

ENVIRONMENTAL OBSERVATIONS SUMMARY

Proposed alteration not anticipated to have negative effects based on low sensitivity of existing drainage course:

- Man-made
- Dug Channel
- Limited substrates/habitat features
- Choked with vegetation
- DFO reviewed and accepted the proposal



Cambium EIS, 2021



ENVIRONMENTAL RECOMMENDATIONS

Recommendations:

- Provide Erosion & Sediment Control Plan
- In-water works outside of March 15 – July 15
- Portions can be removed, piped or re-aligned given that pre-development flows are maintained
- Lack of Fish community presence to be confirmed prior to construction
- Native non-invasive species to be used for riparian areas



Cambium EIS, 2021



LTC POLICY

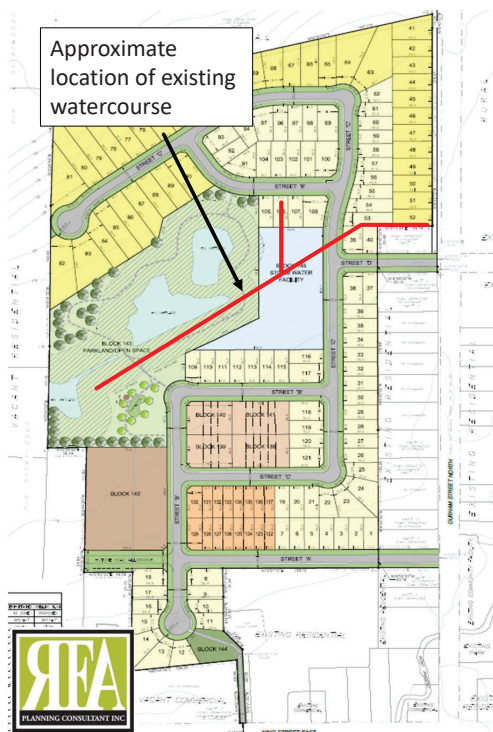
LTC O. Reg. 163/07 Policy Document defines a watercourse as:
 "... an identifiable depression in the ground in which a flow of water regularly or continuously occurs"

Section 7 of LTC Policy Document that states "no person shall straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream, or watercourse"

This drainage course is a man-made dug channel receiving roadside drainage with little environmental value.



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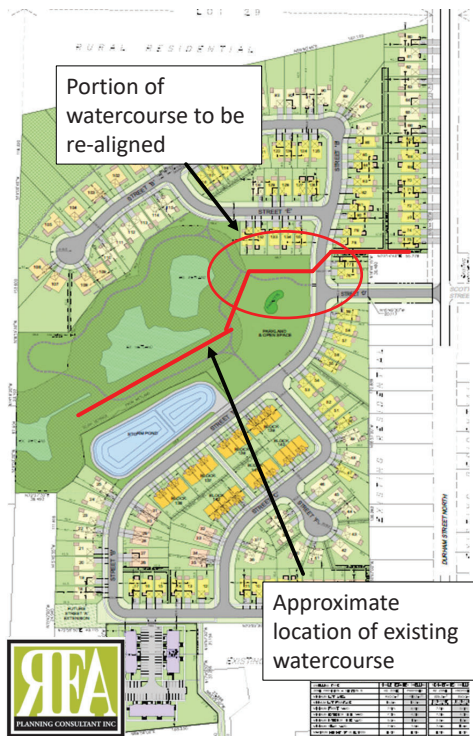


PROJECT HISTORY – CURRENTLY APPROVED DRAFT PLAN

- Eastfields Subdivision was draft plan approved in April 2022 based on the plan and supporting documents prepared by the previous Owner in 2017
 - LTC comments indicated that the drainage ditch should be recognized as a watercourse
- The currently approved draft plan does not consider protection or conveyance of the drainage feature(s) on site
 - No easements, blocks etc. are provided
 - The existing drainage course crosses through proposed lots and the SWM facility

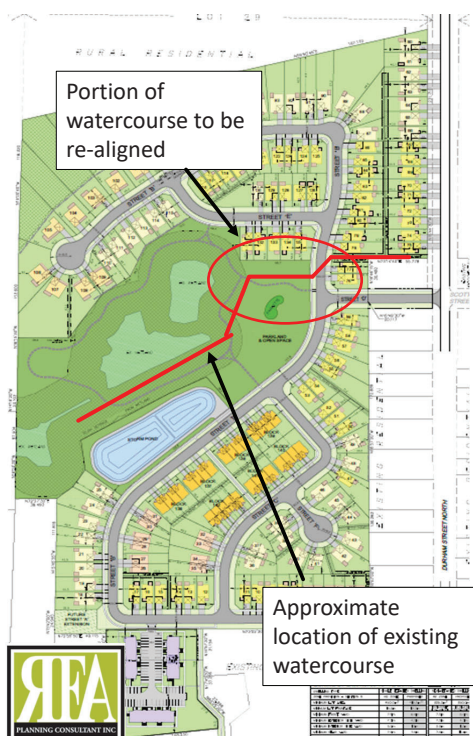


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RED-LINE PLAN

- A red-line draft plan has been prepared to make several improvements to the original plan:
 - Accommodate the drainage feature on-site
 - Shift the multi-residential block closer to King St
 - Revise the road pattern at the south end of the site to facilitate maintenance of existing topography to the greatest extent possible
 - Provide a prominent centralized parkland block

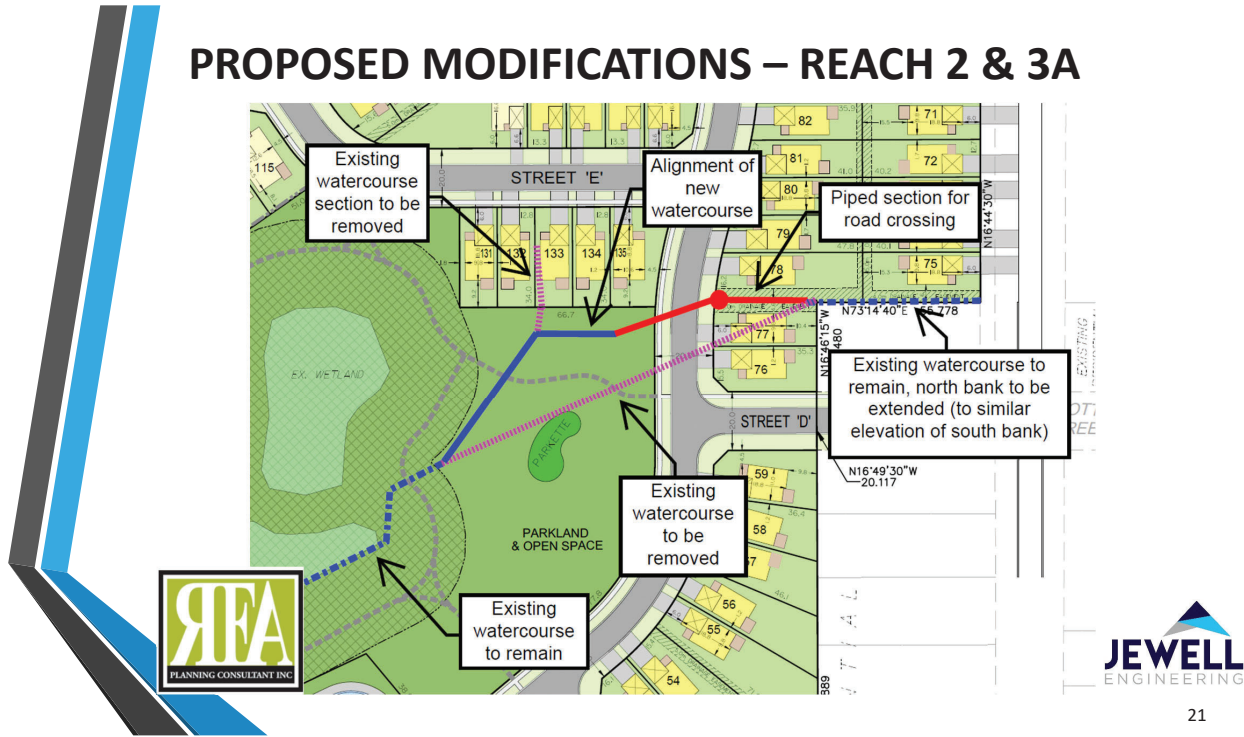


RED-LINE PLAN

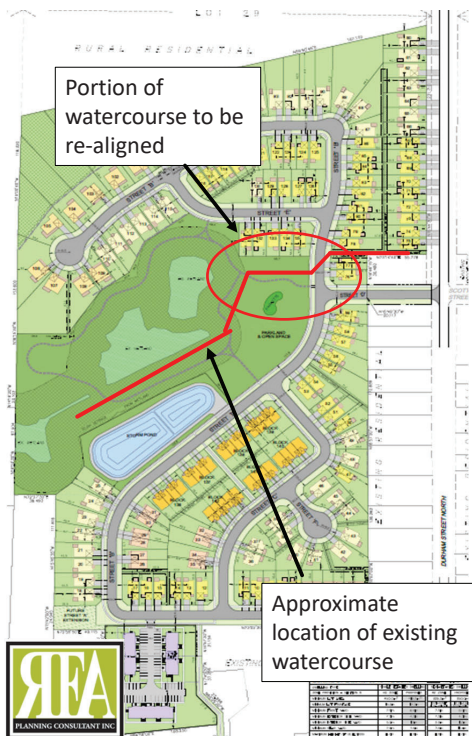
- To facilitate this plan requires:
 - Culvert crossing to convey drainage under Street B
 - Minor re-alignment of upstream section to convey the drainage course within an easement for future maintenance access
 - Minor re-alignment of downstream section to provide optimal unsegregated parkland space
 - Elimination of small north-south branch (1.5" – 4" deep)
 - Board Approval for the re-alignment work



PROPOSED MODIFICATIONS – REACH 2 & 3A



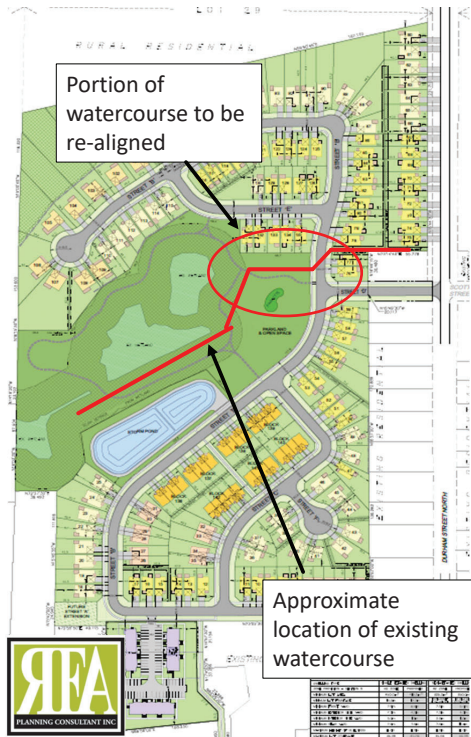
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RED-LINE PLAN

- Other options have been considered but result in:
 - Segregated parkland block with a smaller functional area
 - High cost (potentially prohibitive) for lots 131-135 as large retaining walls would be required to maintain existing drainage course
 - Results in inefficient and costly development of the lands (Less affordable housing for future buyers)
 - Still requires disturbance of the drainage course for installation of culvert crossing on Street B
 - Still require bank modifications to the drainage course as the lands in this area need to be filled ~2m in order to accommodate servicing of the subdivision lands

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RED-LINE PLAN

- The proposed plan provides:
 - Creation of riparian areas (native grasses, shrubs, forbs and trees) to provide terrestrial habitat, shade, and bank stability
 - Temperature benefits – maintaining cool water to contribute to downstream tributary via longer piped section
 - Reduction in urban sprawl through efficient use of land
 - Provision of prominent centralized park block with unsegregated use-able area
 - Permits efficient and affordable development of the lands
 - Efficient management of drainage



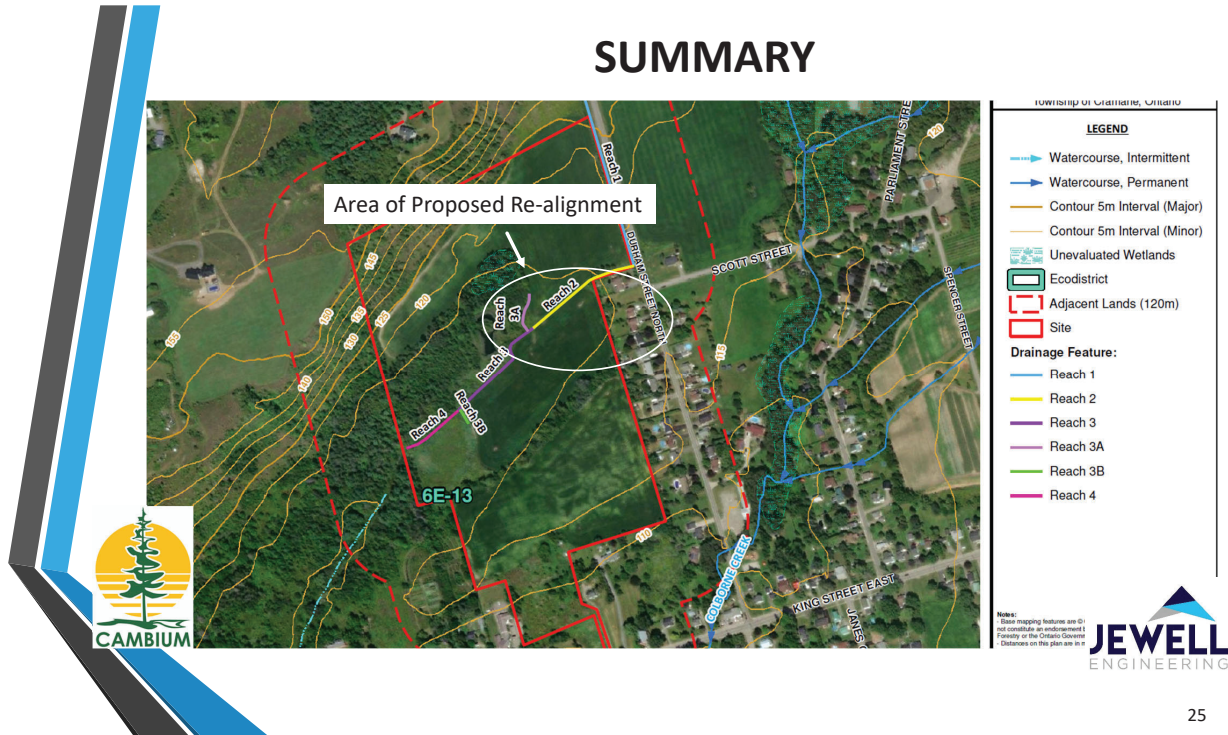
SUMMARY

The existing watercourse being modified/removed is:

- Man-made
- A Dug Channel
- Has limited substrates/habitat features
- 1.5" - 4.0" flow depth
- Primarily receives roadside drainage

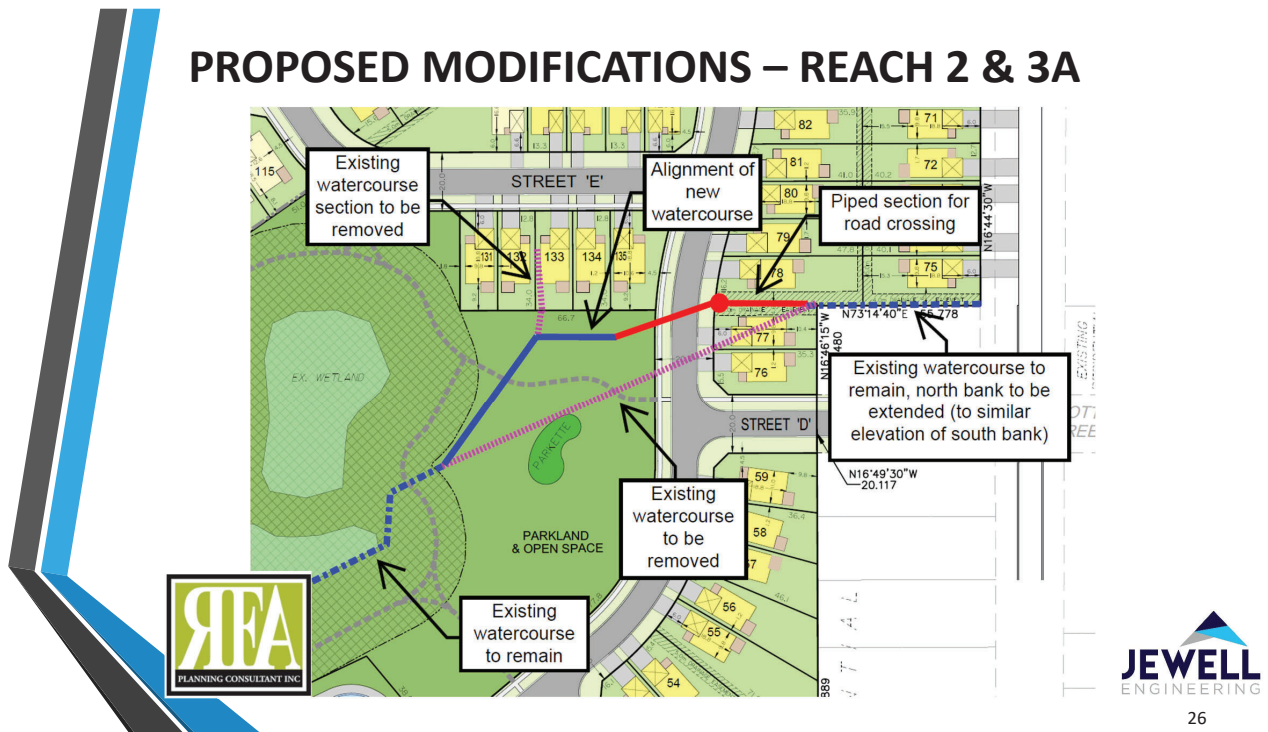


SUMMARY



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PROPOSED MODIFICATIONS – REACH 2 & 3A



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SUMMARY

- The proposed re-alignment provides:
 - Creation of riparian areas (native grasses, shrubs, forbs and trees) to provide terrestrial habitat, shade, and bank stability
 - Temperature benefits – maintaining cool water to contribute to downstream tributary via longer piped section
 - Reduction in urban sprawl through efficient use of land
 - Provision of prominent centralized park block with unsegregated use-able area
 - Permits efficient and affordable development of the lands (no unnecessary retaining walls needed for lots 131-135)
 - Efficient management of drainage
 - DFO reviewed the plan and supported it



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CONSULTATION SERVICES PROVIDED BY



Ruth Ferguson-Aulhouse, MCIP RPP
President



Jeremy Prah, B.Sc., EP, CAN-CISEC - Senior Ecologist
Kristina Domsic, B.E.S - Ecologist



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LOWER TRENT
CONSERVATION

STAFF REPORT

Date: June 23, 2023
To: Lower Trent Conservation Hearing Board
Re: Ontario Regulation 163/06 application for permission RP-23-108 to develop within the Shelter Valley Creek floodplain
Prepared by: Gage Comeau, Manager, Watershed Management, Planning and Regulations

DATE	June 23, 2023
DATE RECEIVED	Permit application received April 27, 2023 Permit application submission deemed complete – May 19, 2023 Request for Hearing received May 29, 2023
APPLICANT	Tom Trumble (Property Owner) Elliott Fledderus, P. Eng. with Jewell Engineering Inc. (Agent) (Copy of application, Elevations and Conceptual plan and Jewell Engineering Inc. Floodplain Opinion Letter Report Appendices 1-3)
LOCATION	2420 Shelter Valley Road Township of Alnwick/Haldimand, Northumberland County Geographic Township of Haldimand, Concession 3, Part of Lot 12 (Map attached, see Appendix 4)
OVERVIEW	Lower Trent Region Conservation Authority (LTC) received an application to undergo the placement of fill material (600 m3) within the regulated area associated with the Shelter Valley Creek floodplain. The proposed development is considered major development within the floodplain and does not comply with LTC’s Ontario Regulation 163/06 Policy Document (February 2022) and therefore, a permit cannot be issued by staff.
PROPOSAL	The proponent is seeking approval from LTC to undergo site preparation and alterations including fill placement associated with future development (i.e., construction of a single-family dwelling) in the Shelter Valley Creek floodplain on the subject property. The site plan and elevation survey (Appendix 2) shows the structure fully within the floodplain (167.00 metres CGVD1928).

SUMMARY

LTC is responsible for the administration of Ontario Regulation 163/06 – *Lower Trent Region Conservation Authority: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*. In order to guide the implementation of Ontario Regulation 163/06 made pursuant to Section 28 of the *Conservation Authorities Act*, the LTC Board of Directors has approved policies, most recently updated in February 2022. Where a proposal for development or alteration follows the approved policies or is not a significant deviation from the approved policies, designated authority staff may grant permission.

The vacant property is located within the Shelter Valley Creek floodplain and the current proposal is to undergo site preparation and alterations including fill placement associated with future development of the lot.

The proposed works involves the placement of approximately 600 m³ of engineered fill material and triggers the below noted policies with respect to development in the One Zone Regulatory Floodplain for Shelter Valley Creek. Designated staff are not in a position to grant approval of the Ontario Regulation 163/06 permit application as it does not conform with the policies.

From the information available to LTC, the Shelter Valley and Barnum House Creeks Floodplain Study (1978) by Crysler & Lanthem Ltd., illustrates that the subject property is in the floodplain for Shelter Valley Creek. A topographic base plan provided to LTC for review confirmed the property was within the regulatory floodplain of Shelter Valley Creek (See **Appendix 2**).

Key issue: A permit from LTC is required for the proposed development as they are to take place within a regulated area as described in Ontario Regulation 163/06. Specifically, within the Shelter Valley Creek floodplain (Section 2 (1) (c) of the Regulation, refer to **Appendix 5** for a copy of O. Reg. 163/06).

**Lower Trent Region Conservation Authority
Ontario Regulation 163/06 Policy Document (February 2022)**

Below are the applicable policies that are relevant to this permit application:

5.2.1.1 Development within One-Zone Regulatory Floodplain of River or Stream Valleys

- 1) Development within the Regulatory floodplain shall not be permitted.
- 2) Placement of fill, flood hazard protection and/or bank stabilization works to allow for future/proposed development or an increase in development envelope within the Regulatory floodplain shall not be permitted.

(LTC's 2022 Policies attached, see **Appendix 6** – Relevant sections only).

