drains that are not within a wetland or watercourse, within 30 metres of a wetland or within 15 metres of a watercourse, and that have an outlet of water that is not directed or connected to a watercourse, wetland or river or stream valley, or the maintenance or repair of existing tile drains;
- (c) the installation, maintenance or repair of a pond for watering livestock that is not connected to or within a watercourse or wetland, within 15 metres of a wetland or a watercourse, and where no excavated material is deposited within an area where subsection 28 (1) of the Act applies;
- (d) the maintenance or repair of a driveway or private lane that is outside of a wetland or the maintenance or repair of a public road, provided that the driveway or road is not extended or widened and the elevation, bedding materials and existing culverts are not altered;
- (e) the maintenance or repair of municipal drains as described in, and conducted in accordance with the mitigation requirements set out in the Drainage Act and the

Conservation Authorities Act Protocol, approved by the Minister and available on a government of Ontario website, as it may be amended from time to time; and

(f) the reconstruction of a non-habitable garage with no basement, if the reconstruction does not exceed the existing footprint of the garage and does not allow for a change in the potential use of the garage to create a habitable space.

Pre-submission consultation

6. (1) Prior to submitting an application for a permit under section 28.1 of the Act, an authority and the applicant may engage in pre-submission consultation for the purposes of confirming the requirements of a complete application to obtain a permit for the activity in question, which may include,

- (a) requests by the authority to the applicant for,
 - (i) initial information on the proposed activity such as a description of the project and any associated plans, or
 - (ii) details about the property upon which the activities are proposed to be carried out, including copies of plans, maps or surveys; or
- (b) meetings between the authority and the applicant prior to the submission of an application, including any site visits to the property where the activities are proposed to be carried out.

(2) If the applicant requests a pre-submission consultation under subsection (1), the authority is required to engage in the pre-submission consultation.

Application for permit

7. (1) An application for a permit under section 28.1 of the Act shall be submitted to an authority and shall include,

- (a) a plan of the area showing the type and location of the proposed development activity or a plan of the area showing plan view and cross-section details of an activity to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse, or change or interfere with a wetland;
- (b) the proposed use of any buildings and structures following completion of the development activity or a statement of the purpose of an activity to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse or to change or interfere with a wetland;

- (c) the start and completion dates of the development activity or other activity;
- (d) a description of the methods to be used in carrying out an activity to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse, or change or interfere with a wetland;
- (e) the elevations of existing buildings, if any, and grades and the proposed elevations of any buildings and grades after the development activity or other activity;
- (f) drainage details before and after the development activity or other activity;
- (g) a complete description of any type of fill proposed to be placed or dumped;
- (h) a confirmation of authorization for the proposed development activity or other activity given by the owner of the subject property, if the applicant is not the owner; and
- (i) any other technical information, studies or plans that the authority requests including information requested during pre-submission consultations between the authority and the applicant.

(2) Upon receipt of the information required under subsection (1) and payment by the applicant of the fee charged by the authority under subsection 21.2 (4) of the Act, the authority shall notify the applicant in writing, within 21 days, whether or not the application complies with subsection 28.1 (3) of the Act and is deemed to be a complete application.

(3) If the authority notifies an applicant under subsection (2) that the application is complete, the authority shall not require new studies, technical information or plans under clause (1) (i) from the applicant to make a determination on the application, unless agreed to by the authority and the applicant. For greater certainty, the authority may ask the applicant for clarification or further details regarding any matter related to the application.

Request for review

8. (1) An applicant may request a review by the authority if,

- (a) the applicant has not received a notice from the authority within 21 days in accordance with subsection 7 (2);

- (b) the applicant disagrees with the authority's determination that the application for a permit is incomplete; or
 - (c) the applicant is of the view that a request by the authority for other information, studies or plans under clause 7 (1) (i) is not reasonable.
- (2) A review requested by an applicant under subsection (1) shall be completed by the authority no later than 30 days after it is requested and the authority shall, as the case may be,
- (a) confirm that the application meets the requirements of subsection 7 (1) and is complete or provide reasons why the application is incomplete; or
 - (b) provide reasons why a request for other information, studies or plans under clause 7 (1) (i) is reasonable or withdraw the request for all or some of the information, studies or plans.

