

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT PROJECT FILE REPORT



**Schedule “B” Municipal Class Environmental Assessment Study, Bridge (C001) on Route 800
over Butternut Creek, Nation Municipality, Ontario**

MP Project No.: OCM-19-0127

Prepared for:



The Nation Municipality
3248 County Road 9
Fournier, Ontario K0B 1G0

Prepared by:

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PROJECT FILE REPORT
SCHEDULE "B" MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT STUDY,
BRIDGE (C001) ON ROUTE 800 OVER BUTTERNUT CREEK, NATION MUNICIPALITY,
ONTARIO

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April 20, 2023

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The Nation Municipality
3248 County Road 9
Fournier, Ontario K0B 1G0

Attention: Marc Legault., Director of Public Works

**RE: Project File Report: Schedule "B" Municipal Class Environmental Assessment Study,
Bridge C001 on Route 800 over Butternut Creek, Nation Municipality, Ontario.**


McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) is pleased to submit this Final Project File Report for the Schedule "B" Municipal Class Environmental Assessment to the Nation Municipality.

This Project File Report provides a comprehensive review of the various solutions, the evaluation criteria, and the final recommendation for the **Technically Preferred Alternative** for Bridge C001 on Route 800 over Butternut Creek. Our team has conducted an in-depth review of the study area, bridge conditions, servicing needs, and stakeholder/public requirements. In particular, this report is intended to:

- Provide a background to the study;
- Define the nature and extent of the problem or opportunity, and explain the source of the concern or issue and the need for a solution;
- Outline the existing structural engineering and environmental (natural, social, cultural) conditions within the study area;
- Provide the alternative solutions considered;
- Provide evaluation followed and selection of the technically preferred solution;
- Define follow-up commitments, and
- Summarize the public consultation program employed.

If you have any questions or require any additional information, please contact the undersigned.

Sincerely,



Lisa Marshall, P.Eng.

McIntosh Perry Consulting Engineers Ltd.

Project Manager

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1.0 INTRODUCTION

The Nation Municipality (the Municipality) retained McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) to provide consulting services to complete a Municipal Class Environmental Assessment (EA) for an existing Bridge (C001) on Route 800 East. The project is following the requirements of the Municipal Class EA process for a Schedule “B” undertaking approved under the *Ontario Environmental Assessment Act*, to identify and develop a technically preferred solution for addressing concerns related to Bridge C001 on Route 800 over Butternut Creek in the Nation Municipality.

The existing Bridge C001 that spans Butternut Creek on Route 800 East has reached the end of its service life. The Municipality is considering various alternative solutions, one of which is to close Route 800 at the bridge and construct a new road alignment to by-pass the creek on the north-east side refer to **Figure 1**.