The applicant was notified that staff could not approve the permit application and of their right to a Hearing before the Authority's Board of Directors (see LTC Letter of Denial, May 26, 2023– **Appendix 7**).

The proponent requested LTC staff to proceed with the necessary arrangements for a Hearing (June 6, 2023 Notice of Hearing scheduled for July 13, 2023 – **Appendix 8**).

The proponent was provided the Hearing Guidelines.
(LTC's 2022 Hearing Guidelines attached, see **Appendix 9**).

**DEVELOPMENT
WITHIN HAZARD
LANDS**

The proposed works would involve the placement of fill to allow for future/proposed development within hazard lands, specifically the Shelter Valley Creek floodplain. This development activity is considered "development" pursuant to the *Conservation Authorities Act*. Section 2 (1) c. of Ontario Regulation 163/06, made under the authority of Section 28 of the *Conservation Authorities Act* states that no person shall undertake development or permit another person to undertake development in or on the areas within the jurisdiction of the Authority that are hazard lands. The Authority may grant permission for development in or on the areas described in subsection 2 (1) (c) if, in its opinion, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development.

This development proposal shows site alterations and the placement of engineered fill material in the Shelter Valley Creek floodplain.

The applicant has submitted the requested documentation for a complete application and the submission has been deemed complete.

Based on a review of the relevant policies that are applicable to this proposal, staff are not in a position to support the application as it does not conform with the policies. Please be advised, a peer-review of the engineering letter report was completed by JKN Consulting for LTC to provide comments related to this submission and the relevant general policies (refer to **Appendix 10**). Specifically, that the development activities would have limited or low potential impact to adjacent properties (i.e., will not increase the existing hazard or create new hazards,

and the control of flooding is not adversely affected during and post development.

STAFF CONCLUSION Hazard land management was delegated by the Province to LTC through the administration of Ontario Regulation 163/06 made pursuant to the *Conservation Authorities Act*. Through the administration of this Regulation, LTC staff review development proposals in an effort to limit development and protect people and property in flood susceptible areas. Overall, it is the goal of the Regulation Policy document and staff to minimize or prevent the impact of flooding. Deviation from the policies represents a risk that requires careful consideration.

The proposal requires a permit from LTC pursuant to Ontario Regulation 163/06 and does not conform to LTC's Ontario Regulation 163/06 Regulation Policy Document (see **Appendix 6**). Limiting development proposals such as this is intended to minimize the risk of property damage/loss and investment in an area that is susceptible to natural hazards. Therefore, staff are recommending denial of the Ontario Regulation 163/06 permit.



LOWER TRENT CONSERVATION

714 Murray Street, R.R. 1, Trenton, Ontario K8V 0N1

■ Tel: 613-394-4829 ■ Fax: 613-394-5226 ■ Website: www.ltc.on.ca ■ Email: information@ltc.on.ca

Registered Charitable Organization No. 107646598RR0001

Application

**Development, Interference with Wetlands &
Alterations to Shorelines & Watercourses
(Pursuant to Ontario Regulation 163/06)**

Please read, complete each section as required, date and sign this application

Project Description

Project Location (Civic Address): 2420 Shelter Valley Road

Municipality: Alnwick Haldimand

Nearest Intersection: Shelter Valley Road and Cooney Lane

Assessment Roll Number*: 1450116040071000

Lot: Part Lot 12

Concession: 3

Ward: Haldimand

*Note: The Roll Number can be found from your Property Assessment Notice, real estate agent, or online Map Viewer at www.ltc.on.ca (click on Planning & Permits)

Project Details

Description of Proposed Works:

Placement of fill within ineffective flow area of existing floodplain.

Amount & type of fill (m³) to be added/removed/moved:

Approximately 600 cubic metres of engineered fill material.

Note: Fill is defined as earth, sand, gravel, topsoil, building materials, rubble, rubbish, garbage or any other material whether similar to or different from any of the aforementioned materials, whether originating on the site or elsewhere, used or capable of being used to raise, lower, or in any way affect or alter the contours of the ground.

Proposed Start date (YYYY/MM/DD):

2023/07/01

Anticipated Date of Completion:

2023/09/15

Has a previous application to Lower Trent Conservation been filed on this property? If yes, please provide previous permit number.

 Yes No

Property Owner	
Name: Marion Trumble Estate (represented by Mr. Tom Trumble)	
Mailing Address: [REDACTED]	
City: [REDACTED]	Postal Code: [REDACTED]
Phone #: [REDACTED]	Cell #:
Email: [REDACTED]	Fax #:

Agent	
<input type="checkbox"/> Same as Property Owner	
Name: Elliott Fledderus, P. Eng.	
Company/Organization: Jewell Engineering Inc.	
Mailing Address: 1-71 Millennium Pkwy	
City: Belleville, ON	Postal Code: K8N 4Z5
Phone #: (613) - 969 - 1111	Cell #:
Email: elliott@jewelleng.ca	Fax #:

Note: Correspondence will be sent to agent, when applicable.

Approved Permit Circulation		
<input checked="" type="checkbox"/> email pdf copy ONLY	<input type="checkbox"/> mail hardcopy ONLY	<input type="checkbox"/> Pickup at LTC office <i>appointment required</i>

Pre-application Consultation	
<i>A pre-application consultation may be in the form of a phone conversation, a meeting, email message, and/or site visit.</i>	
Have you conducted any pre-application consultation with a Lower Trent Conservation staff member to determine site issues and technical requirements for a "complete" application?	
<input checked="" type="checkbox"/> Yes (please indicate method below)	LTC File Number: <input type="text"/>
<input checked="" type="checkbox"/> by phone <input type="checkbox"/> by meeting <input checked="" type="checkbox"/> by email <input type="checkbox"/> by site visit	
<input type="checkbox"/> No	

Further Considerations	
Is there a violation on this property under Ontario Regulation 163/06?	
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (provide details below) <input type="checkbox"/> Don't know	
If yes, please provide file # - ENF- <input type="text"/>	
Are <i>Planning Act</i> or Municipal approvals required?	
<input type="checkbox"/> No <input type="checkbox"/> Don't know <input checked="" type="checkbox"/> Yes (check all that apply)	
<input type="checkbox"/> Official Plan Amendment <input type="checkbox"/> Minor Variance <input type="checkbox"/> Zoning <input type="checkbox"/> Consent <input type="checkbox"/> Draft Plan of Subdivision <input checked="" type="checkbox"/> Building Permit <input type="checkbox"/> Site Plan <input checked="" type="checkbox"/> Septic <input type="checkbox"/> Other	
Do you authorize LTC to circulate approved permit to Municipal Planning & Building Officials?	
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
Are there any other required Approvals? (e.g. MNR, Fisheries and Oceans Canada)	
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (please select below) <input type="checkbox"/> Don't know	
<input type="checkbox"/> MNR <input type="checkbox"/> Parks Canada <input type="checkbox"/> DFO	

Notice of Collection

Pursuant to the *Municipal Freedom of Information and Protection of Privacy Act*, the personal information contained on this form is collected under the authority of the *Conservation Authorities Act*. This information is used to assess applications and, where approved, issue the Development, Interference with Wetlands & Alterations to Shorelines and Watercourses permit. Information on this form may be disclosed to Government and Municipal agencies for review and comment, or to members of the public through the Freedom of Information process. Questions about the collection of information should be directed to the Chief Administrative Officer, Lower Trent Conservation, 714 Murray Street, Trenton, ON, K8V 0N1, 613-394-4829.

Any false or misleading statement made on this application will render null and void any permission granted.

I, the owner, Tom Trumble of _____

Name Organization (if any)

solemnly declare that to my best knowledge and belief, all of the above information, plans and submissions to be true, valid and current. I further accept the aforementioned inclusions, terms, and conditions to be binding upon the registered owner(s) of the property and all assigned agents, contractors, and/or constructors acting on my behalf. My signature acknowledges the right to exercise binding authority.

*Signature of Owner: 	Date: <u>Apr. 25, 2023</u>
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* Signature or written authorization from the property owner is mandatory

Signature of Agent: 	Date: <u>Apr. 25, 2023</u>
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GENERAL CONDITIONS

1. By signing this application, consent is given to Lower Trent Conservation (herein referred to as LTC), its employees and other persons as required by LTC, to access the property for the purpose of inspection, obtaining information, and/or monitoring any and all works, activities, and/or construction pertaining to the property in addition to the works as approved under cover of any permit issued by LTC.
2. The owner and agent agree:
 - a. To indemnify and save harmless LTC and its officers, employees, or agents, from and against all damages, loss, costs, claims, demands, actions and proceedings, arising out of or resulting from any act or omission of the owner and/or agent or any of their employees or contractors relating to any of the particulars, terms, or conditions of this permission;
 - b. This permission shall not release the owner/agent from any legal liability or obligation and remains in force subject to all limitations, requirements, and liabilities imposed by law; and,
 - c. All complaints arising from the execution of the works authorized under this permission shall be reported immediately by the owner/agent to LTC. The owner/agent shall indicate any action which has been taken, or is planned to be taken, if any, with regard to each complaint.
3. Permits granted by LTC are not transferrable and are issued to the current owner of the property only.
4. The owner/agent agrees that, should the works be carried out contrary to the terms of this permission, LTC may enter onto the property and cause the terms to be satisfied at the expense of the owner.
5. The works 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 permission.
6. The owner/agent agrees to install and maintain all sediment controls as directed by LTC staff, until all disturbed areas have been stabilized.
7. All disturbed areas shall be seeded, sodded, or stabilized in a manner acceptable to LTC as soon as possible, and prior to the expiry of this permission.
8. The owner/agent agrees to maintain all existing drainage patterns, and not to obstruct external drainage from other adjacent private or municipal lands.
9. The owner/agent agrees to contact LTC once the development has commenced so an inspection of the development can be undertaken.
10. Permits granted by LTC do not replace building permits or any other permits or approvals issued through Municipal offices and/or other levels of Government. A permit under Ontario Regulation 163/06 does not constitute LTC approval of any related *Planning Act* applications. Separate approval of all related applications must be obtained from their respective agency and LTC.
11. Permits issued by LTC are valid for a period of two (2) years from the date of issue. After a permit has expired, a new application must be submitted. The current fee schedule during submission applies.
12. It is the responsibility of the owner/agent to ensure that a valid permit is in effect at the time the work is occurring.

LANDOWNER AUTHORIZATION FORM

Subject Property		
Civic Address: 2420 Shelter Valley Road		
Municipality: Alnwick Haldimand		
Assessment Roll Number: 1450116040071000		
Lot: Part Lot 12	Concession: 3	Ward: Haldimand

If an application is to be submitted by a solicitor or 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.

If the application is to be prepared by a solicitor or agent, authorization should not be given until the application and its attachments have been examined and approved by you, the owner(s).

I/we Tom Trumble

hereby authorize Jewell Engineering Inc.

to provide as my agent any required authorization or consents, to submit the enclosed application to Lower Trent Conservation, and to appear on my behalf at any hearing(s) of the application and to provide any information or material required by the Lower Trent Conservation Board of Directors relevant to the application for purposes of obtaining a permit to develop, interfere with a wetland or alter a shoreline or watercourse, in accordance with the requirements of Ontario Regulation 163/06 as amended.

Signature of Owner: [Redacted] Date: Apr. 25, 2023

Signature of Agent: [Signature] Date: Apr. 25, 2023

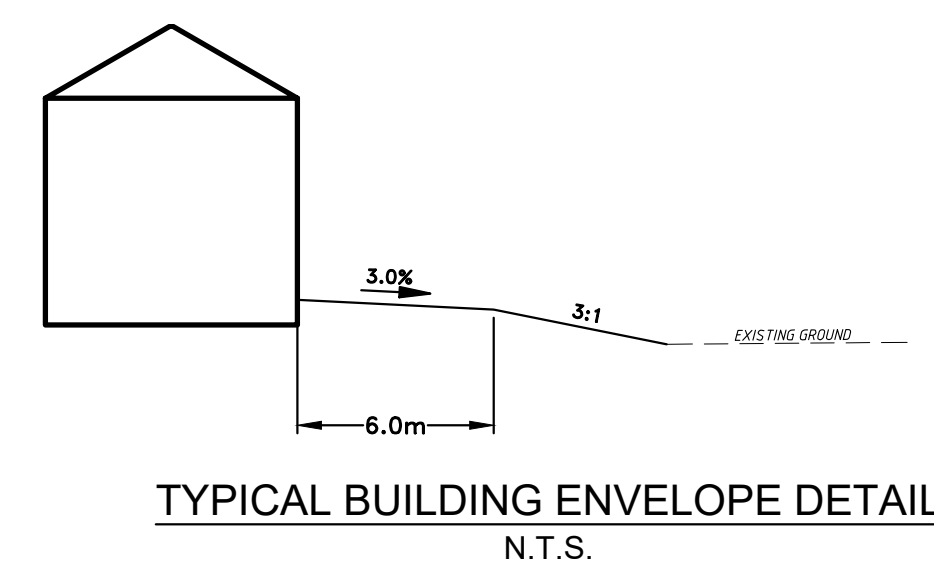
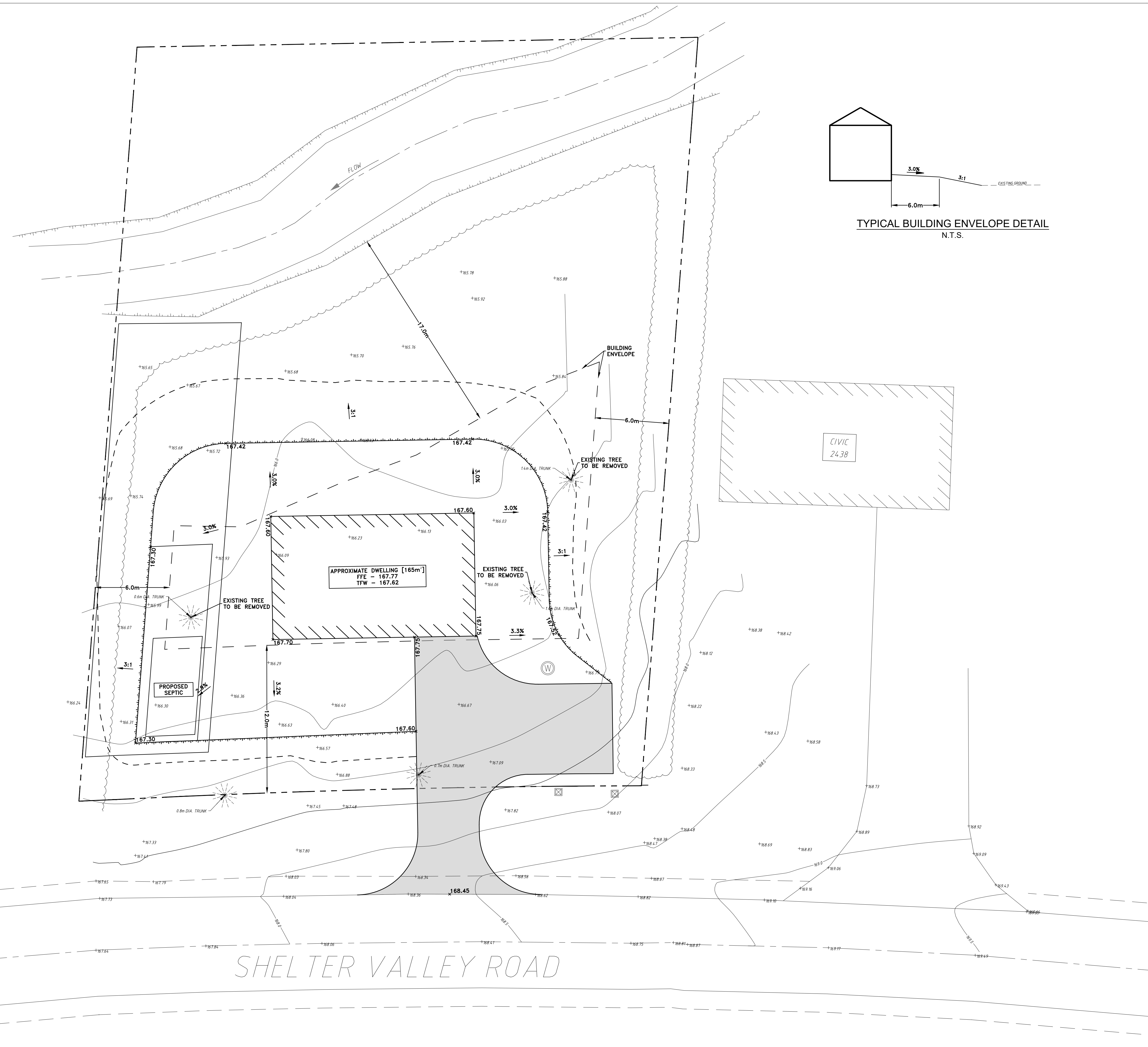
SUBMISSION REQUIREMENTS

Permit applications may be submitted by email to permits@ltc.on.ca. Application fees will be invoiced by email. If no email address is available, other payment options will be discussed. Current application fees can be found on our fee schedule at www.ltc.on.ca or contact Lower Trent Conservation at 613-394-4829. Applications will not be processed until the fee is paid in full. **The application fee is non-refundable.**

FOR OFFICE USE ONLY																															
Application File Number:	Permit File Number:																														
Subwatershed:	Regulated Feature:																														
Permit application rec'd:	Application complete:																														
Deposit Required: Ontario Land Surveyor (\$500) <input type="checkbox"/> Yes <input type="checkbox"/> No Coastal Engineer (\$1,000) <input type="checkbox"/> Yes <input type="checkbox"/> No																															
Amendment request rec'd:	Amended application complete:																														
<table style="width:100%; border: none;"> <tr> <td style="width: 15%; border: none;">Fee Required:</td> <td style="border: none;"> <input type="checkbox"/> Routine </td> <td style="border: none; text-align: right;">\$100</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"> <input type="checkbox"/> Minor </td> <td style="border: none; text-align: right;">\$220</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"> <input type="checkbox"/> Standard </td> <td style="border: none; text-align: right;">\$550</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"> <input type="checkbox"/> Complex (require review of 1 technical study) </td> <td style="border: none; text-align: right;">\$825</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"> <input type="checkbox"/> Complex (require review of 2 or more technical studies) </td> <td style="border: none; text-align: right;">\$1,100</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"> <input type="checkbox"/> Permit amendment (administrative) </td> <td style="border: none; text-align: right;">\$100</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"> <input type="checkbox"/> Permit amendment (significant) - 1/2 original application fee </td> <td style="border: none; text-align: right;">_____</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"> <input type="checkbox"/> Compliance permit - double the application fee </td> <td style="border: none; text-align: right;">_____</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"> <input type="checkbox"/> Restoration agreement - double the application Fee </td> <td style="border: none; text-align: right;">_____</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"> <input type="checkbox"/> Deposit </td> <td style="border: none; text-align: right;">_____</td> </tr> </table>		Fee Required:	<input type="checkbox"/> Routine	\$100		<input type="checkbox"/> Minor	\$220		<input type="checkbox"/> Standard	\$550		<input type="checkbox"/> Complex (require review of 1 technical study)	\$825		<input type="checkbox"/> Complex (require review of 2 or more technical studies)	\$1,100		<input type="checkbox"/> Permit amendment (administrative)	\$100		<input type="checkbox"/> Permit amendment (significant) - 1/2 original application fee	_____		<input type="checkbox"/> Compliance permit - double the application fee	_____		<input type="checkbox"/> Restoration agreement - double the application Fee	_____		<input type="checkbox"/> Deposit	_____
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Method of Payment: <input type="checkbox"/> Cheque <input type="checkbox"/> Credit Card <input type="checkbox"/> Cash																															
Deposit Returned: _____ Date Returned: _____																															
<input type="checkbox"/> Permission for Minor Works: <input type="checkbox"/> Undertake minor landscaping involving the placement, removal or re-grading of material up to 20m ³ (minor fill) <input type="checkbox"/> Minor shoreline protection up to 20m ³ <input type="checkbox"/> Undertake watercourse or shoreline alteration involving less than 20m ² (minor alteration) <input type="checkbox"/> Construct a non-habitable accessory structure up to 10m ² <input type="checkbox"/> Construct a habitable addition up to 10m ² <input type="checkbox"/> Construct a deck up to 23m ² <input type="checkbox"/> Install a pool up to 10m ²	<input type="checkbox"/> Permission for Standard or Complex Permit: <input type="checkbox"/> Construct, reconstruct, erect or place a building or structure (greater than 10m ²) <input type="checkbox"/> Change building/structure so that it increases its size by 10m ² or more, or increases the number of dwelling units <input type="checkbox"/> Temporary or permanent placing, dumping or removal of any material originating on the site or elsewhere greater than 20m ³ <input type="checkbox"/> Change or interfere with a wetland <input type="checkbox"/> Change or interfere with a watercourse <input type="checkbox"/> Shoreline protection work <input type="checkbox"/> Construct a deck greater than 23m ² <input type="checkbox"/> Install a pool greater than 10m ²																														
Permit Approval: <div style="border: 2px solid black; border-radius: 15px; height: 80px; margin-top: 5px;"></div>	Amendment: <div style="border: 2px solid black; border-radius: 15px; height: 80px; margin-top: 5px;"></div>																														

04/19/2023

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GENERAL NOTES:
 - ALL INFORMATION TO BE VERIFIED ON SITE PRIOR TO COMMENCING ANY WORK. ANY DISCREPANCIES ARE TO BE REPORTED TO THE CONSULTANT IMMEDIATELY.
 - ALL UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL CONFIRM THE LOCATION ON SITE AND ASSUME ALL LIABILITY FOR DAMAGE TO ALL UTILITIES.
 - EXCLUDING THE BENCHMARK AND DESCRIPTION PROVIDED FOR THIS PROJECT, NO OTHER ELEVATIONS ARE TO BE USED AS A REFERENCE ELEVATION FOR ANY PURPOSE.