Conditions of permits

- 9.** (1) An authority may attach conditions on a permit issued under section 28.1 of the Act only if, in the opinion of the authority, the conditions,
- (a) assist in preventing or mitigating any effects on the control of flooding, erosion, dynamic beaches or unstable soil or bedrock;
 - (b) assist in preventing or mitigating any effects on human health or safety or any damage or destruction of property in the event of a natural hazard; or
 - (c) support the administration or implementation of the permit, including conditions related to reporting, notification, monitoring and compliance with the permit.
- (2) In addition to the conditions referred to in subsection (1), the Lake Simcoe Region Conservation Authority may attach conditions to a permit that relate to designated policies and other policies in the Lake Simcoe Protection Plan that apply to the issuance of the permit.

Lake Simcoe Protection requirements

- 10.** For the purpose of clause 28.1 (1) (c) of the Act, a decision to issue a permit within the area of jurisdiction of the Lake Simcoe Region Conservation Authority shall,
- (a) conform with any designated policies in the Lake Simcoe Protection Plan that apply to the issuance of the permit; and

(b) have regard to any other policies in the Lake Simcoe Protection Plan that apply to the issuance of the permit.

Period of validity of permits and extensions

11. (1) The maximum period of validity of a permit issued under sections 28.1, 28.1.1 and 28.1.2 of the Act, including any extension, is 60 months.

(2) If a permit is issued for less than the maximum period of validity, the holder of a permit may, at least 60 days before the expiry of the permit, submit an application for an extension of the permit to,

(a) the authority that issued the permit, in the case of permits issued under section 28.1 or 28.1.2 of the Act; or

(b) the Minister, in the case of permits issued under section 28.1.1 of the Act.

(3) An authority or the Minister, as the case may be, may approve an extension of the period of validity of a permit that was issued for a period of less than 60 months but the total period of validity of the permit, including the extension, shall not exceed 60 months.

(4) If an authority intends to refuse a request for an extension, the authority shall give notice of intent to refuse to the holder of the permit, indicating that the extension will be refused unless the holder requests a hearing under subsection (5).

(5) Within 15 days of receiving a notice of intent to refuse a request for an extension, the holder of the permit may submit a written request for a hearing to the authority.

(6) If a request for hearing is submitted under subsection (5), the authority shall hold the hearing within a reasonable time, and shall give the holder at least five days notice of the date of the hearing.

(7) After holding a hearing under subsection (6), the authority may,

(a) confirm the refusal of the extension; or

(b) grant an extension for such period of time as it deems appropriate, as long as the total period of validity of the permit does not exceed the applicable maximum period specified in subsection (1).

Policy and procedure documents re permits

12. Each authority shall develop policy and procedure documents with respect to permit applications and reviews that, at a minimum, include the following:

1. Additional details regarding the pre-submission consultation process described in section 6 as well as additional details related to complete permit application requirements.
2. Procedures respecting the process for a review under section 8.
3. Standard timelines for the authority to make a decision on permit applications following a notification that an application is complete under subsection 7 (2), as the authority determines advisable.
4. Any other policies and procedures, as the authority considers advisable, for the purpose of administering the issuance of permits under Part VI of the Act.
5. A process for the periodic review and updating of the authority's policy and procedure documents, including procedures for consulting with stakeholders and the public during the review and update process, as the authority considers advisable.

Commencement

13. This Regulation comes into force on the later of the day subsection 25 (2) of Schedule 6 to the *Protect, Support and Recover from COVID-19 Act (Budget Measures)*, 2020 comes into force and the day this Regulation is filed.

SCHEDULE 1

FLOOD EVENT STANDARDS

1. For the following conservation authorities, the applicable flood event standards are those specified in Table 1 below:

1. Ausable Bayfield Conservation Authority.
2. Catfish Creek Conservation Authority.
3. Credit Valley Conservation Authority.
4. Ganaraska Region Conservation Authority.
5. Grand River Conservation Authority.
6. Halton Region Conservation Authority.
7. Kettle Creek Conservation Authority.