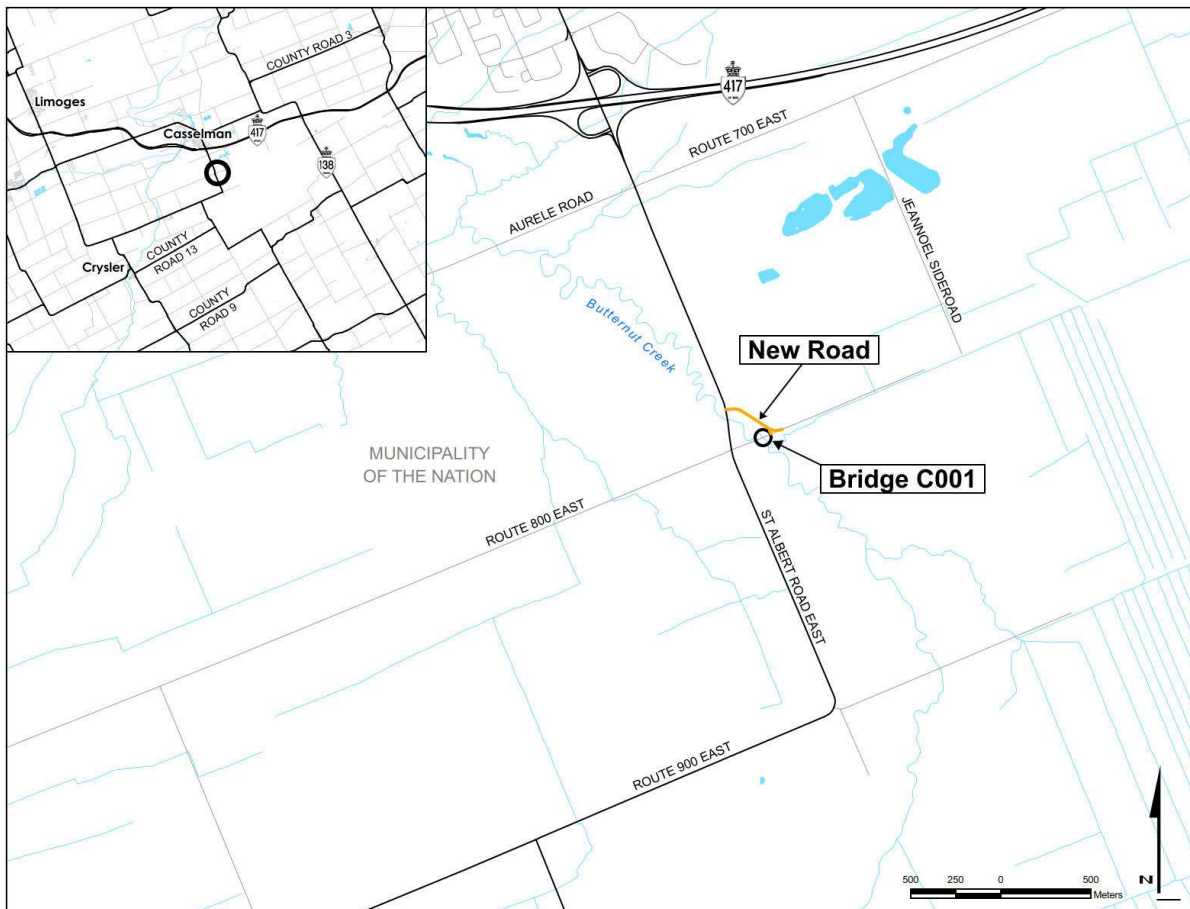


Figure 1: Bridge C001 on Route 800 Study Area Key Map

2.0 CLASS ENVIRONMENTAL ASSESSMENT PROCESS

2.1 Ontario's Environmental Assessment Act

Ontario's Environmental Assessment Act (EAA) was passed in 1975 and was proclaimed in 1976. The EAA requires proponents to examine and document the environmental effects that could result from major projects or activities and their alternatives. Municipal undertakings became subject to the EAA in 1981. The EAA's comprehensive definition of the environment is:

- Air, land, or water;
- Plant and animal life, including human life;
- The social, economic and cultural conditions that influence the life of humans or community;
- Any building, structure, machine or other device or thing made by humans;
- Any solid, liquid, gas, odour, heat, sound, vibration, or radiation resulting directly or indirectly from human activities, and
- Any part of a combination of the foregoing and the interrelationships between any two or more of them, in or of Ontario.

The purpose of the EAA is the betterment of the people as a whole, or any part of Ontario by providing for the protection, conservation and wise management of the environment in Ontario (RSO 1990, c.18, s.2). It is the objective of the EAA proponents to ensure that decisions result from a rational, objective, transparent, replicable, and impartial planning process.

To meet the requirements of Ontario's EAA, class environmental assessments were approved by the Minister of the Environment in 1987 as a means of obtaining project-specific approval under the Ontario EAA. The Class EA approach streamlines the planning and approvals process for projects that are:

- Recurring;
- Similar in nature;
- Usually limited in scale;
- Predictable in the range of environmental impacts, and
- Responsive to mitigation.

2.2 Class Environmental Assessment Process

The MCEA, prepared by the Municipal Engineers Association (MEA) (October 2000, amended 2011, 2015 and 2017) outlines the procedures to be followed to satisfy Class EA requirements for water, wastewater, stormwater management and road projects. The MCEA process provides municipalities with a five-phase planning procedure approved under the EAA for proponents to follow to meet Ontario's EA requirements.