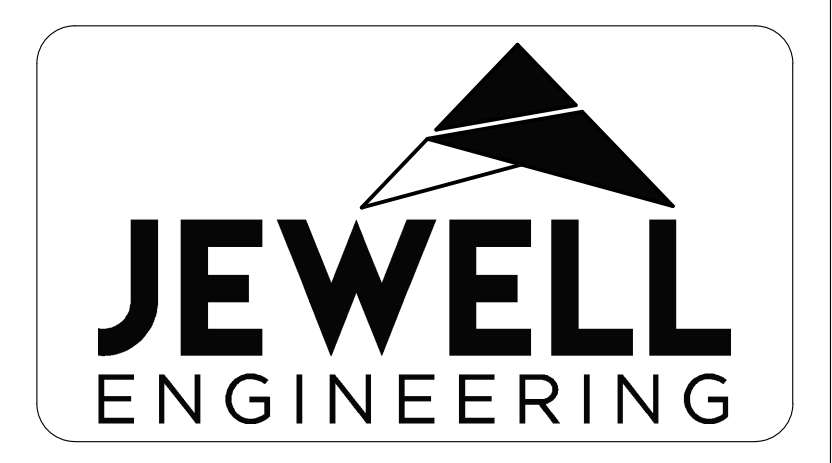
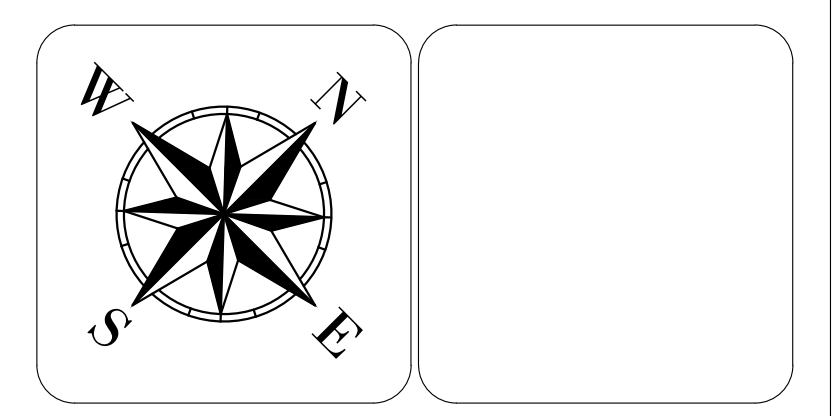
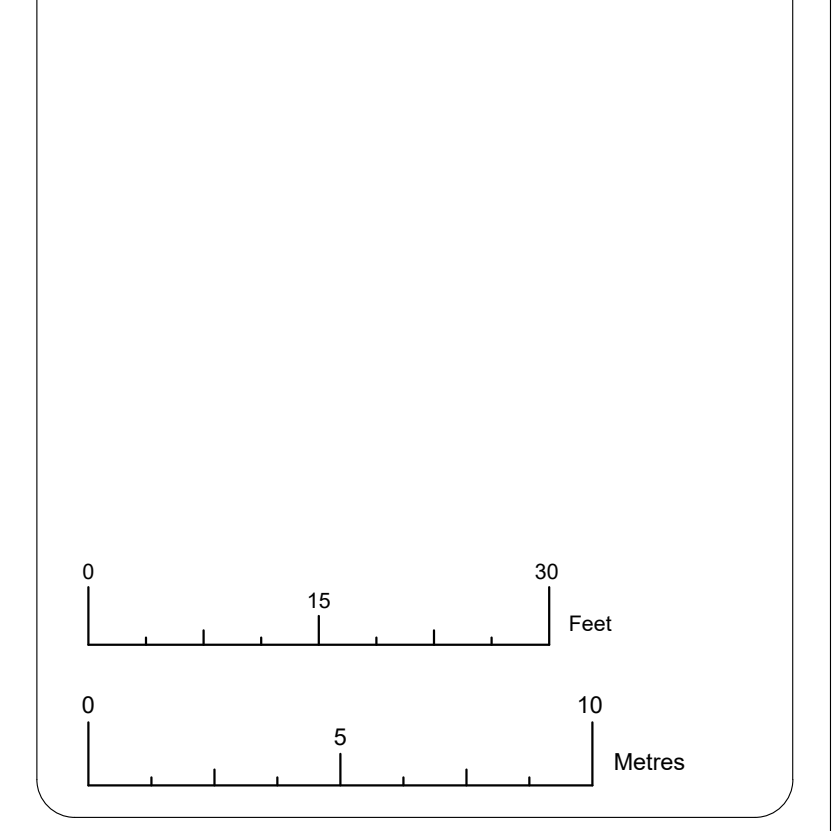
METRIC NOTE:
 - ALL DIMENSIONS SHOWN ARE IN METRES OR MILLIMETRES, UNLESS OTHERWISE NOTED.

GEOMETRIC NOTE:
 - ALL SURVEY DATA SHOWN ON THIS DRAWING WAS RECORDED USING REAL-TIME KINETIC (RTK) GPS OBSERVATIONS IN REFERENCE TO UTM 18 NORTH COORDINATE SYSTEM.
 - ALL ELEVATIONS ARE IN REFERENCE TO LOCAL DATUM NAD83 - GEODETIC MODEL HTFZ, UNLESS DESCRIBED OTHERWISE.
 - DRAWINGS ARE NOT TO BE SCALED.

REVISIONS			
NO.	DATE	DESCRIPTION	BY

LEGEND		
EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY LINE	
* 86.03	SPOT ELEVATION	167.75
	GRADIENT	3.0%
	DIRECTION OF DRAINAGE	→
	TOP OF SLOPE	———
	TOE OF SLOPE	---

FFE - FINISHED FLOOR ELEVATION
TFW - TOP FOUNDATION WALL ELEVATION



TOM TRUMBLE
 2420 SHELTER VALLEY ROAD
 GRAFTON, ONTARIO

CONCEPT PLAN

DRAWN BY: MB	PROJECT NO: 220-5224
DESIGNED BY:	DATE: April 2023
CHECKED BY: NG	SCALE: HORIZONTAL - 1:150 VERTICAL - N/A
APPROVED BY:	CONTRACT NO: DRAWING NO: CP-1



April 11, 2023

Attn: Tom Trumble

**RE: Flood Assessment Opinion Letter
Jewell Engineering File No. 220-5224**

Mr. Trumble,

Jewell Engineering Inc. (JE) has completed this opinion letter to provide recommendations regarding potential flood concerns as it relates to your lot at 2420 Shelter Valley Road. It is understood that your objective is to build a residential dwelling on the property for your future retirement home.

Per LTC correspondence, the lot currently has elevations below the regulatory flood limit. For a dwelling to be placed on the subject lot, it must:

1. present no negative impacts to adjacent properties, and
2. have floodproofing measures to ensure the home is protected from the flood hazard in the regulatory storm event.

The objective of this *Flood Assessment Opinion Letter* is to discuss whether a dwelling on the subject property meets these requirements.

As part of our assessment, we reviewed the following information:

- a site-specific survey using GPS and a total station,
- LTC's regulatory flood elevation and correspondence,
- ineffective flow areas due to adjacent dwellings, and
- septic and well locations for the subject lot.

For a complete application, LTC requested a concept plan identifying a building footprint area, septic and well locations with relevant setbacks, and an entrance location. The concept plan is attached for your reference.

BELLEVILLE
(HEAD OFFICE)
1-71 Millennium Pkwy.
Belleville ON K8N 4Z5
Tel: 613-969-1111
info@jewelleng.ca

TOLL FREE
1-800-966-4338

KINGSTON
208-4 Catarqui St.
Kingston ON K7K 1Z7
Tel: 613-389-7250
kingston@jewelleng.ca

OAKVILLE
214-231 Oak Park Boulevard
Oakville, ON L6H 7S8
Tel: 905-257-2880
oakville@jewelleng.ca

www.jewelleng.ca

Floodproofing Measures

The 1st objective is to ensure the proposed dwelling can be floodproofed in the regulatory storm event. A reliable floodproofing measure is engineered fill. This engineered fill material supports the slab on grade foundation for the dwelling (as discussed there will be no basement). The engineered fill will be placed to have the final floor of the building a minimum of 0.3m above the regulatory flood elevation that was provided by LTC.

The regulatory flood elevation provided by LTC is 167.0m. The proposed dwelling has a final floor elevation of 167.77m. This is more than 2 ft above the regulatory water surface elevation (WSEL). Similarly, the driveway elevation is also above the regulatory WSEL. Therefore, the building will be outside of the flood hazard, and will have safe access in all return period events as well as the regulatory storm.

With the above mitigation measures, Objective #1 is satisfied.

It is noted that Carolle Gauthier was hired for the septic design. It is understood that the lot will have a raised septic bed with an elevation 0.3m above the regulatory flood level.

Assessment of Potential Impacts on Adjacent Properties

LTC provided the flood elevation along the property, and JE used this elevation in conjunction with the topographic data to determine the depth of flooding at the location of the proposed addition. This data was used in combination with the floodline elevation provided by LTC to determine if the structure has any significant impact on the floodplain.

LTC policies do not allow placement of fill within the floodplain unless it can be demonstrated that there will be no negative impacts to the subject property or any other properties. Their policies will also trigger a board hearing, as it is our understanding that their staff do not have the authority to apply discretion on these types of applications.

The theory behind the policy is that lost storage volume within the flood system may increase nearby water surface elevations if excessive amounts of fill are placed in the overbank areas. Based on an understanding of engineering principles, similar past experience, and the reasons described below, JE has no concerns with the relatively small amount of fill needed to floodproof your proposed dwelling.

Ineffective Flow Areas:

One approach to assess potential impacts on the floodplain is to consider the cross-sectional area of the creek and its overbanks. In practice, this approach can utilize a hydraulic modeling program. In hydraulic models, the user is responsible for adding ineffective flow areas. Ineffective flow areas represent areas that offer little to no flow conveyance.

For the lot at 2420 Shelter Valley Road, there are existing buildings immediately upstream and downstream of the lot. This would require the user to establish the lot at 2420 Shelter Valley Road as an ineffective flow area. The bounding buildings would prevent water from flowing in a direct upstream to downstream flow path; rather, the water in the regulatory flood event would only spill laterally from the creek to the subject lot, and with low flow velocities.

With the subject lot functioning as an ineffective flow area in existing conditions, the proposed dwelling would have no effect on flood behavior since it does not contribute to the conveyance of the creek or its overbank flood flows.

Flood System Storage:

For the overall flood system, increases in WSELs only occur when there is a significant loss of storage relative to the size of the overall system. Hence, JE investigated the amount of proposed fill versus the flood storage available within the system.

The subject watercourse is a tributary to Shelter Valley Creek. This tributary has an 18.0 km² catchment area and the length of the main channel is 10.5 km. The average creek width is estimated to be 4.5m with an average channel flow depth of 1.5m in the regulatory storm event. With these characteristics, the creek channel would offer more than 70,000 m³ of storage. Majority of storage in a regulatory storm event occurs within the overbank areas since channels typically can only contain the 2-yr flood flows. It is estimated that another 200,000 m³ would be available in the overbanks. Therefore, the flood storage for this tributary is expected to be a minimum of 270,000 m³. This conservatively does not include many smaller tributaries or the swamp and marsh areas that comprise roughly 8% of the watershed and would significantly increase the system storage.

The proposed dwelling would be within the southern half of the lot. The existing average elevation within the area of proposed fill is 166.25m. The average depth of fill needed to raise this land outside of the floodplain is 0.75m. With a footprint area of 750 m², the fill placed within the existing floodplain is 570 m³.

For comparison, the proposed fill is 0.2% of the flood storage of the tributary, not including its sub-tributaries or swamp and marsh areas. Evidently, the proposed fill is negligible relative to the size of the creek system and would have no appreciable impact on the flood system storage.

In a similar project completed in 2022, JE completed a detailed hydraulic model for Glen Miller Creek with the objective of determining the potential impacts of fill within the floodplain. The proposed fill was much larger at 3,000 m³ since the study was completed for a future commercial development. While the fill amount was larger, the creek system was smaller, with a contributing area of 12.2 km² and a main channel length of 9.9 km². The results of this

detailed hydraulic model showed no change in water levels in the regulatory storm event, and subsequently no negative impacts on adjacent property owners.

With larger fill and a smaller creek system for the Glen Miller Creek project relative to the subject lot at 2420 Shelter Valley Road, this similar project further supports JE's opinion that a dwelling on the subject lot would present no negative impacts to adjacent property owners. It is our opinion that Objective #2 is satisfied.

Conclusion and Recommendations

It is our engineering opinion that the proposed dwelling on the subject lot at 2420 Shelter Valley Road can be floodproofed and constructed without any negative impacts to other property owners. It is recommended that engineered fill be placed to support a slab on grade foundation (no basement) to establish a finished floor elevation that is a minimum of 0.3m above the regulatory flood elevation of 167.0 that was provided from LTC.

It is recommended that the setbacks and building envelope shown in the attached concept plan be followed during construction.

Based on an understanding of engineering principles, similar past projects, and the reasons described herein, we have no flood concerns for the lot at 2420 at Shelter Valley Road assuming that our concept plan and recommended floodproofing measures are followed.











Sincerely,

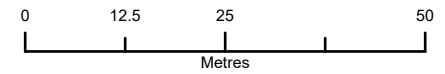


Elliott Fledderus, P. Eng.
Jewell Engineering Inc.


2420 Shelter Valley Road
AH, Haldimand
Con 3, Lot 12

Legend

-  O.Reg. 163/06 Screening Area
-  Parcels
- Water**
 -  Stream
 -  Virtual Flow Connector
- Wetlands (MNRF)**
 -  Unevaluated wetland
 -  Evaluated wetland (PSW)
 -  Evaluated wetland (non-PSW)
- Field Verified Wetland**
 -  Yes (Present)
 -  No (Not Present)
- Flood & Erosion Lines**
 -  Floodlines

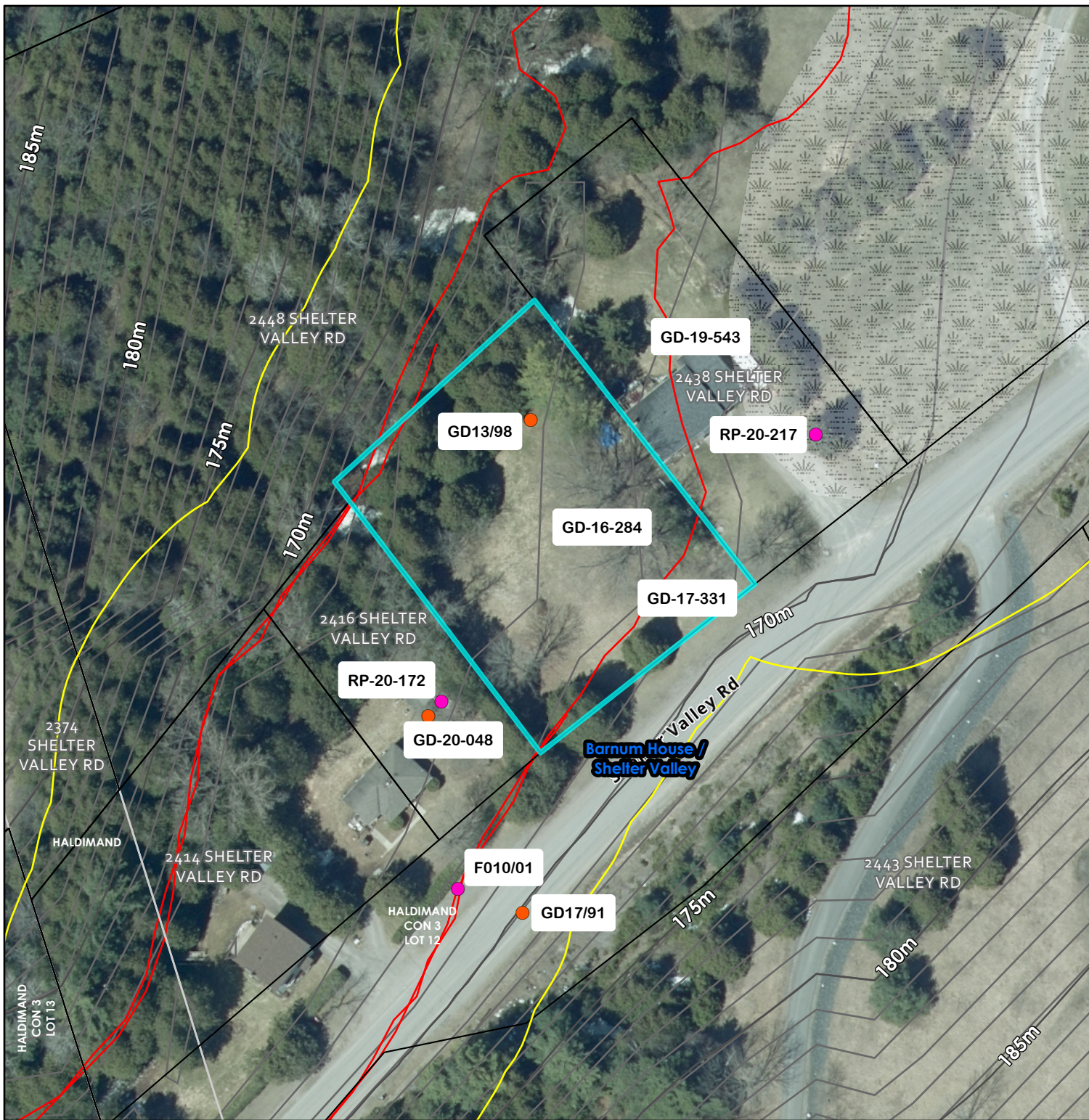


Map produced by Lower Trent Conservation
Includes material Copyright 2023 Queen's Printer for Ontario
Note: Property lines shown on this map are approximate only and may be an inaccurate representation of the legal property limits. A legal survey is required to define the legal property limits.



LOWER TRENT
CONSERVATION

User: technicaladmin May 1, 2023 2:55 PM



Conservation Authorities Act
Loi sur les offices de protection de la nature

ONTARIO REGULATION 163/06

**LOWER TRENT REGION CONSERVATION AUTHORITY: REGULATION OF
DEVELOPMENT, INTERFERENCE WITH WETLANDS AND ALTERATIONS TO SHORELINES
AND WATERCOURSES**

Consolidation Period: From February 8, 2013 to the [e-Laws currency date](#).

Last amendment: O. Reg. 67/13.

This Regulation is made in English only.

Definition

1. In this Regulation,

“Authority” means the Lower Trent Region Conservation Authority. O. Reg. 163/06, s. 1.

Development prohibited

2. (1) Subject to section 3, no person shall undertake development or permit another person to undertake development in or on the areas within the jurisdiction of the Authority that are,

(a) 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 beaches, including the area from the furthest offshore extent of the Authority’s boundary to the furthest landward extent of the aggregate of the following distances:

(i) the 100 year flood level, plus the appropriate allowance for wave uprush shown in the most recent document entitled “Lake Ontario Shoreline Management Plan”, or as identified in the most recent document entitled “Cramahe Shorelands Project” for the Township of Cramahe or in the most recent document entitled “Alnwick/Haldimand Lake Ontario Shorelands Project” for the Township of Alnwick/Haldimand, available at the head office of the Authority,

(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 shown in the most recent document entitled “Lake Ontario Shoreline Management Plan”, or as identified in the most recent document entitled “Cramahe Shorelands Project” for the Township of Cramahe or in the most recent document entitled “Alnwick/Haldimand Lake Ontario Shorelands Project” for the Township of Alnwick/Haldimand, available at the head office of the Authority,

(iii) where a dynamic beach is associated with the waterfront lands, the appropriate allowance inland to accommodate dynamic beach movement shown in the most recent document entitled “Lake Ontario Shoreline Management Plan”, or as identified in the most recent document entitled “Cramahe Shorelands Project” for the Township of Cramahe or in the most recent document entitled “Alnwick/Haldimand Lake Ontario Shorelands Project” for the Township of Alnwick/Haldimand, available at the head office of the Authority, and

(iv) an allowance of 15 metres inland;

(b) 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 in accordance with the following rules:

(i) where the river or stream valley is apparent and has stable slopes, the valley extends from the stable top of bank, plus 15 metres, to a similar point on the opposite side,

(ii) 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,

(iii) where the river or stream valley is not apparent, the valley extends the greater of,

(A) the distance from a point outside the edge of the maximum extent of the flood plain under the applicable flood event standard, plus 15 metres, 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, plus 15 metres, to a similar point on the opposite side;

(c) hazardous lands;

(d) wetlands; or

(e) other areas where development could interfere with the hydrologic function of a wetland, including areas within 120 metres of all provincially significant wetlands and areas within 30 metres of all other wetlands. O. Reg. 163/06, s. 2 (1); O. Reg. 67/13, s. 1 (1, 2).

(2) All areas within the jurisdiction of the Authority that are described in subsection (1) are delineated as the “Regulation Limit” shown on a series of maps filed at the head office of the Authority under the map title “Ontario Regulation 97/04: Regulation for Development, Interference with Wetlands and Alterations to Shorelines and Watercourses”. O. Reg. 67/13, s. 1 (3).

(3) If there is a conflict between the description of areas in subsection (1) and the areas as shown on the series of maps referred to in subsection (2), the description of areas in subsection (1) prevails. O. Reg. 67/13, s. 1 (3).

Permission to develop

3. (1) The Authority may grant permission for development in or on the areas described in subsection 2 (1) if, in its opinion, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development. O. Reg. 163/06, s. 3 (1).

(2) The permission of the Authority shall be given in writing, with or without conditions. O. Reg. 163/06, s. 3 (2).

(3) Subject to subsection (4), the Authority’s executive committee, or one or more employees of the Authority that have been designated by the Authority for the purposes of this section, may exercise the powers and duties of the Authority under subsections (1) and (2) with respect to the granting of permissions for development in or on the areas described in subsection 2 (1). O. Reg. 67/13, s. 2.

(4) A designate under subsection (3) shall not grant a permission for development with a maximum period of validity of more than 24 months. O. Reg. 67/13, s. 2.

Application for permission

4. A signed application for permission to undertake development shall be filed with the Authority and shall contain the following information:

1. Four copies of a plan of the area showing the type and location of the proposed development.
2. The proposed use of the buildings and structures following completion of the development.
3. The start and completion dates of the development.
4. The elevations of existing buildings, if any, and grades and the proposed elevations of buildings and grades after the development.
5. Drainage details before and after the development.
6. A complete description of the type of fill proposed to be placed or dumped.
7. Such other technical studies or plans as the Authority may request. O. Reg. 163/06, s. 4; O. Reg. 67/13, s. 3.

Alterations prohibited

5. Subject to section 6, no person shall straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or change or interfere in any way with a wetland. O. Reg. 163/06, s. 5.

Permission to alter

6. (1) The Authority may grant permission 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. O. Reg. 163/06, s. 6 (1); O. Reg. 67/13, s. 4 (1).

(2) The permission of the Authority shall be given in writing, with or without conditions. O. Reg. 163/06, s. 6 (2).