8. Maitland Valley Conservation Authority.
9. Saugeen Valley Conservation Authority.
10. Toronto and Region Conservation Authority.

TABLE 1

Item	Areas	Applicable Flood Event Standards
1.	All areas	The Hurricane Hazel Flood Event Standard, the 100 Year Flood Event Standard and the 100-year flood level plus wave uprush

2. For the following conservation authorities, the applicable flood event standards are those specified in Table 2 below:

1. Cataraqui Region Conservation Authority.
2. Long Point Region Conservation Authority.
3. Quinte Region Conservation Authority.
4. Raisin Region Conservation Authority.
5. South Nation River Conservation Authority.

TABLE 2

Item	Areas	Applicable Flood Event Standards
1.	All areas	The 100 Year Flood Event Standard and the 100-year flood level plus wave uprush

3. For the following conservation authorities, the applicable flood event standards are those specified in Table 3 below:

1. Mississippi Valley Conservation Authority.
2. Rideau Valley Conservation Authority.

TABLE 3

Item	Areas	Applicable Flood Event Standards
1.	All areas	The 100 Year Flood Event Standard

4. For the following conservation authorities, the applicable flood event standards are those specified in Table 4 below:

1. Mattagami Region Conservation Authority.
2. Nottawasaga Valley Conservation Authority.
3. Sault Ste. Marie Region Conservation Authority.

TABLE 4

Item	Areas	Applicable Flood Event Standards
1.	All areas	The 100 Year Flood Event Standard, the Timmins Flood Event Standard, and the 100-year flood level plus wave uprush

5. For the Crowe Valley Conservation Authority, the applicable flood event standards are those specified in Table 5 below:

TABLE 5

Item	Areas	Applicable Flood Event Standards
1.	All areas	The 100 Year Flood Event Standard, the Timmins Flood Event Standard, the Hurricane Hazel Flood Event Standard and the 100-year flood level

6. For the Kawartha Region Conservation Authority, the applicable flood event standards are those specified in Table 6 below:

TABLE 6

Item	Areas	Applicable Flood Event Standards
1.	All areas	The 100 Year Flood Event Standard and the Timmins Flood Event Standard

7. For the Central Lake Ontario Conservation Authority, the applicable flood event standards are those specified in Table 7 below:

TABLE 7

Item	Areas	Applicable Flood Event Standards
1.	Pringle Creek and Darlington	The 100 Year Flood Event Standard
2.	Lake Ontario in the Great Lakes-St. Lawrence River System	The 100-year flood level plus wave uprush
3.	All other areas	The Hurricane Hazel Flood Event Standard

8. For the Essex Region Conservation Authority, the applicable flood event standards are those specified in Table 8 below:

TABLE 8

Item	Areas	Applicable Flood Event Standards
1.	The main branch and the east branch (Silver Creek) of the Ruscom River, and its tributaries within the Town of	The March 1985 Flood

	Lakeshore and the Town of Kingsville and the main and north branch of Canard River in the Town of LaSalle, Concessions I and II, and on the main branch of the Canard River in the Town of Amherstburg, Concessions I, II, III and IV	Event Standard
2.	All other areas	The 100 Year Flood Event Standard

9. For the Grey Sauble Conservation Authority, the applicable flood event standards are those specified in Table 9 below:

TABLE 9

Item	Areas	Applicable Flood Event Standards
1.	The Sauble River Watershed	The 100 Year Flood Event Standard
2.	Lake Huron and Georgian Bay in the Great Lakes-St. Lawrence River System	The 100-year flood level plus wave uprush
3.	All other watersheds	The Timmins Flood Event Standard

10. For the Hamilton Region Conservation Authority, the applicable flood event standards are those specified in Table 10 below:

TABLE 10

Item	Areas	Applicable Flood Event Standards
1.	Watercourses WCO, WCI, WC2, 3, 4, 5.0, 5.1, 6.0, 6.1, 6.2, 6.3, 6.4, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, 10.1, 10.2, 11.0 and 12.0 as indicated on Map Figure 1 of Project 98040-A, Stoney Creek, Stormwater Management Assessment, prepared by Philips Engineering and located at the Hamilton Region Conservation Authority head office and Hamilton Harbour in the Great Lakes-St. Lawrence River System	The 100-year flood level
2.	Lake Ontario in the Great Lakes-St. Lawrence River System	The 100-year flood level plus wave uprush
3.	All other areas	The Hurricane Hazel Flood Event Standard