- **Phase 1:** Problem or Opportunity Statement
- **Phase 2:** Identification and Evaluation of Alternative Solutions
- **Phase 3:** Examination of Alternative Methods
- **Phase 4:** Documentation of the Class EA Process
- **Phase 5:** Implementation and Monitoring.

Projects subject to the Class EA process are classified into the following four "Schedules" based on the degree of the expected impacts.

- **Schedule "A":** Projects are limited in scale, have minimal adverse effects and include the majority of municipal maintenance and operational activities. These projects are approved and may proceed directly to Phase 5 for implementation without following the other phases.
- **Schedule "A+":** Projects are limited in scale and have minimal adverse effects. These projects are approved and may proceed directly to Phase 5 for implementation without following the other phases. However, the public is to be advised prior to project implementation, though there is no ability for the public to request a Part II Order.
- **Schedule "B":** Projects have the potential for some adverse environmental effects. The municipality is required to undertake a screening process (Phases 1 and 2) involving mandatory contact with directly affected public and relevant review agencies to ensure that they are aware of the project and that their concerns are being addressed. Schedule "B" project requires that a Project File report be prepared and submitted for review by the public and review agencies. If there are no outstanding concerns, then the municipality may proceed to Phase 5 for implementation. However, a request may be made to the Ministry of Environment, Conservation and Parks for an order requiring a higher level of study, or that conditions may be imposed, only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered.
- **Schedule "C":** Projects have the potential for significant environmental effects and must proceed under the full planning and documentation procedures specified in the MCEA Document (Phases 1 to 4). Schedule "C" projects require that an Environmental Study Report be prepared and submitted for review by the public and review agencies. If there are no outstanding concerns, then the municipality may proceed to Phase 5 for implementation.

Figure 2 illustrates the MCEA planning and design process with the phases required for each schedule.

MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA

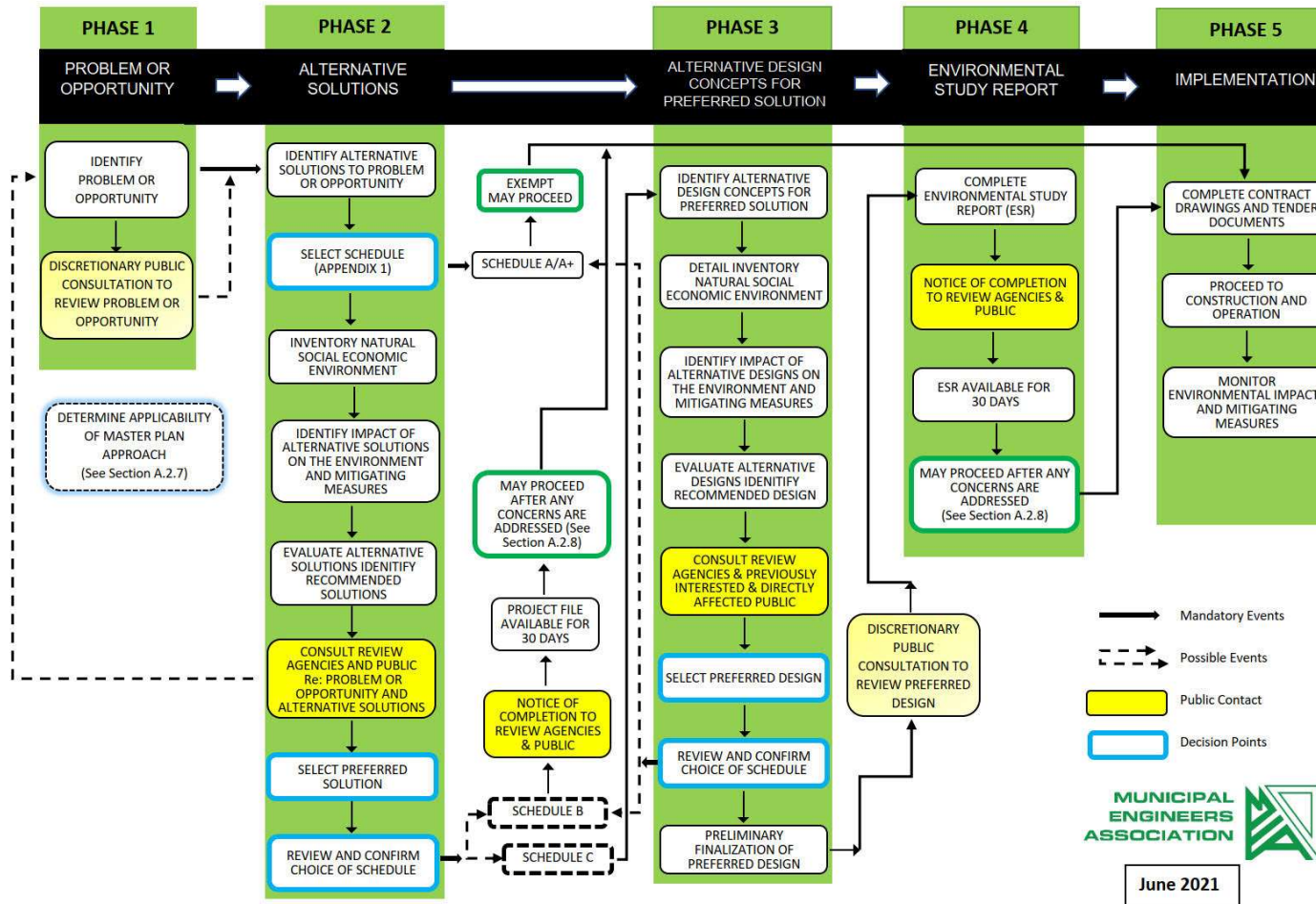


Figure 2: Municipal Class EA Planning and Design Process

2.2.1 Schedule B Classification

The Bridge C001 on Route 800 study is designated as a Schedule “B” undertaking according to the Municipal Class EA (October 2000, amended 2011, 2015 and 2017). A Schedule “B” undertaking must fulfill the first two phases of the MCEA process before moving on to the detail design and implementation. The MCEA planning phases undertaken for this study are listed below.

Phase 1: Identify the Problem / Opportunity

This phase involves not only identifying the problem/opportunity, but also describing it in sufficient detail to formulate a clear problem/opportunity statement. It is important that this statement is concise and considers the goals and objectives of the MCEA, as it is used to dictate the scope of the project.

Phase 2: Identify and Evaluate Alternative Solutions to the Problem/Opportunity

This phase involves undertaking the following six steps:

- Identify reasonable alternative solutions to the problem/opportunity;
- Prepare a general inventory of the existing natural, social and economic environments in which the project is to occur;
- Identify the net positive and negative effects of each alternative solution including mitigating measures, where possible;
- Evaluate the alternative solutions and identify a technically preferred solution;
- Consult with review agencies and the public to solicit comments and input; and
- Select/confirm the technically preferred solution.

2.2.1.1 Mandatory Principles

The planning process followed not only adheres to the guidelines outlined by the MCEA document, but reflects the following five mandatory principles of MCEA planning under the EAA:

- Consultation with affected parties early on and throughout the process, such that the planning process is a cooperative venture;
- Consideration of a reasonable range of alternatives, both functionally different alternative to the project (known as alternative solutions) and alternative methods of implementing the preferred solution;
- Identification and consideration of the effects of each alternative on all aspects of the environment;
- Systematic evaluation of alternatives in terms of their advantages and disadvantages, to determine their net environmental effects; and
- Provision of clear and complete documentation of the planning process followed to allow ‘traceability’ of decision-making with respect to the project.

Following these five principles ensures that the MCEA process is devoted to the prevention of problems and environmental damage through planning and decision-making, recognizing that research and evaluation of possible impacts have been considered prior to implementation of the project.