(3) Subject to subsection (4), the Authority’s executive committee, or one or more employees of the Authority that have been designated by the Authority for the purposes of this section, may exercise the powers and duties of the Authority under subsections (1) and (2) with respect to the granting of permissions for alteration. O. Reg. 67/13, s. 4 (2).

(4) A designate under subsection (3) shall not grant a permission for alteration with a maximum period of validity of more than 24 months. O. Reg. 67/13, s. 4 (2).

Application for permission

7. A signed application for permission to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse or change or interfere with a wetland shall be filed with the Authority and shall contain the following information:

1. Four copies of a plan of the area showing plan view and cross-section details of the proposed alteration.
2. A description of the methods to be used in carrying out the alteration.
3. The start and completion dates of the alteration.
4. A statement of the purpose of the alteration.
5. Such other technical studies or plans as the Authority may request. O. Reg. 163/06, s. 7; O. Reg. 67/13, s. 5.

Cancellation of permission

8. (1) The Authority may cancel a permission granted under section 3 or 6 if it is of the opinion that the conditions of the permission have not been met. O. Reg. 163/06, s. 8 (1); O. Reg. 67/13, s. 6 (1).

(2) Before cancelling a permission, the Authority shall give a notice of intent to cancel to the holder of the permission indicating that the permission will be cancelled unless the holder shows cause at a hearing why the permission should not be cancelled. O. Reg. 163/06, s. 8 (2).

(3) Following the giving of the notice under subsection (2), the Authority shall give the holder at least five days notice of the date of the hearing. O. Reg. 163/06, s. 8 (3); O. Reg. 67/13, s. 6 (2).

Period of validity of permissions and extensions

9. (1) The maximum period, including an extension, for which a permission granted under section 3 or 6 may be valid is,
- (a) 24 months, in the case of a permission granted for projects other than projects described in clause (b); and
 - (b) 60 months, in the case of a permission granted for,
 - (i) projects that, in the opinion of the Authority or its executive committee, cannot reasonably be completed within 24 months from the day the permission is granted, or
 - (ii) projects that require permits or approvals from other regulatory bodies that, in the opinion of the Authority or its executive committee, cannot reasonably be obtained within 24 months from the day permission is granted. O. Reg. 67/13, s. 7.

(2) The Authority or its executive committee may grant a permission for an initial period that is less than the applicable maximum period specified in subsection (1) if, in the opinion of the Authority or its executive committee, the project can be completed in a period that is less than the maximum period. O. Reg. 67/13, s. 7.

(3) If the Authority or its executive committee grants a permission under subsection (2) for an initial period that is less than the applicable maximum period of validity specified in subsection (1), the Authority or its executive committee may grant an extension of the permission if,

- (a) the holder of the permission submits a written application for an extension to the Authority at least 60 days before the expiry of the permission;
- (b) no extension of the permission has previously been granted; and
- (c) the application sets out the reasons for which an extension is required and, in the opinion of the Authority or its executive committee, demonstrates that circumstances beyond the control of the holder of the permission will prevent completion of the project before the expiry of the permission. O. Reg. 67/13, s. 7.

(4) When granting an extension of a permission under subsection (3), the Authority or its executive committee may grant the extension for the period of time requested by the holder in the application or for such period of time as the Authority or its executive committee deems appropriate, as long as the total period of validity of the permission does not exceed the applicable maximum period specified in subsection (1). O. Reg. 67/13, s. 7.

(5) For the purposes of this section, the granting of an extension for a different period of time than the period of time requested does not constitute a refusal of an extension. O. Reg. 67/13, s. 7.

(6) The Authority or its executive committee may refuse an extension of a permission if it is of the opinion that the requirements of subsection (3) have not been met. O. Reg. 67/13, s. 7.

(7) Before refusing an extension of a permission, the Authority or its executive committee shall give notice of intent to refuse to the holder of the permission, indicating that the extension will be refused unless,

- (a) the holder requires a hearing, which may be before the Authority or its executive committee, as the Authority directs; and
- (b) at the hearing, the holder satisfies the Authority, or the Authority's executive committee, as the case may be,

- (i) that the requirements of clauses (3) (a) and (b) have been met, and
- (ii) that circumstances beyond the control of the holder will prevent completion of the project before the expiry of the permission. O. Reg. 67/13, s. 7.

(8) If the holder of the permission requires a hearing under subsection (7), the Authority or its executive committee shall give the holder at least five days notice of the date of the hearing. O. Reg. 67/13, s. 7.

(9) After holding a hearing under subsection (7), the Authority or its executive committee shall,

(a) refuse 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 permission does not exceed the applicable maximum period specified in subsection (1). O. Reg. 67/13, s. 7.

(10) Subject to subsection (11), one or more employees of the Authority that have been designated by the Authority for the purposes of this section may exercise the powers and duties of the Authority under subsections (2), (3) and (4), but not those under subsections (6), (7), (8) and (9). O. Reg. 67/13, s. 7.

(11) A designate under subsection (10) shall not grant an extension of a permission for any period that would result in the permission having a period of validity greater than 24 months. O. Reg. 67/13, s. 7.

Appointment of officers

10. The Authority may appoint officers to enforce this Regulation. O. Reg. 163/06, s. 10.

Flood event standards

11. (1) The applicable flood event standards used to determine the maximum susceptibility to flooding of lands or areas within the watersheds in the area of jurisdiction of the Authority are the Timmins Flood Event Standard and the 100 year flood level plus wave uprush, described in Schedule 1. O. Reg. 163/06, s. 11 (1).

(2) The Timmins Flood Event Standard applies to all watersheds within the area of jurisdiction of the Authority except for,

(a) the main channels of Rice Lake and Trent River, where the applicable standard is rainfall or snowmelt, or a combination of rainfall and snowmelt, that would produce the water surface elevations above Canadian Geodetic Datum described in Table 1;

(b) Lake Ontario in the Great Lakes-St. Lawrence River System where the 100 year flood level plus wave uprush applies.

TABLE 1
WATER SURFACE ELEVATIONS

Location	Elevation
Rice Lake	187.9 metres
Trent River:	
Below Dam #1 (Trenton)	77.2 metres
Below Dam #2 (Sidney)	81.3 metres
Below Dam #3 (Glen Miller)	87.7 metres
Below Dam #4 (Batawa)	95.7 metres
Below Dam #5 (Trent)	101.7 metres
Below Dam #6 (Frankford)	107.9 metres
Below Dam #7 (Glen Ross)	113.5 metres
Below Dam #8 (Meyers)	117.9 metres
Below Dam #9 (Hagues Reach)	128.1 metres
Below Dam # 10 (Ranney Falls)	143.4 metres
Below Dam #11 (Campbellford)	148.3 metres
Below Dam #12 (Crowe Bay)	154.3 metres
Below Dam #13 (Healy Falls)	175.5 metres
Below Dam #14 (Hastings)	186.7 metres

O. Reg. 163/06, s. 11 (2).

12. REVOKED: O. Reg. 67/13, s. 8.

13. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 163/06, s. 13.

SCHEDULE 1

1. 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 2; 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 2 shall be modified by the percentage amount shown in Column 2 of Table 3 opposite the size of the drainage area set out opposite thereto in Column 1 of Table 3.

TABLE 2

15 millimetres of rain in the first hour
20 millimetres of rain in the second hour
10 millimetres of rain in the third hour
3 millimetres of rain in the fourth hour
5 millimetres of rain in the fifth hour
20 millimetres of rain in the sixth hour
43 millimetres of rain in the seventh hour
20 millimetres of rain in the eighth hour
23 millimetres of rain in the ninth hour
13 millimetres of rain in the tenth hour
13 millimetres of rain in the eleventh hour
8 millimetres of rain in the twelfth hour

TABLE 3

Column 1	Column 2
Drainage Area (Square Kilometres)	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

2. The 100 year flood level means the peak instantaneous still water level plus an allowance for wave uprush and other water-related hazards that has a probability of occurrence of one per cent during any given year.

O. Reg. 163/06, Sched. 1.

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**Lower Trent Region
Conservation Authority**

**Ontario Regulation 163/06
Policy Document**

**Approved by
Lower Trent Region Conservation Authority
Board of Directors**

February 10, 2022

1.9 Flood, Erosion and Dynamic Beach Hazard Applications in the Lower Trent Conservation Watershed

The regulatory standard for the Lower Trent watershed is:

- Lake Ontario: 1:100-year event
- Trent River: 1:100-year event
- All other watercourses: Timmins event

In the LTC watershed, the following flood, erosion and dynamic beach hazards are applied and the reference documents are listed here for each delineated floodplain.

1.9.1 Lake Ontario

The flood hazard for Lake Ontario is based on the 100-year flood limit that is comprised of the 100-year flood level plus wave uprush. The erosion hazard is based on the potential for erosion in a 100-year time frame. These hazards along with dynamic beach hazards for Lake Ontario were first identified in the following report:

- Lake Ontario Shoreline Management Plan (LOSMP), 1990, by Sandwell, Swan & Wooster.

Final flood hazard elevations were provided in an update, dated December 1992. Subsequent shoreline studies for the Township of Alnwick/Haldimand and Township of Cramahe were undertaken to build on the information provided in the “Sandwell Report”. The updated studies were:

- *Cramahe Shorelands Project, 1997*
- *Alnwick/Haldimand Township Lake Ontario Shorelands Project, 2002.*

In 2018 to 2020, LTC undertook an update to the Shoreline Management Reports in partnership with the Ganaraska Region Conservation Authority (GRCA) and Central Lake Ontario Conservation Authority (CLOCA). The resulting report provided much needed updates to flood, erosion and dynamic beach hazards along the Lower Trent Conservation portion of the Lake Ontario Shoreline. This study extended from Wellers Bay in the City of Quinte West in the east to the western boundary of the Township of Alnwick/Haldimand. The current Lake Ontario hazard report is:

- *Lake Ontario Shoreline Management Plan, November 5, 2020 (Zuzek)*

The resulting 100-year combined (still water and wind setup) flood level for the LTC Lake Ontario shoreline is 75.97 metres CGVD28 (Canadian Geodetic Vertical Datum 1928) with varying wave uprush considerations that determine the entire Flood Hazard delineation.

There were no detailed technical studies for the Bay of Quinte portion of Lake Ontario but a Memorandum by the MNR (February 21, 1991—see **Appendix I**) identified the 100-year water level for the Lower Trent Conservation portion of the Bay of Quinte as 75.8 metres CGVD28.

During the 2019-2020 Lake Ontario Shoreline Update, LTC contracted SJL Engineering to provide an update on the Combined 100-year Flood Level for the Bay of Quinte based on statistical

analyses completed with the Lake Ontario Study. The resulting memorandum provides an update for the flood level for the Bay of Quinte and is found in **Appendix I**. The resulting flood level for the Bay of Quinte is 76.05 metres CGVD28:

- *Bay of Quinte 100-Year Combined Flood Level, February 29, 2020 (SJL Engineering)*

There are communications in the historic memos about wave uprush to be used on the Bay of Quinte in the communications between MNR and the Bay of Quinte Conservation Authorities and three acceptable methods to calculate wave uprush were documented. Lower Trent Conservation applies a 0.2 metre uprush to the 100-year flood limit on the Bay of Quinte, resulting in a Flood Hazard elevation of 76.25 metres CGVD28.

There are no dynamic beach hazards identified on the Bay of Quinte and the standard erosion hazard of 15 metres from the 100-year flood elevation has been applied as per NDMNRF Technical Guidelines for Large Inland Lakes, 1996.

1.9.2 Other Lakes

Both Little Lake in the Township of Cramahe and Oak Lake in the City of Quinte West originally had mapped flood lines that had not been delineated through engineered studies. These lines were identified as a horizontally measured 15 metre zone around the average lake water level to delineate a potential high-water level. A 15-metre regulation limit was applied to these floodlines for a regulated area of 30 metres beyond the typical water's edge.

In 2021 LTC staff conducted a preliminary hydrology assessment of Little Lake and used LiDAR mapping provided through OMAFRA to better identify the actual flood hazard for Little Lake. This mapping has now been incorporated into the LTC mapping. Flood Hazard elevations for Little Lake are 171.93 metres CGVD2013 or **172.28 metres CGVD1928**. Calculations for this assessment are provided in **Appendix K**.

The preliminary hydrology to calculate flood depths for Oak Lake has been undertaken but there is not accurate topographic information to determine the flood hazard mapping for Oak Lake at this time. Therefore, the 15-metre setback is still in effect without confirmed flood hazard elevation.

Oak Lake is identified as Area Specific Policy 3 in the City of Quinte West Official Plan and the LTC regulated area is still defined as stated above. Planning studies may be required before Lower Trent Conservation can issue permits. These policies should be reviewed in consultation with City of Quinte West planning staff, prior to approval of any LTC permits.

Policies specific to flood hazards on Little Lake and Oak Lake are found in Section 5.2.1.1. regarding One-Zone Floodplain mapping.

1.9.3 Trent River and Rice Lake

The regulatory event for the Trent River is the 100-year event. The floodplain delineations were completed in two studies and both are treated as one-zone areas. The first study defined the floodplain from the Bay of Quinte to Highway 401 and the second study defined the floodplain from Highway 401 to Rice Lake.

- Trent River Floodplain Mapping Report, 1975. M.M. Dillon Limited. (Associated Mapping TR-T-1 to TR-T-4).
- Floodplain Mapping Study of the Trent River, 1983. Cumming-Cockburn & Associates. 1:5000 mapping TR-1 to TR-45
1:2000 mapping of Flood Damage Areas:
Hastings: (TR-H-1 to TR-H-5)
Campbellford: (TR-C-1 to TR-C-5)
Percy Boom: TR-PB-1 to TR-PB-3)
Frankford: (TR-F-1 to TR-F-4)

Note that Rice Lake is listed as the smallest of the Large Inland Lakes in the MNR Technical Guide with an area of 100 km². There are no technical studies assessing erosion or dynamic beach hazards on Rice Lake and therefore the flood elevation for Rice Lake identified in the Trent River mapping is the only hazard delineated for Rice Lake at this time (187.9 metres CGVD28). This is covered in Trent River maps (TR-46 to TR-62). Also note that there are some steep shorelines along Rice Lake that would require erosion hazard assessment for steep slopes, similar to a riverine system.

1.9.4 One-Zone Riverine Areas

Not all streams have delineated floodplains in the Lower Trent Conservation watershed. However, the following reports have floodplain delineations associated with them. The creek name and associated reports are listed below. All of these floodplains have been delineated with the Timmins Storm Regulatory event.

- **Shelter Valley & Barnum House Creeks:** Shelter Valley and Barnum House Creeks Floodplain Study, 1978. Chrysler & Lathem Ltd.
- **Colborne Creek (Colborne):** Floodplain Mapping Colborne Creek, Village of Colborne, 1982. Kilborn Limited (Note: 2-Zone study undertaken but results did not support creation of a 2-Zone policy).
- **Dead & York Creeks (Murray Ward):** Dead & York Creek Subwatershed Plan, 1998. Totten Sims Hubicki Associates.
- **DND Creek (Trenton):** DND Creek Floodline Mapping Study, 2002. PSR Group Ltd.
- **Glen Miller Creek (Trenton & Sidney Ward):** Floodplain Mapping and Preliminary Engineering Study, Glen Miller Creek, 1983. Cumming-Cockburn & Associates Limited (CCA); and the Spill Analysis of the Glen Miller Creek by CCA dated April 1984.
- **Killoran Creek (Hastings):** Killoran Creek Flood Reduction Study, 1985. Totten Sims Hubicki Associates.
- **Mill/Burnley Creek (Warkworth):** Mill Creek Preliminary Engineering Study, 1983. Cumming-Cockburn & Associates Limited.
- **Rawdon Creek (Stirling other than SPA):** Flood Damage Reduction Study, Rawdon Creek, Village of Stirling, 1985. Kilborn Limited.
- **Meyers, Massey and other South Sidney Creeks (Sidney Ward):** South Sidney Watershed Plan, 1985. Totten Sims Hubicki Associates.

1.9.5 Two-Zone Areas

Two zone concepts recognize that floodplains can be divided into two zones: the floodway, where the majority of the flood is conveyed, and flood fringes, which exist on both sides of the floodway. They can be established by a Municipality in conjunction with the Conservation Authority and MNRF, following recommendations of a detailed engineering study.

There are four two-zone policy areas located within the Lower Trent Watershed: Butler Creek in Brighton, Cold Creek in Frankford; Mayhew Creek in Trenton and Trout Creek in Campbellford. The studies and maps associated with these areas are as follows:

- **Butler Creek 2-Zone (Brighton):** Butler Creek Flood Reduction Study, 1988. Totten Sims Hubicki Associates.
- **Cold Creek 2-Zone (Frankford):** Floodplain Assessment & Policy Formulation for a Two Zone Concept Application in the Village of Frankford, July 1983. Totten Sims Hubicki Associates.
- **Mayhew Creek 2-Zone (Trenton):** Mayhew Creek Two-Zone Concept, City of Trenton and Township of Murray, 1983. Totten Sims Hubicki Associates. – Note that the 2-Zone was only implemented in Trenton and not Murray Township.
- **Trout Creek 2-Zone (Campbellford):** Final Report Trout Creek Floodplain Management Study, 1982. MacLaren Plansearch Inc.

Note that a two-zone study was completed for Colborne Creek in the Township of Cramahe (Ecos Garatech Associates - November 1991) but the report concluded that Colborne Creek was NOT a suitable candidate for implementation of a Two-Zone Concept. Floodplain mapping was updated during this study in several areas so this mapping should be used for regulatory purposes.

1.9.6 Special Policy Area

A Special Policy Area is an area within a community that has historically existed in the floodplain where site specific policies apply. Only the MNRF and MMAH have the authority to establish Special Policy Areas; this authority cannot be delegated to municipalities and other planning bodies.

Rawdon Creek - Downtown Stirling: One Special Policy Area with respect to floodplains exists in the Lower Trent Conservation watershed within the downtown core of the Village of Stirling in the Township of Stirling-Rawdon. This area is bounded by Front Street and Mill Street in the south, Victoria Street in the north, North Street in the west and Edward Street in the east. The property of the Stirling Creamery located on the south side of Front Street is also considered in this zone although not included in the descriptions. This is because the Special Policy Area is intended to ensure the long-term economic viability of the area and the creamery is an integral component of the economy of Stirling. In this area, the 1:100-year flood elevations are to be used for floodproofing requirements rather than the Timmins event. Lands above the 1:100-year elevation may be developed without the need for floodproofing measures. Lands south of Rawdon Creek within this zone that are below the 1:100-year elevation may be developed with floodproofing and causing no impediment to flow to Rawdon Creek. The associated report for

the flood elevations identified for this Special Policy Area is Flood Damage Reduction Study, Rawdon Creek, Village of Stirling, 1985, by Kilborn Limited.

2 GENERAL POLICIES

Background:

Lower Trent Region Conservation Authority (LTC) will be guided by the following general administrative guidance with respect to the implementation of its regulatory responsibilities:

- Development, interference and/or alteration activities shall not be undertaken in a regulated area without written permission from LTC.
- Where a regulated area pertains to more than one water-related hazard (e.g., lands susceptible to flooding that are part of a wetland), policies will be applied jointly, and where applicable, the more restrictive policies will apply.
- Technical studies and/or assessments, site plans and/or other plans submitted as part of an application for permission to undertake development, interference and/or alteration in a regulated area must be completed by a qualified professional to the satisfaction of LTC in conformity with the most current provincial technical guidelines or guidelines accepted by LTC through a Board Resolution.

Note: Information regarding technical standards and guidelines is contained within the Appendices.

Similar to the MNR recommended 6-metre erosion access allowance (Section 3.4, Technical Guide for River and Stream Systems: Erosion Hazard Limit, MNR), LTC recommends that a 6-metre access allowance is applied to all hazard lands. Note that emergency access is required along the hazard as well as between the buildings and the lot line to allow for heavy equipment access to the hazard area.

The guidelines for development within the 15 metre adjacent lands to a hazard include an access setback. Three main principles support the inclusion of an access setback:

- providing for emergency access to hazard areas;
- providing for construction access for regular maintenance and access to the site in the event of a natural hazard or failure of a structure; and
- providing protection against unforeseen or predicted external conditions which could have an adverse effect on the natural conditions or processes acting on or within a hazard prone area.

Activities in regulated areas that are carried out by other provincial ministries or the federal government do not require a permit. Activities conducted on provincial crown land by third-party proponents in a regulated area may require a permit, unless acting as an agent of the Crown.

Works for which permission is required under the Regulation may also be subject to other legislation, policies and standards that are administered by other agencies and municipalities, such as the Planning Act, Public Lands Act, Nutrient Management Act, Drainage Act, Environmental Assessment Act (EA Act) or the federal Fisheries Act, etc. It is the responsibility of the applicant (or applicant's agent) to ensure that all necessary approvals are obtained prior to undertaking any works for which a permit under this Regulation has been obtained.

LTC Policies – General Policies:

Within areas defined by the regulation (i.e., regulated areas), including Lake Ontario shoreline hazard lands and an allowance, river or stream valleys and an allowance, wetlands or other areas where

development could interfere with the hydrologic function of a wetland (areas of interference), watercourses, or hazardous lands, the following general policies will apply:

- 1) Development, interference and/or alteration will not be permitted within a regulated area, except in accordance with the policies contained in this document.
- 2) Notwithstanding Policy 2. (1), the LTC Board of Directors, sitting as the Hearing Board, may grant permission for development, interference and/or alteration where the applicant provides evidence acceptable to the Board that documents that the development and/or activity will have no adverse effect on the control of flooding, erosion, dynamic beaches, pollution or the conservation of land with respect to Lake Ontario shoreline, river or stream valleys, hazardous land, wetlands, and areas of interference or will not result in an unacceptable interference with a watercourse or wetland.
- 3) In addition to specific conditions outlined through this document, development, interference and/or alteration within a regulated area may be permitted only where:
 - a) risk to public safety is not increased;
 - b) there is no increase in habitation in the hazard area with the exception of allowable flood fringes or wave uprush hazard areas;
 - c) susceptibility to natural hazards is not increased nor new hazards created (e.g., there will be no impacts on adjacent properties with respect to natural hazards);
 - d) safe ingress/egress is available for proposed development that increases habitation outside of hazard lands;
 - e) pollution, sedimentation and erosion during construction and post construction is minimized using best management practices including site, landscape, infrastructure and/or facility design, construction controls, and appropriate remedial measures;
 - f) access for emergency works and maintenance of flood or erosion control works is available;
 - g) proposed development is constructed, repaired and/or maintained in accordance with accepted engineering principles and approved engineering standards or to the satisfaction of LTC, whichever is applicable based on the structural scale and scope, and purpose of the project;
 - h) there are no adverse hydraulic or fluvial effects on rivers, creeks, streams, or watercourses;
 - i) there are no adverse sedimentation or littoral effects on the Lake Ontario shoreline;
 - j) there are no adverse effects on the hydrologic function of wetlands; and,
 - k) the control of flooding, erosion, dynamic beaches, pollution and/or the conservation of land is not adversely affected during and post development.