11. For the Lake Simcoe Region Conservation Authority, the applicable flood event standards are those specified in Table 11 below:

TABLE 11

Item	Areas	Applicable Flood Event Standards
1.	Bunker's Creek and Sophia Creek	The 100 Year Flood Event Standard

2.	Talbot River and the Trent-Severn waterway	The Timmins Flood Event Standard
3.	Lake Simcoe	The 100-year flood level plus wave uprush
4.	All other areas	The Hurricane Hazel Flood Event Standard

12. For the Lakehead Region Conservation Authority, the applicable flood event standards are those specified in Table 12 below:

TABLE 12

Item	Areas	Applicable Flood Event Standards
1.	The main channel of the Kaministiquia River	The 100 Year Flood Event
2.	Lake Superior in the Great Lakes-St. Lawrence River System	The 100-year flood level plus wave uprush
3.	All other areas	Timmins Flood Event Standard

13. For the Lower Thames Valley Conservation Authority, the applicable flood event standards are those specified in Table 13 below:

TABLE 13

Item	Areas	Applicable Flood Event Standards
------	-------	----------------------------------

1.	All areas	The 1937 Regulatory Flood Event Standard and the 100-year flood level plus wave uprush
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14. For the Lower Trent Region Conservation Authority, the applicable flood event standards are those specified in Table 14 below:

TABLE 14

Item	Areas	Applicable Flood Event Standards
1.	The main channels of Rice Lake and Trent River	The rainfall, snowmelt, or a combination of rainfall and snowmelt, that would produce the water surface elevations above Canadian Geodetic Datum described in Table 1 of Schedule 3
2.	Lake Ontario in the Great Lakes-St. Lawrence River System	The 100-year flood level plus wave uprush
3.	All other areas	The Timmins Flood Event Standard

15. For the Niagara Peninsula Conservation Authority, the applicable flood event standards are those specified in Table 15 below:

TABLE 15

Item	Areas	Applicable Flood Event Standards
1.	The watersheds associated with Shriner's Creek, Ten Mile Creek and Beaverdam Creek (including Tributary W-6-5) in the City of Niagara Falls	The Hurricane Hazel Flood Event Standard

2.	Lake Ontario and Lake Erie in the Great Lakes-St. Lawrence River System	The 100-year flood level plus wave uprush
3.	All other areas	The 100 Year Flood Event Standard

16. For the Nickel District Conservation Authority, the applicable flood event standards are those specified in Table 16 below:

TABLE 16

Item	Areas	Applicable Flood Event Standards
1.	Wanapitei Lake	The maximum flood allowance elevation of 267.95 metres Canadian Geodetic Datum (in accordance with Ontario Power Generation's Licence of Occupation Agreement #6168)
2.	All other areas	The Timmins Flood Event Standard and the 100 Year Flood Event Standard

17. For the North Bay-Mattawa Conservation Authority, the applicable flood event standards are those specified in Table 17 below:

TABLE 17

Item	Areas	Applicable Flood Event Standards
1.	Chippewa Creek and its tributaries below the North Bay Escarpment, Parks Creek, the Mattawa River in the Town of Mattawa and the La Vase River	The 100 Year Flood Event Standard

2.	Lake Nipissing	100-year flood level plus wave uprush
3.	All other areas	The Timmins Flood Event Standard

18. For the Otonabee Region Conservation Authority, the applicable flood event standards are those specified in Table 18 below:

TABLE 18

Item	Areas	Applicable Flood Event Standards
1.	Rice Lake, Stony Lake, Clear Lake, Lovesick Lake, Deer Bay, Buckhorn Lake, Chemong Lake, Pigeon Lake, Katchiwanoooka Lake and Lower Buckhorn Lake	The rainfall, snowmelt, or a combination of rainfall and snowmelt, that would produce the water surface elevations above Canadian Geodetic Datum described in Table 2 of Schedule 3.
2.	All other areas	The Timmins Flood Event Standard