Prohibited Uses:

- 4) Notwithstanding the General Policies referenced above, in accordance with Section 3.1 of the Provincial Policy Statement, development will not be permitted within hazardous lands as defined in the Conservation Authorities Act, where the use is:
 - an institutional use associated with hospitals, nursing homes, pre-school, school nurseries, day care and schools, where there is a threat to the safe evacuation of the sick, the elderly, persons with disabilities or the young during an emergency as a result of flooding, failure of floodproofing and/or protection works, and/or erosion;
 - an essential emergency service such as that provided by fire, police and ambulance stations and electrical substations, which would be impaired during an emergency as result of flooding, failure of flood-proofing measures and/or protection works, and/or erosion; or,
 - uses associated with the disposal, manufacture, treatment or storage of hazardous substances.

5 HAZARDOUS LANDS

5.1 Ontario Regulation 163/06

The updated definition of hazardous lands referenced in Section 25 of the Conservation Authorities Act is as follows: “*hazardous land*” means property or lands that could be unsafe for development due to naturally occurring processes. Along the shorelines of the Great Lakes - St. Lawrence River System, this means the land, including that covered by water, between the international boundary, where applicable, and the furthest landward limit of the flooding hazard, erosion hazard or dynamic beach hazard limits. Along the shorelines of large inland lakes, this means the land, including that covered by water, between a defined offshore distance or depth and the furthest landward limit of the flooding hazard, erosion hazard or dynamic beach hazard limits. Along river, stream and small inland lake systems, this means the land, including that covered by water, to the furthest landward limit of the flooding hazard or erosion hazard limits.

Lower Trent Conservation’s Regulation contains the following sections dealing with hazardous lands.

The LTC Regulation contains the following sections dealing with hazardous lands:

Development prohibited

- 2.(1) Subject to section 3, no person shall undertake development or permit another person to undertake development in or on areas within the jurisdiction of the Authority that are:
- (C) hazardous lands;

Permission to develop

3. (1) The Authority may grant permission for development in or on the areas described in subsection 2(1) if, in its opinion, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development.
- (2) The permission of the Authority shall be given in writing, with or without conditions.

Therefore, the following policies have been developed to deal with flooding and erosion. The dynamic beach hazards were identified in the Great Lakes section along with the flooding and erosion hazards for Great Lakes and Large Inland Lakes.

Also note that with the updated definitions declared in O.Reg. 686/21, *Hazardous Sites* have been separated from *Hazardous Lands*. Although LTC’s Regulation O.Reg. 163/06 only refers to *Hazardous Lands*, O.Reg. 686/21 does note that an authority shall provide the programs and services for a list of natural hazards that includes *Hazardous Sites* and Section 28 Regulations are included in the list of programs and services. Therefore, *Hazardous Sites* are included as regulated features in this policy document. *Hazardous Sites* means property or lands that could be unsafe for development and site alteration due to naturally occurring hazards. These may include unstable soils (sensitive marine clays [leda], organic soils) or unstable bedrock (karst topography).

5.2 Policy Standards

The following sections outline the policy standards for implementing the LTC Regulation with respect to hazardous lands including flood hazard lands, erosion hazard lands and hazardous sites with unstable soil and/or unstable bedrock. LTC, in their role through the planning process, should review planning applications to ensure that, in general, all development occurs outside the unstable soil and bedrock boundaries.

LTC may require technical studies be undertaken to demonstrate the suitability of development proposals. Technical studies should be carried out by a qualified professional, with recognized expertise in the appropriate discipline, and should be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

5.2.1 Development within Flood Hazard Lands

5.2.1.1 *Development within One-Zone Regulatory Floodplain of River or Stream Valleys (including inland lakes)*

Background

The following policies are focused on development within the One-Zone Regulatory floodplain. These policies do not apply to development within the allowance adjacent to the One-Zone Regulatory floodplain and the reader should refer to Section 4.2.2 for policies that apply to these areas.

LTC Policies

- 1) Development within the Regulatory floodplain shall not be permitted.
- 2) Placement of fill, flood hazard protection and/or bank stabilization works to allow for future/proposed development or an increase in development envelope within the Regulatory floodplain shall not be permitted.
- 3) Development associated with new and/or the expansion of existing trailer parks / campgrounds in the Regulatory floodplain shall not be permitted.
- 4) *Major development* within the Regulatory floodplain shall not be permitted.
- 5) Redevelopment of derelict and abandoned buildings within the Regulatory floodplain shall not be permitted.
- 6) Stormwater management facilities within the 100-year floodplain shall not be permitted.
- 7) Basements within the Regulatory floodplain shall not be permitted.
- 8) Underground parking within the Regulatory floodplain shall not be permitted.
- 9) Cut and fill operations will not be permitted within the One-Zone Regulatory floodplain.
- 10) Notwithstanding Section 5.2.1.1 1), public infrastructure (e.g. roads, sewers, flood and erosion control works) and various utilities (e.g. pipelines) may be permitted within the Regulatory floodplain subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of

- LTC that the control of flooding, erosion, pollution, or the conservation of land will not be affected.
- 11) Notwithstanding Section 5.2.1.1 1), development associated with public parks (e.g. passive or low intensity outdoor recreation, education, or trail systems) may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution, or the conservation of land will not be affected.
 - 12) Notwithstanding Section 5.2.1.1 1), stream bank slope and valley stabilization to protect existing development and conservation or restoration projects may be permitted within the Regulatory floodplain subject to the activity being approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution, or the conservation of land will not be affected.
 - 13) Notwithstanding Section 5.2.1.1 1), *moderate development and* structural repairs may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution, or the conservation of land will not be affected. The submitted plans must demonstrate that:
 - a) there is no feasible alternative site outside of the Regulatory floodplain for the proposed development or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;
 - b) the proposed works do not create new hazards or aggravate flooding on adjacent or other properties and there are no negative upstream and downstream hydraulic impacts;
 - c) the development is protected from the flood hazard in accordance with established floodproofing and protection techniques. Habitable development must be dry floodproofed to 0.3 metres above the Regulatory flood elevation and non-habitable development must be floodproofed to the Regulatory flood elevation;
 - d) the proposed development will not prevent access for emergency works, maintenance, and evacuation;
 - e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
 - f) natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented and erosion and flooding hazards have been adequately addressed; and,
 - g) for any building where the depth of flooding exceeds 0.8 metres (2.5 ft) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

- 14) Notwithstanding Section 5.2.1.1 4), detached non-habitable accessory structures greater than 46 m² (500 ft²) may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution, or the conservation of land will not be affected. The submitted plans must demonstrate that:
- a) there is no feasible alternative site outside of the Regulatory floodplain for the proposed development or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;
 - b) the proposed works do not create new hazards or aggravate flooding on adjacent or other properties and there are no negative upstream and downstream hydraulic impacts;
 - c) the development is protected from the flood hazard in accordance with established floodproofing and protection techniques;
 - d) the proposed development will not prevent access for emergency works, maintenance, and evacuation;
 - e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
 - f) natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented and erosion and flooding hazards have been adequately addressed; and,
 - g) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.
- 15) Notwithstanding Section 5.2.1.1 4), construction of a second storey addition to a habitable building greater than 46 m² (500 ft²) may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution, or the conservation of land will not be affected. The submitted plans must demonstrate that:
- a) The original footprint of the building is not increased;
 - b) Habitation is not increased for the entire building;
 - c) the entire building is protected from the flood hazard in accordance with established floodproofing and protection techniques with dry floodproofing to 0.3 metres above the Regulatory flood elevation;
 - d) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
 - e) for any building where the depth of flooding exceeds 0.8 metres (2.5 ft) an engineering assessment and design carried out by a qualified professional with recognized expertise in the appropriate discipline must be prepared using established procedures and recognized methodologies to the satisfaction of LTC.

- 16) Notwithstanding Section 5.2.1.1 1), development associated with existing uses located within the Regulatory floodplain such as marine facilities, in-ground (at existing grade) pools, *minor development*, landscaping retaining walls, grading, etc., may be permitted if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution, or the conservation of land will not be affected.
- 17) Notwithstanding Section 5.2.1.1 1), development may be permitted for the reconstruction or relocation of a building within the Regulatory floodplain, provided that it has not been damaged or destroyed by flooding and if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution, or conservation of land will not be affected. The submitted plans must demonstrate that:
- a) the building or structure meets the criteria described in Policy 13) above;
 - b) the building or structure must not be located closer to the hazard than the original building; and,
 - c) the building or structure does not exceed the original floor space plus the allowable floor space for a *minor addition*. If the building or structure is enlarged, a future *minor addition* to the building or structure will not be considered.
- 18) Notwithstanding Section 5.2.1.1 1), development associated with the construction of a driveway or access way through the Regulatory floodplain in order to provide access to lands outside of the Regulatory floodplain may be permitted subject to the provision of safe access as identified in Section 1.7.3 and if it has been demonstrated to the satisfaction of LTC that there is no viable alternative outside of the regulated area and that the control of flooding, erosion, pollution, or the conservation of land will not be affected.
- 19) Notwithstanding Section 5.2.1.1 1), removal or placement of *minor fill* and associated site grading may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution or the conservation of land will not be affected.
- 20) Notwithstanding Section 5.2.1.1 1), the replacement of sewage disposal systems may be permitted within the Regulatory floodplain if it does not require greater than 1 metre depth of *fill* and has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution or the conservation of land will not be affected. The replacement system should be located outside of the floodplain where possible, and only permitted within the floodplain subject to being located in the area of lowest risk.
- 21) Notwithstanding Section 5.2.1.1 1), parking areas may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution or the conservation of land will not be affected, and that safe pedestrian and vehicular access is achieved.
- 22) Notwithstanding Section 5.2.1.1 1), boathouses may be permitted within the Regulatory floodplain if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution or the conservation of land will not be affected, and an engineered design may be required for wet flood proofing.

9 GLOSSARY

100 Year Flood Event Standard: That flood, based on an analysis of precipitation, snow melt, or a combination thereof, having a return period of 100 years on average, or having a 1% chance of occurring or being exceeded in any given year.

Alteration to a Waterway: the act whereby the channel of a watercourse is altered in some manner. Examples of an alteration include, but are not limited to, the following: channelization, full or partial diversions, retaining walls, revetments, bridges, culverts, pipeline crossings erosion protection measures, construction of storm sewer outlets and agricultural tile drain outlets.

Apparent (confined) river and stream valley: Ones in which the physical presence of a valley corridor containing a river or stream channel, which may or may not contain flowing water, is visibly discernible (i.e., valley walls are clearly definable) from the surrounding landscape by either field investigations, aerial photography and/or map interpretation. The location of the river or stream channel may be located at the base of the valley slope, in close proximity to the toe of the valley slope (i.e., within 15 metres), or removed from the toe of the valley slope (i.e., greater than 15 metres)."

Area of interference: Those lands where development could interfere with the hydrologic function of a wetland.

Armour: Artificial surfacing of bed, banks, shores, or embankments to resist scour or erosion.

Authority: The Lower Trent Region Conservation Authority, a corporate body established under the *Conservation Authorities Act* (RSO 1990).

Basement: One or more storeys of a building located below the first storey (Building Code).

Breakwall/Breakwater: An object (especially a groyne or pier) resisting force of waves.

Boathouse: Structure meant for storage of water craft and associated boating equipment located on or within 6 metres of a navigable waterway. The boathouse must be anchored and is to be constructed as a single storey with no habitable space. The boathouse is considered a detached accessory structure and it must be wet floodproofed with openings on two sides to allow the flow of water through and no electrical services to be located less than 0.3 metres above the flood elevation.

Channel: The area of a watercourse carrying normal flows within the banks.

Conservation of Land (CO Interpretation): The protection, management, or restoration of lands within the watershed ecosystem for the purpose of maintaining or enhancing the natural features and hydrologic and ecological functions within the watershed.

Crawl Space: A Crawl space must be:

- (a) less than 1500 mm high between the lowest part of the floor assembly and the ground or other surface below, and
- (b) not used for any occupancy.

Development: 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.

Diversion: The process whereby streamflow is directed from the original channel of the watercourse and returned to the original channel at another point on the watercourse. Diversions may be full or partial re-direction of the streamflow. A diversion may also be the redirecting of flow from the channel of one watercourse to the channel of another watercourse.

Dwelling unit: One or more habitable rooms, occupied or capable of being occupied as an independent and separate housekeeping establishment, in which separate kitchen and sanitary facilities are provided for the exclusive use of the occupants.

Dyke (dike): An embankment or wall, usually along a watercourse or floodplain, to prevent overflow on to adjacent land.

Dynamic Beach: That portion of the shoreline where accumulated unconsolidated sediment continuously moves as a result of naturally occurring processes associated with wind and water and changes in the rate of sediment supply.

Dynamic Beach Hazard: Areas of inherently unstable accumulations of shoreline sediments along the Great Lakes – St. Lawrence River System and large inland lakes, as identified by provincial standards, as amended from time to time. The dynamic beach hazard limit consists of the flooding hazard limit plus a dynamic beach allowance.

Erosion: Continual loss of earth material (i.e., soil or sediment) over time as a result of the influence of water or wind.

Erosion Hazard: The loss of land, due to human or natural processes, that poses a threat to life and property. The erosion hazard limit is determined using considerations that include the 100-year erosion rate (the average annual rate of recession extended over a one-hundred-year time span) and an allowance for slope stability and an erosion/erosion access allowance.

Fill: Earth, sand, gravel, topsoil, building materials, rubble, rubbish, garbage, or any other material whether similar to or different from any of the aforementioned materials, whether originating on the site or elsewhere, used or capable of being used to raise, lower or in any way affect or alter the contours of the ground.

Flooding Hazard: The inundation, under the conditions specified below, of areas adjacent to a shoreline or a river or stream system and not ordinarily covered by water:

- a) along the shorelines of the Great Lakes - St. Lawrence River System and large inland lakes, the flooding hazard limit is based on the one-hundred-year flood level plus an allowance for wave uprush and other water related hazards;
- b) along river, stream and small inland lake systems, the flooding hazard limit is the greater of:
 - a. the flood resulting from the rainfall actually experienced during a major storm such as the Hurricane Hazel storm (1954) or the Timmins storm (1961), transposed over a specific watershed and combined with the local conditions, where evidence suggests

that the storm event could have potentially occurred over watersheds in the general area;

- b. the one-hundred-year flood; and
- c. a flood which is greater than 1. or 2. which was actually experienced in a particular watershed or portion thereof as a result of ice jams and which has been approved as the standard for that specific area by the Minister of Natural Resources and Forestry;

except where the use of the one-hundred-year flood or the actually experienced event has been approved by the Minister of Natural Resources and Forestry as the standard for a specific watershed (where the past history of flooding supports the lowering of the standard).

Flood Line: An engineered line delineating the potential extent of flooding.

Floodplain: The area, usually low lands, adjoining a watercourse which has been or may be covered by water.

Floodproofing: A combination of structural changes and/or adjustments incorporated into the basic design and/or construction or alteration of individual buildings, structures, or properties subject to flooding so as to reduce or eliminate flood damages.

Floodway: The channel of a watercourse and the inner portion of the floodplain where flood depths and velocities are generally higher than those experienced in the flood fringe. The floodway represents that area required for the safe passage of flood flow and/or that area where flood depths and/or velocities are considered to be such that they pose a potential threat to life and/or property damage.

Groyne: A structure extending from the shore to prevent erosion and arrest sand movement along a shoreline.

Habitable: Suitable to live in or on; that can be inhabited. Inhabit means to dwell in, occupy.

Habitation: is measured by the number of bedrooms within a dwelling unit.

Hazardous Land: Property or lands that could be unsafe for development due to naturally occurring processes. Along the shorelines of the Great Lakes - St. Lawrence River System, this means the land, including that covered by water, between the international boundary, where applicable, and the furthest landward limit of the flooding hazard, erosion hazard or dynamic beach hazard limits. Along the shorelines of large inland lakes, this means the land, including that covered by water, between a defined offshore distance or depth and the furthest landward limit of the flooding hazard, erosion hazard or dynamic beach hazard limits. Along river, stream and small inland lake systems, this means the land, including that covered by water, to the furthest landward limit of the flooding hazard or erosion hazard limits.

Hazardous Sites: Property or lands that could be unsafe for development and site alteration due to naturally occurring hazards. These may include unstable soils (sensitive marine clays [leda], organic soils) or unstable bedrock (karst topography).

Hydric Soil: Soil that, in its undrained condition, is saturated, flooded, or ponded long enough during the growing season to develop an anaerobic condition that supports the growth and regeneration of hydrophytic vegetation.

Hydrologic Function: The functions of the hydrological cycle that include the occurrence, circulation, distribution, and chemical and physical properties of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere, and water's interaction with the environment including its relation to living things.

Inert Fill: Earth or rock fill, or material of a similar nature that contains no putrescible materials or soluble or decomposable chemical substances.

Ingress/egress: The ability to access a property or residence by land.

Interference in any way (CO Interpretation): Any anthropogenic act or instance which hinders, disrupts, degrades, or impedes in any way the natural features or hydrologic and ecologic functions of a wetland or watercourse.

Jetty: A structure that projects from the land out into water.

Large Inland Lakes: Waterbody that has a surface area equal to or greater than 100 square kilometers where there is no measurable or predictable response to a single runoff event.

Major Development: New structures, additions, or restorations greater than 46 square metres (500 square feet).

Major Stabilization Work: stabilization works that have been approved through a satisfactory Environmental Assessment process and/or if it has been demonstrated to the satisfaction of LTC through a detailed engineering design that the control of flooding, erosion, pollution, dynamic beaches or the conservation of land will not be affected.

Minor Addition: An addition to an existing structure that does not exceed 46 square metres (500 square feet) and shall not result in an increase in the number of dwelling units. Attached covered structures including decks and garages will be considered habitable space. All new floor space shall be considered when determining the additional floor space including all storeys.

Minor Alteration: Alteration of a watercourse not exceeding 20 square metres (215 square feet).

Minor Development: A small addition to an existing building, a detached accessory building or above-ground pool that does not exceed 10 square metres (108 square feet) and does not increase number of dwelling units in a hazard land. Uncovered decks less than 23 square metres (250 square feet) are also considered minor development.

Minor Fill: A volumetric amount of fill not exceeding 20 cubic metres (26 cubic yards).

Moderate Development: *Minor additions*, detached accessory buildings and above ground pools that do not exceed 46 square metres (500 square feet). Uncovered decks larger than 23 square metres (250 square feet) are also considered moderate development. All moderate development (excluding uncovered decks) will be considered cumulative and will not exceed the 46 square metres (500 square feet). If cumulative moderate development exceeds 46 square metres (500 square feet) *major development* definitions apply.

Moderate Stabilization Work: stabilization works for banks/bluffs two metres or less in height and placement of appropriately sized stone a volumetric amount equivalent of up to one cubic metre per

one linear metre of shoreline or stream bank if it has been demonstrated to the satisfaction of LTC that the control of flooding, erosion, pollution, dynamic beaches or the conservation of land will not be affected.

Non-Habitable: Detached structure not intended for dwelling in (i.e. garage, uncovered deck, picnic shelter, sun shelter, gazebo, pergola, boathouse)

Not Apparent (unconfined) river and stream valleys: Valleys in which a river or stream is present but there is no discernible valley slope or bank that can be detected from the surrounding landscape. For the most part, unconfined systems are found in fairly flat or gently rolling landscapes and may be located within the headwater areas of drainage basins. The river or stream channels contain either perennial (i.e., year round) or ephemeral (i.e., seasonal or intermittent) flow and range in channel configuration from seepage and natural channels to detectable channels.

Offsetting: Measures that are undertaken to counterbalance unavoidable impacts to the ecosystem. Offsetting should be identified through an Environmental Impact Study and considered only when all other options have been deemed not feasible.

One Zone Concept: An approach whereby the entire floodplain, as defined by the regulatory flood, is treated a one unit, and all development is prohibited or restricted.

Pollution: Any deleterious physical substance or other contaminant that has the potential to be generated by development in an area.

Regulated Lands: The area within which development, interference and alteration activities are regulated by the Conservation Authority.

Regulatory floodplain: See definition of flooding hazard

Retaining Wall: A vertical structure designed to resist the lateral pressure of soil and water behind it.

Revetment: A vertical or inclined facing of rip-rap or other material protecting a soil surface from erosion.

Rip-rap: A layer of stone to prevent the erosion of soil.

Routine permit applications: are activities that are documented through another approval process (DART Protocol) or are determined to have limited impacts on the control of flooding, erosion, dynamic beaches, pollution or the conservation of land (i.e. non-habitable buildings and structures that are less than 10 m² in size).

Rubble: Waste fragments of stone, brick etc. from old houses; pieces of undressed stone used especially as backfill for walls; loose angular stones; water worn stones.

Scour: Local lowering of a streambed by the erosive action of flowing water.

Sedimentation: The deposition of detached soil particles.

Sewage Disposal System: A system which contains the entire sewage envelope, including both primary and secondary beds, mantle, septic tanks, and reserve areas, as per the requirements of the Ontario *Building Code Act* or the Ministry of the Environment and Climate Change.



LOWER TRENT CONSERVATION

714 Murray Street, R.R. 1, Trenton, Ontario K8V 0N1

■ Tel: 613-394-4829 ■ Fax: 613-394-5226 ■ Website: www.ltc.on.ca ■ Email: information@ltc.on.ca

Registered Charitable Organization No. 107646598RR0001

May 26, 2023

LTC File: **RP-23-108**

Property Owner: Tom Trumble

Email to: [REDACTED]

Agent: Elliott Fledderus, P. Eng.

Jewell Engineering Inc.

Email to: elliott@jewelleng.ca

Re: 2420 Shelter Valley Road, Township of Alnwick/Haldimand, Northumberland County,
Geographic Township of Haldimand, Concession 3, Part of Lot 12

Application for Permission under Ontario Regulation 163/06 – *Lower Trent Region Conservation Authority: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*

LTC Staff Cannot Grant Approval

Dear Applicants,

Lower Trent Region Conservation Authority (LTRCA) received the above noted application to undergo site preparation and alterations including fill placement associated with future development on the subject lands within an area that is regulated by LTRCA under Ontario Regulation 163/06. Staff have reviewed the applications and the property information available on record including, but not limited to provincial mapping, aerial and satellite imagery and supplementary documents provided as part of the permit submission (i.e., engineering report completed by Jewell Engineering Inc., dated April 11, 2023).

In 2022, LTRCA updated the Regulation Policy Document with respect to Ontario Regulation 163/06. The entire Ontario Regulation 163/06 Policy Document, with all appendices, can be viewed on the LTRCA website at this link: <http://www.ltc.on.ca/planning/pag/>. Please note that Sections 5.2.1 *Development within Flood Hazards* is the applicable section of the Policy Document for the proposed development on this property.

According to our review of the development proposal with consideration for the policies contained within the applicable sections noted above, we can confirm that the proposed development is in direct conflict with the following policies:

5.2.1 Development within Flood Hazard Lands

5.2.1.1 Development within One-Zone Regulatory Floodplain of River or Stream Valleys (including inland lakes)

- 1) Development within the Regulatory floodplain shall not be permitted.
- 2) Placement of fill, flood hazard protection and/or bank stabilization works to allow for future/proposed development or an increase in development envelope within the Regulatory floodplain shall not be permitted.

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Member of Conservation Ontario
Representing Ontario's 36 Conservation Authorities

The policies contained in the document represent thresholds and guidelines that have been approved by the LTRCA Board of Directors to enable designated staff to approve permit applications. It is our opinion that the proposed development does not comply with the above noted policies and therefore, staff approval cannot be granted.

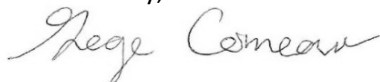
Based on the above noted information, there are three options available for you to proceed with your application:

- You may review the information above and withdraw your application for permission under Ontario Regulation 163/06;
- You may modify your development proposal to comply with the LTC Board-approved policies; or,
- You may request a Hearing before the Board as you have a right to a hearing where staff are recommending refusal of the application.

If you intend to proceed with the third bulleted option above the next available date for a Hearing is **July 13, 2023** as our Board Meetings are held on the second Thursday of the month. Please confirm **in writing** by **June 7, 2023** which of the above-noted options you would prefer so that the necessary arrangements can be made. Please note that the LTC Hearing Guidelines have been attached with this letter for your information.

We look forward to hearing back from you on your chosen option. If you require further assistance, please do not hesitate to contact me at 613-394-3915 ext. 224.

Sincerely,



Gage Comeau, M. Sc. Provincial Offences Officer
Manager, Watershed Management, Planning and Regulations
Lower Trent Conservation

Encl: Appendix G – Hearing Guidelines



LOWER TRENT CONSERVATION

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■ Tel: 613-394-4829 ■ Fax: 613-394-5226 ■ Website: www.ltc.on.ca ■ Email: information@ltc.on.ca

Registered Charitable Organization No. 107646598RR0001

June 6, 2023

LTC File #: RP-23-108

Owner: Tom Trumble

Email to: [REDACTED]

Agent: Elliott Fledderus, P. Eng.

Jewell Engineering Inc.

Email to: elliott@jewelleng.ca

NOTICE OF HEARING

IN THE MATTER OF

The Conservation Authorities Act,

R.S.O. 1990, Chapter 27

**AND IN THE MATTER OF an application by JEWELL ENGINEERING INC. for TRUMBLE
FOR THE PERMISSION OF THE CONSERVATION AUTHORITY**

Pursuant to Regulations made under

Section 28, Subsection 12 of the said Act

TAKE NOTICE THAT a Hearing before the Hearing Board of the Lower Trent Region Conservation Authority will be held under Section 28, Subsection 12 of the *Conservation Authorities Act* at the offices of the said Authority located at 714 Murray Street, RR #1 Trenton, Ontario K8V 0N1 at the hour of **1:00 p.m., on the 13th day of July, 2023** with respect to the application by **JEWELL ENGINEERING INC. for TRUMBLE** to permit development within an area regulated by the Authority in order to ensure there are no adverse effects on the control of flooding or erosion as a result of the proposed development in the Shelter Valley Creek floodplain. Specifically, this Hearing is to request permission to undergo site preparation and alterations including fill placement associated with future development in the Township of Alnwick/Haldimand, Geographic Township of Haldimand, Concession 3, Part of Lot 12, on the property known as 2420 Shelter Valley Road in Northumberland County.

TAKE NOTICE THAT you are invited to make a delegation and submit supporting written material to the Hearing Board for the meeting of July 13, 2023. If you intend to appear, please contact Gage Comeau, Manager, Watershed Management, Planning & Regulations. **Written material will be required by July 4, 2023, to enable the Hearing Board members to review the material prior to the meeting.**

TAKE NOTICE THAT this hearing is governed by the provisions of the *Statutory Powers Procedure Act*.

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Representing Ontario's 36 Conservation Authorities

Under the Act, a witness is automatically afforded a protection that is similar to the protection of the *Ontario Evidence Act*. This means that the 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 the 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.

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

DATED the 6th day of June, 2023.

The Board of Directors of the Lower Trent Region Conservation Authority

Per: Rhonda Bateman

CAO/ Secretary Treasurer: Rhonda T. Bateman



LOWER TRENT
CONSERVATION

APPENDIX G

HEARING GUIDELINES

February 10, 2022

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Appendices:

Appendix G-1: Notice of Hearing – Section 28 (12)

Appendix G-2: Hearing Procedures

Appendix G-3: Chair’s Remarks When Dealing with Hearing with respect to Ontario Regulation 163/06.

Appendix G-4: Notice of Decision – Hearing Pursuant to Section 28(12)

Appendix G-5: Notice of Decision – Hearing Pursuant to Section 28(12) (with permit)

Appendix G-6: Notice of Hearing - Section 28.0.1 (7)

Appendix G-7: Chair’s Remarks When Dealing with Section 28.0.1 (7)

Revision Notes:

May 12, 2016 – Original Hearing Guidelines – Approved by Board (Resolution G67/16)

Revision 1: April 13, 2017 – Clarifications and Consistency Updates (Resolution G44/17)

Revision 2: November 16, 2018 – Admin Updates

Revision 3: March 26, 2021 – Include Electronic Hearings (Resolution G51/21)

Revision 4: February 10, 2022 – MZO Hearings and OLT Reference (Resolution G20/22)

G-1. PURPOSE OF HEARING GUIDELINES:

The Conservation Authorities Act requires that the applicant be provided with an opportunity for 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, erosion, dynamic beaches, pollution or the conservation of land. The Hearing Board is empowered by law to make a decision, governed by the *Statutory Powers Procedures Act (SPPA)*.

The Hearing Rules are adopted under the authority of Section 25.1 of the *Statutory Powers Procedures Act (SPPA)*. The SPPA applies to the exercise of a statutory power of decision where there is a requirement to hold or to afford the parties to the proceeding an opportunity for a hearing before making a decision. The SPPA sets out minimum procedural requirements governing such hearings and provides rule-making authority for to establish rules to govern such proceedings.

The Hearing Board shall hear and decide whether the application will be approved with or without conditions or refused. In the case of hearings related to applications submitted pursuant to Section 28.0.1, the Hearing Board shall determine what conditions, if any, will be attached to the permission. See Section G-6 for further details.

These guidelines have been prepared as an update to previous 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. It is expected that hearings meet the legal requirements of the *Statutory Powers Procedures Act* without being unduly legalistic or intimidating to the participants. Additional considerations have been included related to hearings under Section 28.0.1 (7) in Section G-6 of this document.

G-1.1 Hearing Guideline Updates

Note that these Guidelines have been revised based on changes in legislation to incorporate various considerations as noted below:

- Revised in May 2018 - Housekeeping amendments made reflecting changes to appeal process as a result of the *Building Better Communities and Conserving Watersheds Act, 2017* and subsequent *Order in Council*. Note: changes to appeal process are no longer valid.
- Revised in March 2021 - Amendments made to incorporate the use of electronic hearings.
- Revised in February 2022 - Amendments made to incorporate hearings under 28.0.1 and update references to the Ontario Land Tribunal (OLT).

G-1.2 Additional Hearing Considerations – 2021

With the passage of *Bill 229, Protect, Support and Recover from COVID-19 Act (Budget Measures), 2020*, a new section of the Conservation Authorities Act came into force. Section 28.0.1 (Permission for development, zoning order) applies to applications for permission submitted to an Authority where a zoning order has been made by the Minister of Municipal Affairs and Housing authorizing the proposed development project. While the Act outlines that the Authority must issue these permissions, an Authority has the ability to attach conditions to the permission. In the case of these applications for

permission, applicants must be given the opportunity for a hearing before the Authority, prior to conditions being attached.

As such, hearings under section 28.0.1 of the Act differ from those under section 28, in that the intent of the hearing is not to determine whether or not to issue a permission, but rather, to finalize the conditions of a permission. The purpose of the interim update to the Hearing Guidelines is to incorporate direction for hearings under section 28.0.1 of the Conservation Authorities Act in Section G-6 of this document.

Further, with the passage of Bill 245, Accelerating Access to Justice Act, 2021, on June 1st, 2021 the Local Planning Appeal Tribunal, Environmental Review Tribunal, Board of Negotiation, Conservation Review Board and Mining and Lands Tribunal were merged into a new single tribunal called the Ontario Land Tribunal (OLT). Amendments have been throughout the Hearing Guidelines to update references to the Mining and Lands Tribunal to now reference the Ontario Land Tribunal.

G-2. PRE-HEARING PROCEDURES

G-2.1 Role of the Hearing Board

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 reasonable 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 have prior involvement with the application that could lead to a reasonable apprehension of bias on the part of that member. Where a member has a personal interest, the test is whether a reasonable well-informed person would consider that the interest might have an influence on the exercise of the official's public duty. Where a member is a municipal councillor, the *Municipal Conflict of Interest Act* applies. In the case of preciously expressed opinion, the test is that of an open mind, i.e. is the member capable of persuasion in participating in the decision making.
- 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 should be distributed to the applicant. The applicant may be afforded an opportunity to distribute similar pre-hearing material. These materials can be distributed to the applicable parties electronically.
- c) 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.

G-2.2 Application

An applicant has the right to a hearing when:

- staff are recommending refusal of an application because it doesn't comply with the approved policies;
- Staff are unable to approve the permit application because the application does not comply with approved policies; 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*.

G-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:

- Reference to the applicable legislation under which the hearing is to be held (i.e., the Conservation Authorities Act)
- The date, time, place and the purpose of the hearing, or for electronic hearings: the time, purpose of the hearing, and details about the manner in which the hearing will be held. Note: for electronic hearings the Notice must also contain a statement that the applicant should notify the Authority if they believe holding the hearing electronically is likely to cause them significant prejudice. The Authority shall assume the applicant has no objection to the electronic hearing if no such notification is received.
- 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.
- 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 they 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.
- 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.
- Reminder that the applicant is entitled to be represented at the hearing by a representative such as legal counsel, if desired. The Conservation Authority may be represented at the Hearing by counsel and/or staff.
- A copy of the Authority's Hearing Guidelines.

It is recommended that the Notice of Hearing be directed to the applicant and/or landowner by registered mail or other method where confirmation of delivery can be verified.

Refer to **Appendix G-1** for an example **Notice of Hearing**.

G-2.4 Pre-submission of Reports

It is the practice of the Lower Trent Region Conservation Authority to submit reports to the Board members in advance of the hearing (i.e., inclusion on an Authority Agenda) and the applicant will be

provided with the same opportunity. The applicant will be given reasonable time 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. The applicant will be required to provide sufficient copies of this report for inclusion in the Agenda.

G-2.5 Hearing Information

Prior to the hearing, the applicant should be advised of the local Conservation Authority's hearing procedures. (a copy of this document should be provided with the staff report).

G-3. HEARING

G-3.1 Public Hearing

Pursuant to the *Statutory Powers Procedure Act*, hearings, including electronic hearings, are required to be held in public. For electronic hearings, public attendance should be synchronous with the hearing. 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.

G-3.2 Hearing Participants

The Conservation Authorities Act does not provide for third party status at the Hearing. The Hearing however is open to the public. Any information provided by third parties should be incorporated within the presentation of information by, or on behalf of, the applicant or Authority staff as appropriate.

G-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 remaining members can continue with the Hearing and render a decision.

G-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.

G-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 G-2**.

G-3.6 Information Presented at Hearings

- a) The *Statutory Powers Procedure Act* requires that a witness be informed of their right to object pursuant to the *Canada Evidence Act*. The *Canada Evidence Act* indicates that a witness shall not

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.
- e) Information that is not directly within the knowledge of the speaker (hearsay), if relevant to the issues of the hearing, can be heard.
- f) 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.

G-3.7 Conduct of Hearing

G-3.7.1 Record of Attending Hearing Board Members

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

G-3.7.2 Opening Remarks

The Hearing Board Chair should convene the hearing with opening remarks which; 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 G-3** for the Opening Remarks Template. In an electronic hearing, all the parties and members of the Hearing Board must be able to clearly hear one another and any witnesses throughout the hearing.

G-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 should be properly indexed and received.

Staff of the Authority should not submit new technical 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.

G-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 beaches, pollution or conservation of land? 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, hydro-geologist etc.

The applicant should not submit new technical 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.

G-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. Staff will be given an opportunity to respond to questions posed by either the Board or the applicant. Staff may also rebut comments or pose questions to the applicant at this time.

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.

G-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 the applicant of the Board's decision. The Board members should not discuss the hearing with others prior to the decision of the Board being finalized.

G-4. DECISION

The applicant must receive written notice of the decision. The applicant should be informed of the right to appeal the decision within 30 days upon receipt of the written decision to the Ontario Land Tribunal.

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

led to their decision.

G-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 or other method where confirmation of delivery can be verified.

A sample Notice of Decision and cover letter has been included as **Appendix G-4**. Note that if the decision of the Board is to approve the application, the written notice of decision can be included as part of the Permit Cover Letter. An example of Permission Granted through Hearing has been included as **Appendix G-5**.

G-4.2 Adoption

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

G-5. 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 Ontario Land Tribunal. 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) Attendance of Hearing Board members.
- f) The transcript/minutes, if one exists, of the oral presentations made at the hearing.
- g) The decision and reasons for decision of the Board.
- h) The Notice of Decision sent to the applicant.

G-6. HEARINGS UNDER SECTION 28.0.1 CAA

Section 28.0.1 of the Conservation Authorities Act came into force with the Royal Assent of *Bill 229, Protect, Support and Recover from COVID-19 Act (Budget Measures), 2020*. This section applies to any application submitted to an authority under a regulation made under Section 28 of the Act for permission to carry out all or part of a development project associated with an approved Minister's Zoning Order (MZO). For such applications, an Authority must grant permission to the applicant to carry out the activity, provided an MZO has been made by the Minister of Municipal Affairs and Housing, and provided that the authority's regulated area in which the development activity is proposed to take place

APPENDIX G – HEARING GUIDELINES

is not located in the Greenbelt Area designated under section 2 of the Greenbelt Act. A permission which is granted under s.28.0.1 may be subject to conditions as prescribed by the issuing Authority.

Understanding that an Authority must grant permission for applications submitted pursuant to an approved MZO (pending the above-noted conditions are met), hearings for these applications differ from those under Section 28(12) of the Act, in that a hearing cannot be held to determine if a permission should be refused. The Authority may refuse to grant a permit only if i) a zoning order has not been made to authorize the development project, ii) the project is proposed to be carried out in the Greenbelt Area, and iii) if all other prescribed requirements have not been satisfied. Per s.28.0.1 (7) of the Act, the applicant for a permission will be given the opportunity to be heard by the Authority prior to any conditions being attached to the granted permission.

The following table is intended to provide a step-by-step process to conducting hearings required under Section 28.0.1 (7) of the Conservation Authorities Act. It is recognized that much of the guidance provided in the body of the Section 28 Hearing Guidelines will be applicable to the s. 28.0.1 (7) hearing process. Where processes differ, the table outlines the necessary considerations for the s. 28.0.1 (7) processes. Where the processes are the same, the table refers to the appropriate sections of the Section 28(3) hearing guidelines.

Sections of the <i>Section 28 Conservation Authorities Act</i> Hearing Guidelines	Specific Guidance and/or Processes for S. 28.0.1 (7) Hearings
1.0 Purpose of Hearing Guidelines	<p>The <i>Conservation Authorities Act</i> requires that the applicant be provided with an opportunity for 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. In the case of hearings related to applications submitted pursuant to s. 28.0.1 of the <i>Conservation Authorities Act</i>, the Authority must grant permission to the applicant, provided the requirements set out under this section are met. In this scenario, a hearing will only be held to determine conditions which will be attached to a permission.</p> <p>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. In the case of applications submitted pursuant to s. 28.0.1 of the <i>Conservation Authorities Act</i>, the Authority may refuse to grant a permit only if i) a zoning order has not been made to authorize the development project, ii) the project is proposed to be carried out in the Greenbelt Area, and iii) if all other prescribed requirements have not been satisfied. The Hearing Board is empowered by law to make a decision, governed by the <i>Statutory Powers Procedures Act</i>.</p>

APPENDIX G – HEARING GUIDELINES

	<p>The Hearing Rules are adopted under the authority of Section 25.1 of the <i>Statutory Powers Procedures Act</i> (SPPA). The SPPA applies to the exercise of a statutory power of decision where there is a requirement to hold or to afford the parties to the proceeding an opportunity for a hearing before making a decision. The SPPA sets out minimum procedural requirements governing such hearings and provides rule-making authority for to establish rules to govern such proceedings.</p> <p>The Hearing Board shall hear and decide whether the application will be approved with or without conditions or refused. In the case of hearings related to applications submitted purposed to Section 28.0.1, the Hearing Board shall determine what conditions, if any, will be attached to the permission. See Section G-6 for further details.</p> <p>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 <i>Conservation Authorities Act</i>. It is hoped that the guidelines will ensure that hearings meet the legal requirements of the <i>Statutory Powers Procedures Act</i> without being unduly legalistic or intimidating to the participants. Additional considerations have been included related to hearings under Section 28.0.1 (7) in Section G-6</p>
2.0 Prehearing Procedures	Not applicable to S.28.0.1(7) hearings
2.1 Role of the Hearing Board	<p>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 reasonable apprehension of bias.</p> <p>The following are three examples of steps to be taken to avoid apprehension of bias where it is likely to arise.</p> <p>(a) No member of the Authority taking part in the hearing should have prior involvement with the application that could lead to a reasonable apprehension of bias on the part of that member. Where a member has a personal interest, the test is whether a reasonably well-informed person would consider that the interest might have an influence on the exercise of the official's public duty. Where a member is a municipal councillor, the <i>Municipal Conflict of Interest Act</i> applies. In the case of a previously expressed opinion, the test is that of an</p>

APPENDIX G – HEARING GUIDELINES

	<p>open mind, i.e. is the member capable of persuasion in participating in the decision making</p> <p>(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. These materials can be distributed electronically.</p> <p>(c) 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.</p> <p>(d) Where a hearing is required for applications submitted pursuant to s. 28.0.1 of the <i>Conservation Authorities Act</i> (e.g., to determine the conditions of the permission), final decisions on the conditions shall not be made until such a time as the applicant has been given the opportunity to attend a hearing.</p>
2.2 Application	The right to a hearing arises where staff is recommending refusal of an application or is recommending conditions to the approval of an application. Additionally, in the case of applications submitted pursuant to s. 28.0.1 of the CA Act, the authority shall not attach conditions to a permission unless the applicant has been given an opportunity to be heard by the authority. The applicant is entitled to reasonable notice of the hearing pursuant to the <i>Statutory Powers Procedures Act</i> .
2.3 Notice of Hearing	<i>Refer to Section 2.3</i>
2.4 Presubmission of Reports	<i>Refer to Section 2.4</i>
3.0 Hearing	Not applicable to S.28.0.1(7) hearings
3.1 Public Hearing	<i>Refer to Section 3.1</i>
3.2 Hearing participants	<i>Refer to Section 3.2</i>
3.3 Attendance of Hearing Board Members	<i>Refer to Section 3.3</i>
3.4 Adjournments	<i>Refer to Section 3.4</i>
3.5 Orders and Directions	<i>Refer to Section 3.5</i>
3.6 Information Presented at Hearings	<i>Refer to Section 3.6</i>
3.7 Conduct of Hearing	N/A
3.7.1 Record of Attending Hearing Board Members	<i>Refer to Section 3.7.1</i>
3.7.2 Opening Remarks	<i>Refer to Section 3.7.2</i>
3.7.3 Presentation of Authority Staff Information	<i>Refer to Section 3.7.3</i>
3.7.4 Presentation of Applicant Information	<i>Refer to Section 3.7.4</i>
3.7.5 Questions	<i>Refer to Section 3.7.5</i>

APPENDIX G – HEARING GUIDELINES

3.7.6 Deliberation	<i>Refer to Section 3.7.6</i>
4.0 Decision	<i>Refer to Section 4.0</i>
4.1 Notice of Decision	<p>The decision notice should include the following information:</p> <p>(a) The identification of the applicant, property and the nature of the application that was the subject of the hearing.</p> <p>(b) The decision to refuse or approve the application, and in the case of applications under s. 28.0.1 of the CA Act, the decision to approve the application with or without conditions. A copy of the Hearing Board resolution should be attached.</p> <p>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 G-4.</p>
4.2 Adoption	<i>Refer to section 4.2</i>
5.0 Record	<i>Refer to Section 5.0</i>
Appendix G-6	A new Appendix G-6 has been prepared which provides an example “Notice of Hearing” for hearings under Section 28.0.1 (7) of the <i>Conservation Authorities Act</i>
Appendix G-7	A new Appendix G-7 has been prepared which provides an example “Notice of Decision” for hearings under Section 28.0.1 (7) of the <i>Conservation Authorities Act</i>

Appendix G-1

NOTICE OF HEARING

IN THE MATTER OF

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

AND IN THE MATTER OF an application by XXXXXX

FOR THE PERMISSION OF THE CONSERVATION AUTHORITY

Pursuant to Regulations made under Section 28, Subsection 12 of the said Act

TAKE NOTICE THAT a Hearing before the Full Board of the Lower Trent Region Conservation Authority will be held under Section 28, Subsection 12 of the Conservation Authorities Act at the offices of the said Authority located at 714 Murray Street, RR #1 Trenton, Ontario K8V 5P4 at the hour of , **on the day of , 20__**, [for electronic hearings, include details about the manner in which the hearing will be held] with respect to the application by **(NAME)** to permit development within an area regulated by the Authority in order to ensure no adverse effect on **(the control of flooding, erosion, dynamic beaches or pollution or, conservation of land./alter or interfere with a watercourse or wetland)** on Lot , Plan/Lot , Concession, **(Street)** in the City of , Regional Municipality of , River Watershed.