19. For the St. Clair Region Conservation Authority, the applicable flood event standards are those specified in Table 19 below:

TABLE 19

Item	Areas	Applicable Flood Event Standards
1.	Perch Creek	The 100 Year Flood Event Standard

2.	Lake Huron, Lake St. Clair and St. Clair River in the Great Lakes-St. Lawrence River System	The 100-year flood level plus wave uprush
3.	All other areas	The Hurricane Hazel Flood Event Standard

20. For the Upper Thames Region Conservation Authority, the applicable flood event standards are those specified in Table 20 below:

TABLE 20

Item	Areas	Applicable Flood Event Standards
1.	All areas	The 1937 Flood Event Standard

SCHEDULE 2 DESCRIPTION OF STANDARDS

1. The Hurricane Hazel Flood Event Standard means a storm that produces over a 48-hour period,

- (a) in a drainage area of 25 square kilometres or less, rainfall that has the distribution set out in Table 1; or
- (b) in a drainage area of more than 25 square kilometres, rainfall such that the number of millimetres of rain referred to in each case in Table 1 is modified by the percentage amount shown in Column 2 of Table 2 opposite the corresponding size of the drainage area set out Column 1 of Table 2.

TABLE 1

73 millimetres of rain in the first 36 hours
6 millimetres of rain in the 37th hour
4 millimetres of rain in the 38th hour

6 millimetres of rain in the 39th hour
13 millimetres of rain in the 40th hour
17 millimetres of rain in the 41st hour
13 millimetres of rain in the 42nd hour
23 millimetres of rain in the 43rd hour
13 millimetres of rain in the 44th hour
13 millimetres of rain in the 45th hour
53 millimetres of rain in the 46th hour
38 millimetres of rain in the 47th hour
13 millimetres of rain in the 48th hour

TABLE 2

Column 1 Drainage Area (square kilometres)	Column 2 Percentage
26 to 45 both inclusive	99.2
46 to 65 both inclusive	98.2
66 to 90 both inclusive	97.1
91 to 115 both inclusive	96.3
116 to 140 both inclusive	95.4
141 to 165 both inclusive	94.8

166 to 195 both inclusive	94.2
196 to 220 both inclusive	93.5
221 to 245 both inclusive	92.7
246 to 270 both inclusive	92.0
271 to 450 both inclusive	89.4
451 to 575 both inclusive	86.7
576 to 700 both inclusive	84.0
701 to 850 both inclusive	82.4
851 to 1000 both inclusive	80.8
1001 to 1200 both inclusive	79.3
1201 to 1500 both inclusive	76.6
1501 to 1700 both inclusive	74.4
1701 to 2000 both inclusive	73.3
2001 to 2200 both inclusive	71.7
2201 to 2500 both inclusive	70.2
2501 to 2700 both inclusive	69.0
2701 to 4500 both inclusive	64.4
4501 to 6000 both inclusive	61.4
6001 to 7000 both inclusive	58.9
7001 to 8000 both inclusive	57.4

2. The Timmins Flood Event Standard means a storm that produces over a 12-hour period,

(a) in a drainage area of 25 square kilometres or less, rainfall that has the distribution set out in Table 3; or

(b) in a drainage area of more than 25 square kilometres, rainfall such that the number of millimetres of rain referred to in each case in Table 3 is modified by the percentage amount shown in Column 2 of Table 4 opposite the corresponding size of the drainage area set out in Column 1 of Table 4.