TAKE NOTICE THAT you are invited to make a delegation and submit supporting written material to the Hearing Board for the meeting of **(meeting number)**. If you intend to appear, [for electronic hearings: or if you believe holding the hearing is likely to cause significant prejudice], please contact **(name)**. Written material will be required by **(date)**, to enable the Hearing Board members to review the material prior to the meeting.

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. This means that the 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 the 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.

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

DATED the ___ day of , _____ 20__.

APPENDIX G – HEARING GUIDELINES

The Board of Directors of the Lower Trent Region Conservation Authority

Per:

Staff Member, Title: _____

Chief Administration Officer/ Secretary Treasurer: _____

Appendix G-2

HEARING PROCEDURES

1. Motion to sit as Hearing Board.
2. Roll Call followed by the Chair's opening remarks. For electronic hearings, the Chair shall ensure that all parties and the Hearing Board are able to clearly hear one another and any witnesses throughout the hearing.
3. Staff will introduce to the Hearing Board the applicant/owner, his agent and others wishing to speak.
4. Staff will indicate the nature and location of the subject application and the conclusions.
5. Staff will present the staff report included in the Authority agenda.
6. The applicant and/or his agent will speak and also make any comments on the staff report, if he so desires.
7. The Hearing Board will allow others to speak, and, if necessary, the applicant in rebuttal.
8. The Hearing Board will question, if necessary, both the staff and the applicant/agent.
9. The Hearing Board will move into camera. For electronic hearings, the Hearing Board will separate from the other participants.
10. Members of the Hearing Board will move and second a motion.
11. A motion will be carried which will culminate in the decision.
12. The Hearing Board will move out of camera. For electronic meeting, the Hearing Board will reconvene with other participants.
13. The Chair or Acting Chair will advise the owner/applicant of the Hearing Board decision.
14. If decision is "to refuse" or "approve with conditions", the Chair or Acting Chair shall notify the owner/applicant of his/her right to appeal the decision to the Ontario Land Tribunal within 30 days of receipt of the reasons for the decision.
15. Motion to move out of Hearing Board and sit as the Board of Directors.

Appendix G-3

CHAIR'S REMARKS WHEN DEALING WITH HEARINGS WITH RESPECT TO ONTARIO REGULATION 163/06.

Date: Month XX, XXXX
O.Reg. 163/06: Permit Application # RP-XX-XXX
Applicant: Name

We are now going to conduct a hearing under Section 28 of the Conservation Authorities Act in respect of an application by _____: , for permission to: _____

The Authority has adopted regulations under section 28 of the Conservation Authorities Act which requires the permission of the Authority for development within an area regulated by the Authority in order to ensure no adverse effect on the control of flooding, erosion, dynamic beaches, pollution or conservation of land, or to permit alteration to a shoreline or watercourse or interference with a wetland. This Hearing is about granting permission to develop under the Authority regulations; a separate matter from approvals under the *Planning Act*.

The Staff has reviewed this proposed work and a copy of the staff report has been given to the applicant.

The Conservation Authorities Act (Section 28 [12]) provides that:

"Permission required under a regulation made under clause (1) (b) or (c) shall not be refused or granted subject to conditions unless the person requesting permission has been given the opportunity to require a hearing before the authority or, if the authority so directs, before the authority's executive committee."

In holding this hearing, the Hearing Board is to determine whether or not a permit is to be issued, with or without conditions. In doing so, we can only consider the application in the form that is before us, the staff report, such evidence as may be given and the submissions to be made on behalf of the applicant. Only information disclosed prior to the hearing is to be presented at the hearing. It is not our place to suggest alternative development methods.

It is to be noted that if the Hearing Board decision is "to refuse" or not support the proposed work within the permit submission, the Chair or Acting Chair shall notify the owner/applicant of his/her right to appeal the decision to the Ontario Land Tribunals.

The proceedings will be conducted according to the *Statutory Powers Procedure Act*. Under Section 5 of the Canada Evidence Act, a witness may refuse to answer any question. The procedure in general shall be informal without the evidence before it being given under oath or affirmation.

If the applicant has any questions to ask of the Hearing Board or of the Authority representative, they must be directed to the Chair of the Board.

APPENDIX G – HEARING GUIDELINES

At this time, if any member of this Board has intervened on behalf of the Applicant with regards to this matter, they should recuse themselves so there is no apprehension of bias and that a fair and impartial Hearing may be conducted.

Appendix G-4

(Date) BY REGISTERED MAIL

(name) , (address)

Dear:

RE: NOTICE OF DECISION

Hearing Pursuant to Section 28(12) of the Conservation Authorities Act

Proposed Residential Development

Lot , Plan ; ?? Drive, City of

(Application #)

In accordance with the requirements of the Conservation Authorities Act, the Lower Trent Region Conservation Authority provides the following Notice of Decision:

On **(meeting date and number)**, the Hearing Board of the Lower Trent Region Conservation Authority refused/approved your application/approved your application with conditions. A copy the Board's Resolution # _____ has been attached for your records. Please note that this decision is based on the following reasons: **(the proposed development/alteration to a watercourse adversely affects the control of flooding, erosion, dynamic beaches, pollution or conservation of land.)**

In accordance with Section 28 (15) of the Conservation Authorities Act, an applicant who has been refused permission or who objects to conditions imposed on a permission may, within 30 days of receiving the reasons under subsection (14), appeal to the Minister who may refuse the permission; or grant permission, with or without conditions. Through Order in Council 332/2018 the responsibility for hearing the appeal has been transferred to the Ontario Land Tribunal. For your information, should you wish to exercise your right to appeal the decision, a letter by you or your agent/counsel setting out your appeal must be sent within 30 days of receiving this decision addressed to:

Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario M5G 1E5

A carbon copy of this letter should also be sent to Lower Trent Region Conservation Authority. Should you require any further information, please do not hesitate to contact **(staff contact)** or the undersigned.

Yours truly,

Chief Administration Officer/ Secretary Treasurer

Enclosure

Appendix G-5

Date

FILE #: RP-XX-XXX

PERMIT#: P-XX-XXX

Name of Applicant

Address of Applicant

ATTENTION: **It is important that you read and understand the contents of this letter and ensure that all necessary parties (i.e., landowner(s) and anyone conducting site works) are aware of any special mitigation requirements contained herein.**

RE: Location where Permission Applies

Application for permission to (development, interference and/or alteration) pursuant to Ontario Regulation 163/06 – *Lower Trent Region Conservation Authority: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.*

As you are aware, your application to allow for (Proposed development/interference/alteration) on the property noted above was heard and approved by the Lower Trent Region Conservation Authority's (LTC) Hearing Board on Hearing Date. The following resolution was passed (draft resolution for final approval at the upcoming LTC's Board of Directors' meeting – Next Meeting Date):

RES: HC2/17 Moved by: Board Member Seconded by: Board Member
THAT the permit application RP-XX-XXX by Applicant for permission (development/interference/alteration) in the (Regulated Area) be approved.
Carried

Please accept this letter as formal notice of the decision of the Hearing Board.

The proposed (development/alteration/interference) is situated within regulated areas associated with (Regulated Area). Attached you will find a copy of Permit No. P-XX-XXX issued for the works noted above in accordance with Ontario Regulation 163/06. The permit has been issued based on the information, plans and specifications submitted with the application as well as your acceptance of the general conditions of approval detailed in the application. The plans and specifications are attached as part of the approved documentation.

The following mitigation measures are expected to be implemented as part of the approval from LTC:

- 1) *Listed Conditions of Permission;*

Should you require any further information, please do not hesitate to contact (**staff contact**) or the undersigned.

Appendix G-6

NOTICE OF HEARING

(Subsection 28.0.1 (7) of the Conservation Authorities Act)

IN THE MATTER OF

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

AND IN THE MATTER OF an application by

FOR THE PERMISSION OF THE CONSERVATION AUTHORITY

Pursuant to Regulations made under Section 28.0.1, Subsection 7 of the said Act

TAKE NOTICE THAT a Hearing before the Executive Committee of the Conservation Authority will be held under Section 28.0.1, Subsection 7 of the Conservation Authorities Act at the offices of the said Authority (located at 714 Murray Street, RR #1 Trenton, Ontario K8V 5P4), at the hour of XX:XX, on the XX day of XXX, 20XX, [for electronic hearings, include details about the manner in which the hearing will be held] with respect to the application by (NAME) to permit development within an area regulated by the Authority in association with a Minister's Zoning Order (REGULATION NUMBER) on Lot, Plan/Lot, Concession, (Street) in the City of, Regional Municipality of, River Watershed.

TAKE NOTICE THAT you are invited to make a delegation and submit supporting written material to the Executive Committee for the meeting of (meeting number). If you intend to appear [For electronic hearings: or if you believe that holding the hearing electronically is likely to cause significant prejudice], please contact (name). Written material will be required by (date), to enable the Committee members to review the material prior to the meeting.

TAKE NOTICE THAT pursuant to Section 28.0.1 of the Conservation Authorities Act, a conservation authority is required to grant the permission applied for and may only impose conditions to the permission. The Hearing will therefore focus on the conditions to be imposed to the granting of the permission.

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*. This means that the 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 the 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 affect of any evidence that a witness may give.

AND FURTHER TAKE NOTICE that if you do not attend at this Hearing, the Executive 24 Committee of the Conservation Authority may proceed in your absence, and you will not be entitled to any

APPENDIX G – HEARING GUIDELINES

further notice in the proceedings.

DATED the ___ day of , _____202X

The Executive Committee of the Conservation Authority

Per:

Chief Administrative Officer/Secretary-Treasurer

Appendix G-7

HEARING BOARD CHAIR'S REMARKS WHEN DEALING WITH HEARINGS

(Section 28.0.1, Subsection 7 of the Conservation Authorities Act)

WITH RESPECT TO ONTARIO REGULATION 163/06.

We are now going to conduct a hearing under section 28.0.1 of the Conservation Authorities Act in respect of an application by _____: , for permission to: _____

Under Section 28.0.1 of the Conservation Authorities Act, an Authority is required to grant permission for any application submitted under a regulation made under subsection 28(1) for permission to carry out all or part of a development project, in an area regulated by the Authority, associated with a Minister's Zoning Order, provided the criteria listed under subsection 28.0.1 (1) are met. A permission is subject to any conditions as may be prescribed by the Authority.

The Staff has reviewed this proposed work and prepared a staff report, including the proposed conditions of approval for the proposed work, which has been given to the applicant and the Board. The applicant was invited to file material in response to the staff report, a copy of which has also been provided to the Board.

Under Section 28.0.1 (7) of the Conservation Authorities Act, the person requesting permission has the right to a hearing before the Authority/Executive Committee.

In holding this hearing, the Authority Board/Executive Committee is to determine the prescribed conditions to be attached to the approved permission. In doing so, we can only consider the application in the form that is before us, the staff report, such evidence as may be given and the submissions to be made on behalf of the applicant. Only Information disclosed prior to the hearing is to be presented at the hearing.

The proceedings will be conducted according to the *Statutory Powers Procedure Act*. Under Section 5 of the *Canada Evidence Act*, a witness may refuse to answer any question on the ground that the answer may tend to incriminate the person, or may tend to establish his/her liability to a civil proceeding at the instance of the Crown or of any person.

The procedure in general shall be informal without the evidence before it being given under oath or affirmation unless decided by the hearing members.

If the applicant has any questions to ask of the Hearing Board or of the Authority representative, they must be directed to the Chair of the board.

Fwd: Trumble - LTC Permit Application

Janet K Noyes <jknatltc@gmail.com>

Thu 2023-05-18 2:14 PM

To: Gage Comeau <gage.comeau@ltc.on.ca>

📎 1 attachments (13 KB)

image001.png;

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Gage

I am happy with this response and note that the floodplain impacts to adjacent properties would be quite limited.

I realize that this application will go to the Board but I would consider this application complete with the opinion letter and detailed explanation below.

LTC File: RP-23-108

Janet Noyes, P.Eng.

JKN Consulting

JKNatLTC@gmail.com

----- Forwarded message -----

From: **Elliott Fledderus** <elliott@jewelleng.ca>

Date: Thu., May 18, 2023, 10:26 a.m.

Subject: RE: Trumble - LTC Permit Application

To: Janet K Noyes <jknatltc@gmail.com>

Cc: Gage Comeau <gage.comeau@ltc.on.ca>

Hi Janet,

Thanks for the input. Please see below. Sorry for the length of email.

1. No modeling was completed. We did assess the depth of fill required by taking a full size scaled drawing of the concept plan and taking average fill depths for cross sections throughout the fill area and multiplying by the fill footprint area. We used those calcs to estimate the 600 m³ of engineered fill material listed on the permit application. The 1.5m depth in some areas is about

right. The grades ended up working well with the raised septic recommended by Carol. The neighbour to the east is raised quite a bit higher than this lot's existing elevations, and is a good reference for what this lot would look like in a built condition.

2. Regarding the concern for *localized* loss of storage: This is where the ineffective flow areas are factored in. If we were to update a traditional HEC-RAS model (LTC did not have the model on file), or produce a traditional (1D) HEC-RAS model of our own, then we already know that properly input ineffective flow areas in existing conditions, compared to the proposed fill location on the lot, both of which would be aligned with immediate upstream and downstream houses in existing conditions, would produce no change in the local WSELs.

Hydraulic models assume flow in one direction. Any cross sections entered on Tom's property in existing conditions would need ineffective flow areas for the same reason that we apply ineffective flow areas to the bounding contraction and expansion cross sections on a bridge. The model computes the flow and subsequent WSEL based on the area of the cross section. Due to the buildings and driveways immediately upstream and downstream of Tom's property, one has to make any portion of his property that is between the bounding buildings (in the direction of flow parallel to the creek) an ineffective flow area (it can also be modeled as an obstruction) in order for the model to know it cannot flow in its singular direction. If you fill within an ineffective flow area, it has no impact on that cross section's flow conveyance since the model already knows not to use that cross sectional area. As a result, the added fill has no impact on localized WSELs.

For reference, we completed this exact scenario last year as a modeling exercise for the Drag River in Haliburton. That project was prepared for a building near the downtown of Haliburton immediately adjacent to the Drag River. There is no CA there, so the Municipality required a flood assessment to determine potential localized flooding impacts to the bounding and adjacent buildings. With a number of buildings nearby in the overbank areas, we added flow obstructions in place of the buildings. Although the existing lot was undeveloped, obstructions/ineffective flow areas were added for the future building in locations where the bounding buildings were parallel to the flow direction. The model results showed no negative impacts, as expected based on the above concept. The peer review was completed by Engage Engineering and there were no concerns with this approach.

In Tom's case, or many other private lot owners, the cost to do a full hydrology and hydraulics study is not feasible. For this particular site, we were able to provide a confident opinion based on hydraulic theory and past experience without the need of a modelling tool.

3. My opinion on scour on the north slope of the engineered fill is that it is low risk for the following reasons:

- a. In a site visit of the property, I do not recall any erosion or scour on the adjacent upstream property that has similar grading to Tom's proposed lot grades. I may have Tom go and get some pictures of their slope for me to confirm as I completed that site visit a little while ago.
- b. You and I know that in these creek systems the velocities would be higher at the creek and lower in the overbank areas, and lower yet at the flood limit which is where this slope would be located. We see this visually with the 2D hydraulic models. We also see this in 1D models although less detailed and in tabular format.
- c. The creek has well defined dimensions based on my site visit. It is reasonable to assume that the 2-yr is contained with the creek. The narrowest point on the concept plan between the top of creek bank and top of fill slope is about 10m, with 5m from the top of creek bank to the toe of slope. This means there will be significant flow capacity in the overbank and that it is reasonable to expect the 5-yr depth at the north slope of the engineered fill to be shallow. With shallow flows and low velocities in the minor return period events, I am not too concerned about erosion in these events, although regular inspections by the lot owner is recommended.
- d. For the major and regulatory event, the depth could get in the 1 – 1.5m range based on the flood elevation provided, and there could be noticeable velocities at different depths along the slope. I think a reasonable approach here is to add straw bales to the north slope of the engineered fill during construction. The straw bales would be spread across the face of the slope to act as a mulch to provide some added stability.

Elliott Fledderus P. Eng. | Municipal Engineer

Jewell Engineering Inc.

1-71 Millennium Parkway

Belleville ON K8N 4Z5

O 613.969.1111 ex 242



From: Janet K Noyes <jknatltc@gmail.com>
Sent: Friday, May 12, 2023 10:56 AM
To: Elliott Fledderus <elliott@jewelleng.ca>
Cc: Gage Comeau <gage.comeau@ltc.on.ca>
Subject: Trumble - LTC Permit Application

Hello Elliott;

I am reviewing the permit application submission for Mr. Trumble's property at 2420 Shelter Valley Road and I have a few questions about the Floodline Opinion Letter by Jewell Engineering (2023-04-11). The updated survey confirms that almost the entire property (except a portion of the entrance driveway) is located within the flood hazard lands of Shelter Valley Creek.

I note the discussions about ineffective flow areas and loss of storage but I was wondering if you did any modelling in support of these statements? Did you complete a "heat map" as to depth of fill required as it looks like there is a good 1.5 metres required in some areas - especially near the north end of the top of slope area. I realize that your storage calculations are for the entire tributary but note that a more localized loss of storage could have more localized impacts. I'm mostly concerned about impacts to the direct neighbours - specifically the upstream neighbour.

I'm also curious as to your opinion of the velocity scour on the north slope of the engineered fill required for the proposed development. Would the high velocities incurred during a flood event provide significant erosion/scour on the filled slope? If so, should this slope be protected?

Please don't hesitate to respond to the email or give me a call.

LTC File: RP-23-108

Regards,

Janet Noyes, P.Eng.

JKN Consulting

[Redacted]

[Redacted]

JKNatLTC@gmail.com



HEARING
Ontario Regulation 163/06 Permit
Application: RP-23-108

*Property Owner: Tom TRUMBLE
Agent: Elliott Fledderus – Jewell Engineering
2420 Shelter Valley Road, Township of Alnwick/Haldimand
Concession 3, Part of Lot 12*

Presented to: Lower Trent Region Conservation Authority Hearing Board
Presented by: Gage Comeau, Manager, Watershed Management, Planning & Regulations

Date: July 13, 2023

Contents

- Subject Property
- Floodplain Mapping
- Development Proposal
- O.Reg. 163/06 LTC Policies
- Staff Conclusion
- File Timelines

Subject lands

- Property located to the North of Shelter Valley Road
- Shelter Valley Creek runs along the North portion of the property boundary
- Property located within Shelter Valley Creek Regulatory floodplain



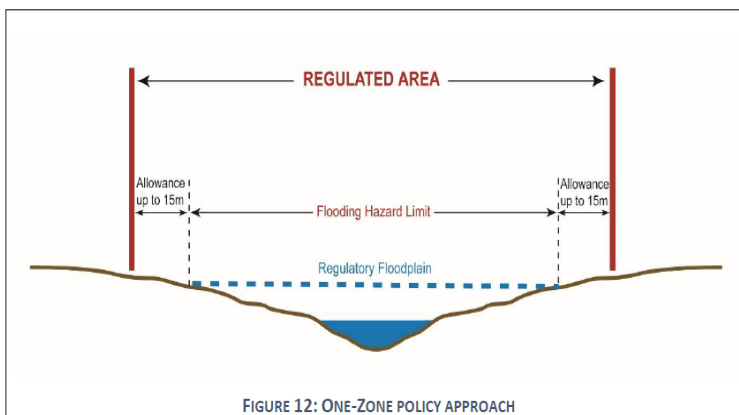
Subject Property



Floodplain Mapping



One-Zone Concept



One-Zone Concept

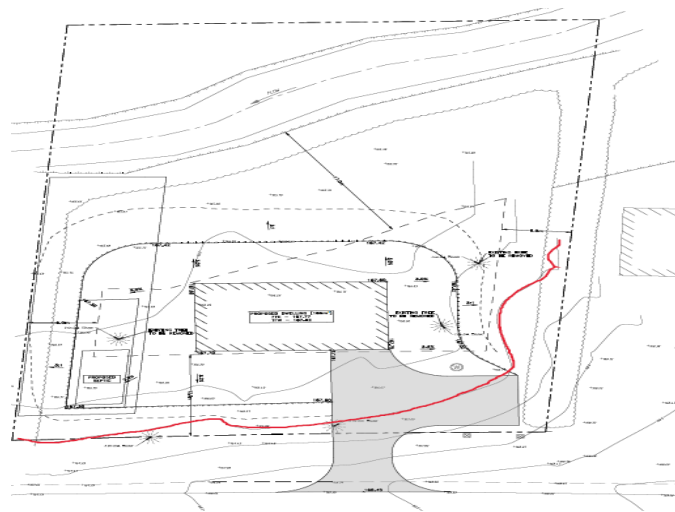
Two-Zone Concept

Shelter Valley Creek Floodplain

- Information is from the 1978 Shelter Valley & Barnum House Creeks project
- Property is located in floodplain based on the mapping

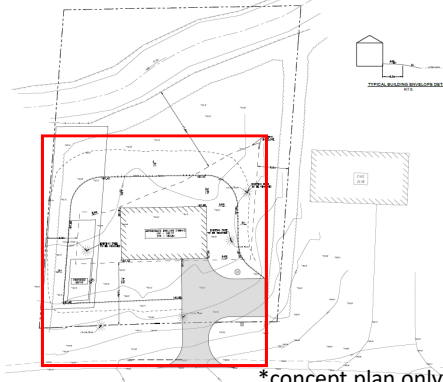


Shelter Valley Creek Floodplain



Development Proposal

- Permit Application received: April 27, 2023
- Undergo the placement of fill material (600 m³) to provide a suitable future development envelope



*concept plan only

Ontario Regulation 163/06 Policy Document

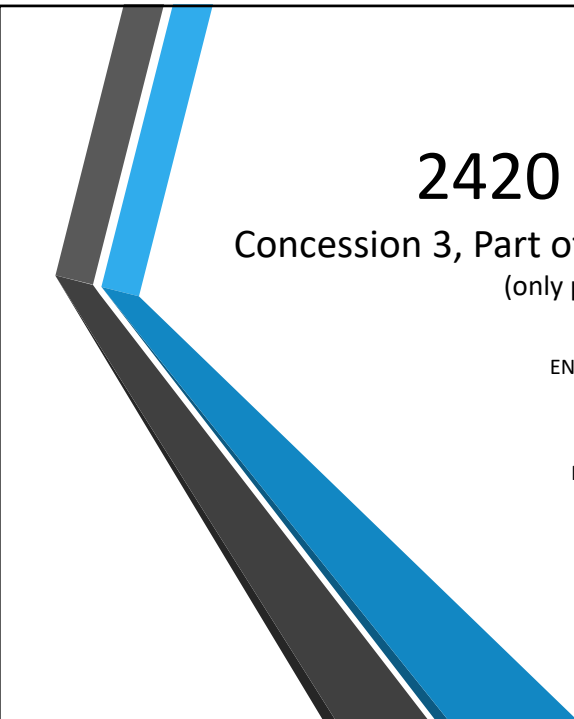
- **General Policies**
 - c) Susceptibility to natural hazards is not increased nor new hazards created (e.g., there will be no impacts on adjacent properties with respect to natural hazards).
 - k) the control of flooding, erosion, dynamic beaches, pollution and/or the conservation of land is not adversely affected during and post development.
- **5.2.1.1 Development within One-Zone Regulatory Floodplain of River or Stream Valleys**
 1. Development within the Regulatory floodplain shall not be permitted.
 2. Placement of fill, flood hazard protection and/or bank stabilization works to allow for future/proposed development or an increase in development envelope within the Regulatory floodplain shall not be permitted.