TABLE 3

15 mm of rain in the 1st hour
20 mm of rain in the 2nd hour
10 mm of rain in the 3rd hour
3 mm of rain in the 4th hour
5 mm of rain in the 5th hour
20 mm of rain in the 6th hour
43 mm of rain in the 7th hour
20 mm of rain in the 8th hour
23 mm of rain in the 9th hour
13 mm of rain in the 10th hour
13 mm of rain in the 11th hour
8 mm of rain in the 12th hour

TABLE 4

Column 1 Drainage Area (km ²)	Column 2 Percentage
26 to 50 both inclusive	97
51 to 75 both inclusive	94
76 to 100 both inclusive	90
101 to 150 both inclusive	87
151 to 200 both inclusive	84
201 to 250 both inclusive	82
251 to 375 both inclusive	79
376 to 500 both inclusive	76
501 to 750 both inclusive	74
751 to 1000 both inclusive	70
1001 to 1250 both inclusive	68
1251 to 1500 both inclusive	66
1501 to 1800 both inclusive	65
1801 to 2100 both inclusive	64
2101 to 2300 both inclusive	63
2301 to 2600 both inclusive	62
2601 to 3900 both inclusive	58
3901 to 5200 both inclusive	56

5201 to 6500 both inclusive	53
6501 to 8000 both inclusive	50

3. The 100 Year Flood Event Standard means rainfall, snowmelt, or a combination of rainfall and snowmelt, producing at any location in a river, creek, stream or watercourse a peak flow that has a probability of occurrence of one per cent during any given year.

4. The 100-year flood level means the peak instantaneous still water level plus an allowance for wave uprush and other water-related hazards for inland lakes and the Great Lakes-St. Lawrence River System that has a probability of occurrence of one per cent during any given year.

5. The March 1985 Flood Event Standard means the flood levels observed, surveyed and mapped, and located at the Essex Region Conservation Authority head office, along portions of the relevant prescribed watercourses that exceeded the 100 Year Flood Event Standard.

6. The 1937 Flood Event Standard means the historical observed 1937 flood on the Thames River. This event is equivalent to the combination of events that caused the flood event on the Thames River in April of 1937. The 1937 flood event is estimated to be equivalent to a 1 in 250-year return flood.

7. The 1937 Regulatory Flood Event Standard means the historical observed 1937 flood on the Thames River. This event is equivalent to a flow of 1,540 cubic metres per second (cms) commencing at Delaware and proportionately reducing until 1,160 cms at Thamesville and 1,125 cms at Chatham. The 1937 flood event is estimated to be equivalent to a 1 in 250-year return flood.

SCHEDULE 3

WATER SURFACE ELEVATIONS

1. The water surface elevations above Canadian Geodetic Datum applicable to Item 1 in Table 14 of Schedule 1 are shown in Table 1.

TABLE 1
LOWER TRENT REGION CONSERVATION AUTHORITY

Location	Water Surface Elevation
Rice Lake	187.9 metres
Trent River below Dam #1 (Trenton)	77.2 metres
Trent River below Dam #2 (Sidney)	81.3 metres
Trent River below Dam #3 (Glen Miller)	87.7 metres
Trent River below Dam #4 (Batawa)	95.7 metres
Trent River below Dam #5 (Trent)	101.7 metres
Trent River below Dam #6 (Frankford)	107.9 metres
Trent River below Dam #7 (Glen Ross)	113.5 metres
Trent River below Dam #8 (Meyers)	117.9 metres
Trent River below Dam #9 (Hagues Reach)	128.1 metres
Trent River below Dam # 10 (Ranney Falls)	143.4 metres
Trent River below Dam #11 (Campbellford)	148.3 metres
Trent River below Dam #12 (Crowe Bay)	154.3 metres
Trent River below Dam #13 (Healy Falls)	175.5 metres
Trent River below Dam #14 (Hastings)	186.7 metres

2. The water surface elevations above Canadian Geodetic Datum applicable to Item 1 in Table 18 of Schedule 1 are shown in Table 2.

TABLE 2
OTONABEE REGION CONSERVATION AUTHORITY

Water Body	Water Surface Elevation
Rice Lake	187.90 metres
Stony Lake	235.95 metres
Clear Lake	235.95 metres
Lovesick Lake	242.16 metres
Deer Bay	244.31 metres
Buckhorn Lake	247.12 metres
Chemong Lake	247.12 metres
Pigeon Lake	247.12 metres
Katchiwanooka Lake	233.68 metres
Lower Buckhorn Lake	244.31 metres

Made by:

Pris par :

Le ministre des Richesses naturelles et des Forêts,

GRAYDON SMITH

Minister of Natural Resources and Forestry

Date made: December 5, 2023

Pris le : 5 décembre 2023