Staff Conclusion

Based on a review of the relevant policies that are applicable to this proposal, staff are not in a position to support the application as it does not conform with the policies.

Permit Application: RP-23-108

- Permit Application received: July 8, 2021
- Complete Application: May 19, 2023
- Denial Letter: May 26, 2023
- Request for Hearing: May 29, 2023
- Notice of Hearing: June 6, 2023
- Hearing Date: July 13, 2023



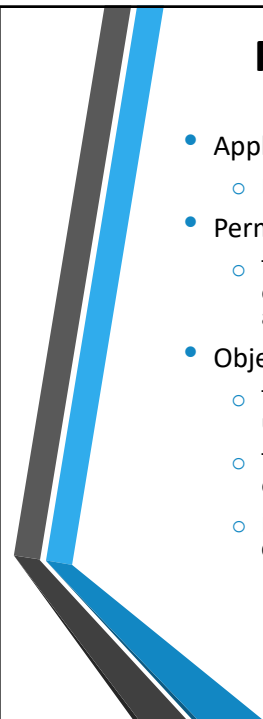

2420 Shelter Valley Rd

Concession 3, Part of Lot 12 of Alnwick/Haldimand Township
(only property between 2416 and 2438)

ENGINEERING OPINION & CONCEPT PLAN
PERMIT APPLICATION HEARING


Prepared by: Elliott Fledderus, P. Eng.

July 13, 2023



PERMIT APPLICATION & HEARING OBJECTIVE

- Applicant:
 - Mr. Tom Trumble
- Permit Application:
 - To permit development and alteration within an area regulated by the Authority in order to ensure there are no adverse effects on the control of flooding or as a result of the proposed alteration to the placement of fill within the floodplain.
- Objective:
 - To present an engineering opinion based on site observations, recent similar projects, and an understanding of floodplain and hydraulic engineering principles.
 - To present a prudent concept plan that presents no flood risk to the applicant or other property owners
 - Mr. Trumble is **seeking to place fill** on the subject lot with the intent to re-instate a residential dwelling on a family property they have owned for 40+ years.



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BACKGROUND

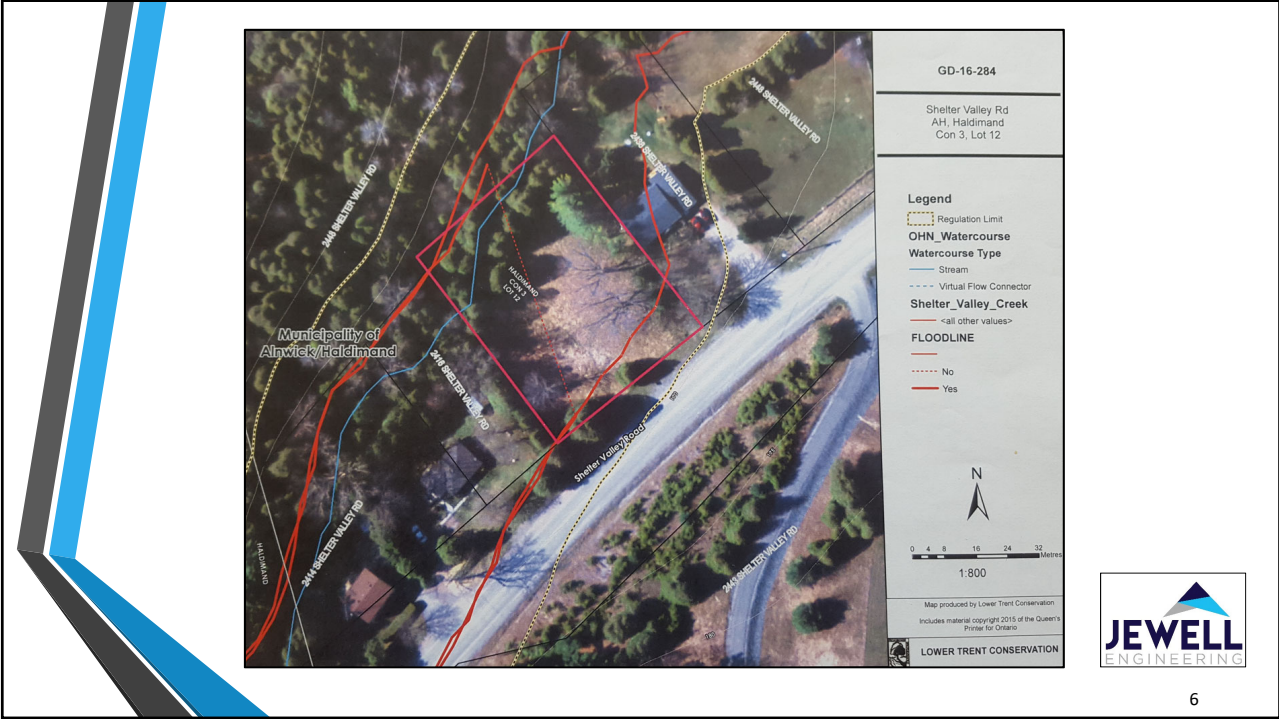
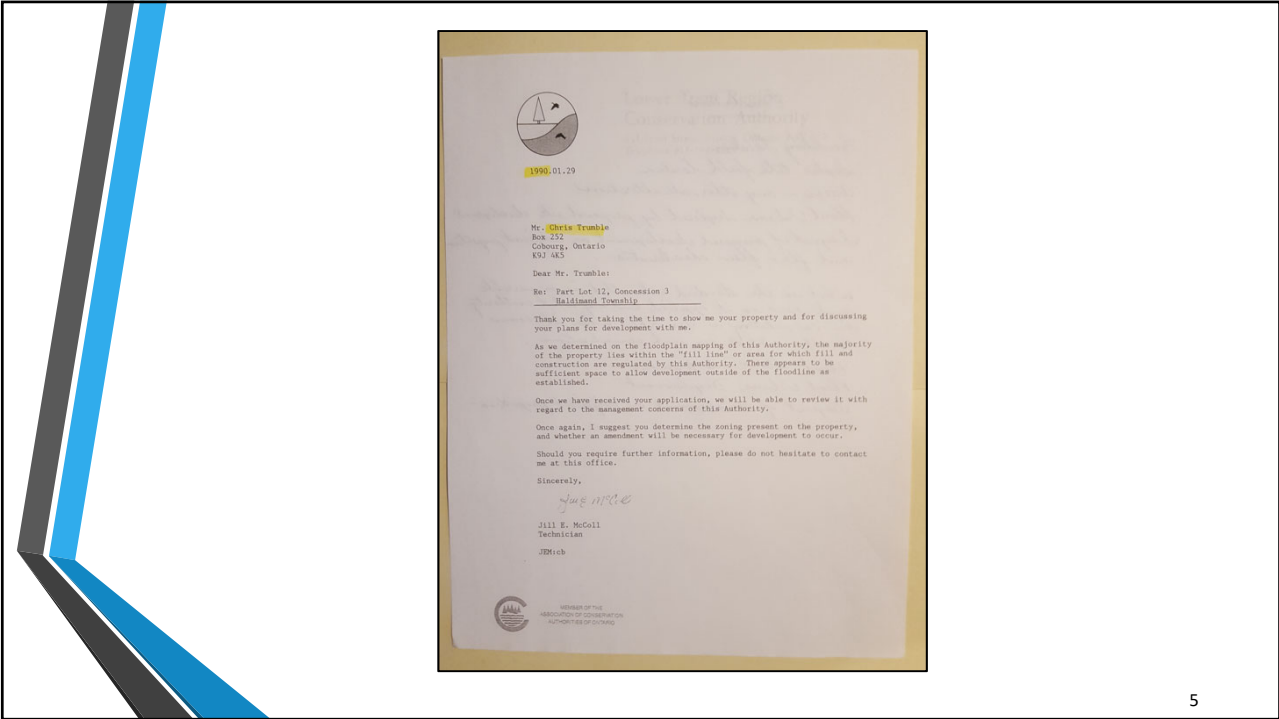
- Property located at 2420 Shelter Valley Road in Grafton, ON.
- Single family dwelling previously existed on the lot but was destroyed by fire in the early 1980s.
- In 1990, the Trumble family received a letter from LTC suggesting sufficient space is available to allow development outside of the floodline.
- In 2022, LTC's records indicate the subject lot would not have sufficient space to accommodate a dwelling in its current state.
- The flood hazard model is not available in LTC files – the 2022 information received from LTC was conservatively used in Jewell Engineering's assessment.



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2023 Engineering Assessment

- Jewell Engineering completed:
 - A site visit and topographic survey at the subject property.
 - The site visit was completed by a licensed Professional Engineer.
 - Correspondence with Gage Comeau to understand LTC's policy concerns.
 - An engineering opinion letter to address LTC's flood hazard concerns.
 - A concept plan to show a floodproofed dwelling that simultaneously presents no negative impacts to adjacent property owners.



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Engineering Opinion Letter

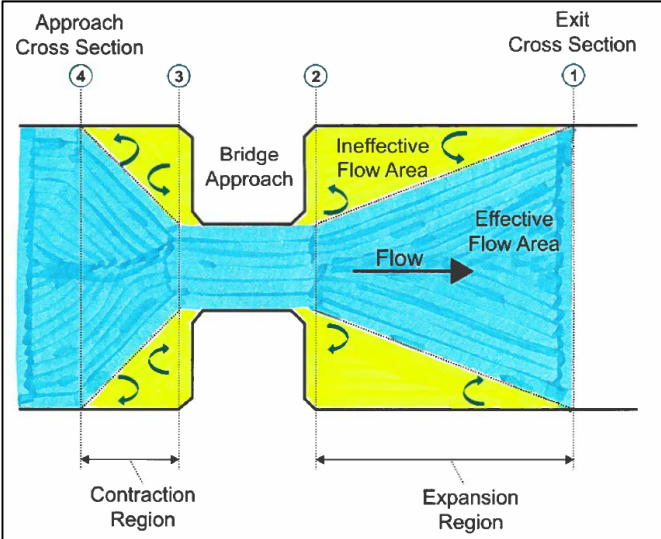
- Our opinion letter concluded that:
 - Engineered fill will be placed to ensure the final floor elevation for the proposed dwelling is a minimum of 0.3m above the regulatory flood elevation that was provided by LTC - the dwelling will be slab-on-grade (i.e. no basement).
 - Majority of the subject lot is an *ineffective flow area* due to the adjacent existing buildings – **ineffective flow areas represent areas that are not relied upon to convey flows**, and subsequently have no impact on water levels in a flood hazard storm event. This means that fill placed on the subject lot would not raise water levels or affect any neighbouring property.
 - The proposed fill is **0.002 m³/m³** (or 0.2%) of the flood storage within the tributary – meaning the lost flood storage is insignificant and does not present a drainage concern to adjacent property owners.
 - Our topographic survey confirmed the upstream property is >1m **higher** than the local flood elevation – this confirms the upstream property will **act as a barrier and create an ineffective flow area** on the subject site (it also confirms the current LTC floodline delineation is not entirely accurate).

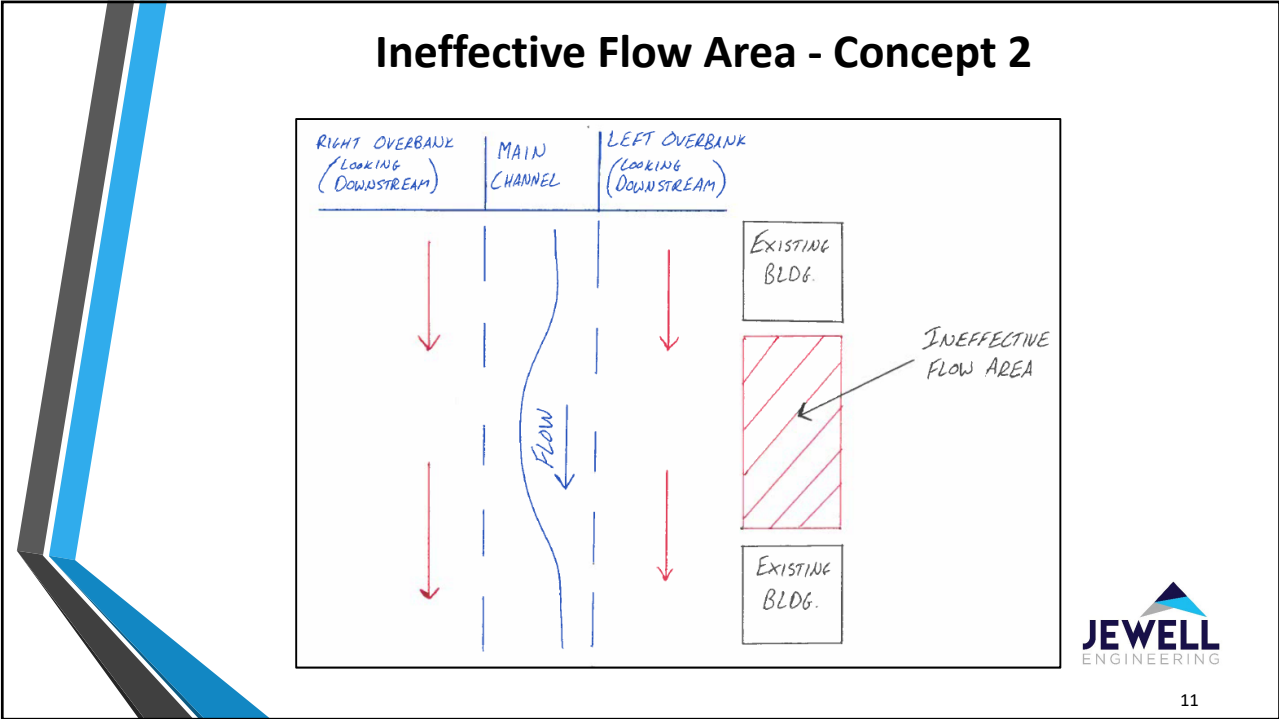


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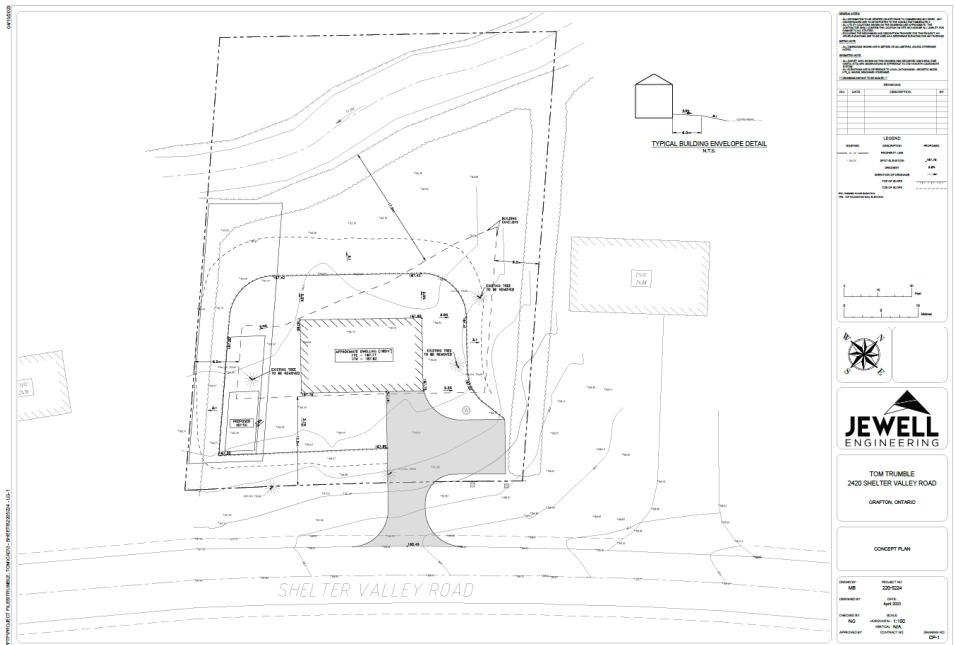
Ineffective Flow Area – Concept 1





Concept Plan

- The concept plan includes:
 - A septic design prepared by Carolle Gauthier.
 - A proposed dwelling location that meets relevant setbacks (i.e. septic, well, frontage, and creek setbacks).
 - A hammerhead driveway commonly requested by municipalities.
 - A grading plan for the house and surrounding grades to ensure all features fit within the site boundaries.
 - Note that the septic bed, dwelling finished floor, driveway, and top of well are all a minimum of 0.3m above the regulatory water surface elevation in the drawing.

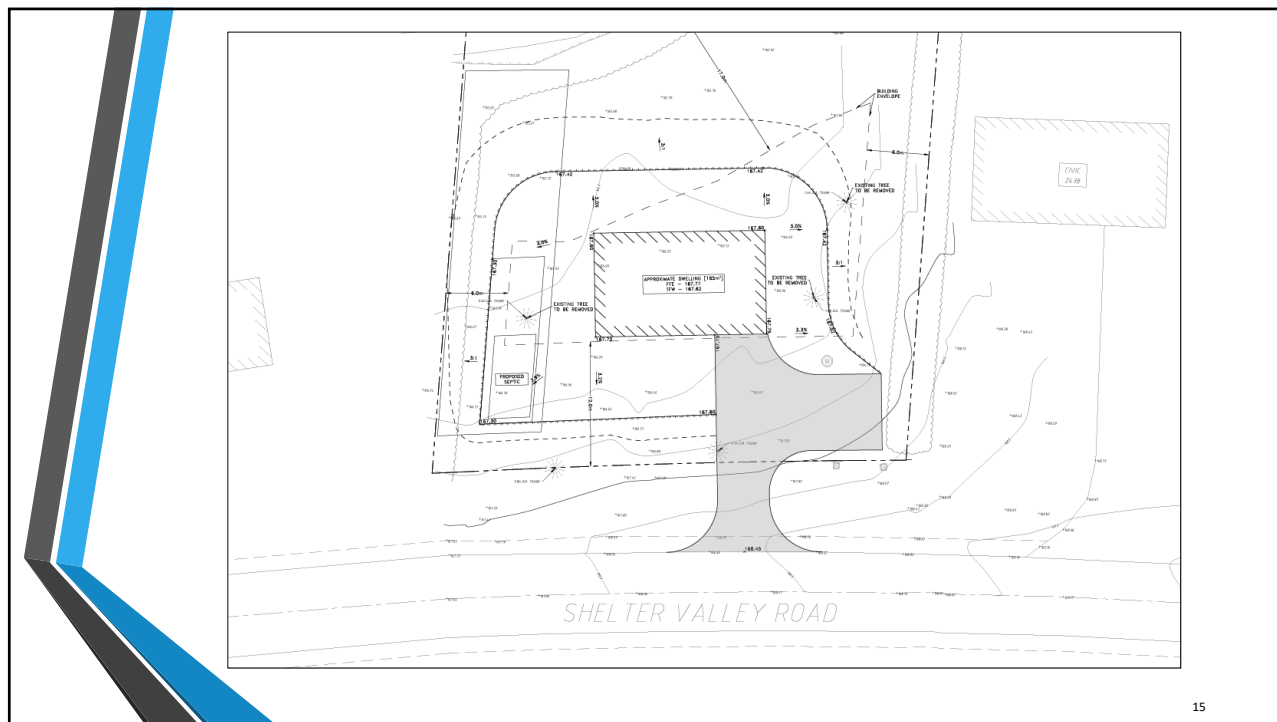


JEWELL ENGINEERING

TOM TRUMBULE
2403 SHELTER VALLEY ROAD
GRAFTON, ONTARIO

CONCEPT PLAN

DATE: 2023-08-01
SCALE: 1:500
PROJECT: 2403 SHELTER VALLEY ROAD
DRAWN BY: JTT
CHECKED BY: JTT
APPROVED BY: JTT



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LTC Engineering Review

- Correspondence between LTC’s engineering representative and Jewell Engineering after the submission of the opinion letter and concept plan concluded that LTC’s engineer has no further concerns with the proposed plan.
- Case study: Drag River, Haliburton
 - A similar project that included detailed modeling. The numerical assessment confirmed the methodology and engineering theory discussed in our opinion letter to be true and accurate.
 - Based on the Drag River project, years of experience, site observations, and our understanding of engineering principles and hydraulic theory, a new hydraulic model was not needed for this particular site. This is primarily due to the scenario presented by the existing buildings that bound either side of the subject lot.



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CONCLUSIONS

- Mr. Trumble is seeking to place fill on the subject lot with the intent to re-instate a residential dwelling on his family's property at 2420 Shelter Valley Rd.
- Jewell Engineering completed an inspection of the site and an engineering opinion letter as it relates to LTC's flood concerns. Our investigation concluded that with the proposed concept plan, the issuance of a permit is supportable since the plan presents a floodproofed dwelling *and* no negative impacts to adjacent property owners.
- The detailed concept plan was completed to satisfy LTC's request to show the lot is sufficient to accommodate the necessary grading, septic, well, and driveway.
- We request a permit with a duration of five (5) years to allow sufficient time for other approvals and the placement of fill material.
- The intent is to apply for a follow-up permit from LTC staff following the fill placement; the objective will be to reduce the flood-line setback from 15m to 6m. A reduction to the flood-line setback is not requested as part of this hearing.