2.2.2 Impact Assessment Act

On August 28, 2019, the Impact Assessment Act (IAA) replaced the former *Canadian Environmental Assessment Act* (CEEA), 2012. The projects and activities that are subject to the IAA are very similar to those that were subject to an environmental assessment under the CEEA, 2012. However, some changes have been made to the “Project List”, such as new thresholds or projects have been introduced or increased. Under the IAA, only those projects designated by the Physical Activities Regulations or designated by the Minister of Environment on a discretionary basis may be subject to federal environmental assessment.

It has been determined that this project does not include physical activities identified on the list and is therefore not subject to the IAA process.

3.0 STUDY OVERVIEW

Phase 1 of the MCEA study required a clear and concise Problem/Opportunity Statement, followed by Phase 2 Alternative Solutions considered to address the identified Problem/Opportunity.

3.1 Phase 1 – Problem/Opportunity Statement

The existing Bridge C001 is located on Route 800 East and 0.2 km east of St. Albert Street and runs in an east-west direction. The bridge was built in 1951 and is a concrete slab on steel girder structure with a length of 8.0 m and a width of 5.0 m. Bridge C001 is nearing the end of its service life. Therefore, the Nation Municipality has the opportunity to identify and evaluate alternative solutions and determine a preferred solution in accordance with the Municipal Class Environmental Process.

3.2 Phase 2 – Alternative Solutions

To address the Problem/Opportunity Statement the following four (4) Alternative Solutions were developed:

- **Alternative 1:** Do nothing.
- **Alternative 2:** Rehabilitate the existing Bridge C001.
- **Alternative 3:** Replace existing Bridge C001 with new Structure.
- **Alternative 4:** Decommission the existing Bridge C001 and construction of a new road alignment for Route 800.

3.2.1 Alternative 1 - Do nothing

Alternative 1 involves leaving the existing Bridge C001 in place, in its deteriorating condition. Continued inaction on the deteriorating conditions of Bridge C001 will amount to demolition by neglect which would pose as a health and safety concern. Therefore, Alternative 1 is not considered to be a viable option, however, this option has been carried forward for evaluation to use as a benchmark for the other Alternative Design Concepts.

3.2.2 Alternative 2 - Rehabilitate the Existing Bridge C001

Alternative 2 involves the rehabilitation of the existing Bridge C001. This alternative would attempt to extend the service of the structure by 10-15 years. A temporary Bailey bridge would need to be installed on private property adjacent to the existing structure to detour traffic as the existing structure is not wide enough to accommodate staged construction for the rehabilitation. This alternative would require temporary limited interest on private property to construct the detour road and Bailey bridge.

3.2.3 Alternative 3 - Replace Existing Bridge C001 with new Structure

Alternative 3 involves the complete removal and replacement of the existing Bridge C001 in the current location. The new structure will have a life span of 75 years. The intention is to provide a structure that meets operational and safety standards. A temporary Bailey bridge would need to be installed on private property to detour traffic to facilitate the demolition of the old bridge and construction of the new structure. This alternative would require temporary limited interest on private property to construct the detour road and Bailey bridge.

3.2.4 Alternative 4 - Decommission the existing Bridge C001 and Construction of a new Road Alignment

Alternative 4 includes decommissioning the existing Bridge C001 and constructing a new road alignment to by-pass the creek on the north-east side, as well as construction of new turnaround areas at the east and west ends of the bridge on Route 800. This alternative would include permanent property acquisition.

4.0 INVENTORY OF EXISTING CONDITIONS

This section presents an overview of the background information (secondary source information) and the results of the field inventories undertaken specifically for this study. The following sections provide a summary of the existing natural, socio-economic, and cultural environments, as well as the structural conditions of the existing Bridge C001.

4.1 Natural Environmental Conditions

Determining the existing natural environmental conditions of the study area is required to assess the potential impacts of each alternative option considered as part of this MCEA study.

A desktop review was undertaken to collect background data and document all known natural features within the study area, prior to undertaking field work. Information was obtained from the following sources during the desktop review:

- Wildlife atlases for birds and herpetofauna, (Bird Studies Canada et al. 2006, Ontario Nature, 2019,);
- Ministry of Natural Resources and Forestry (MNRF) Land Information Ontario (LIO) database;
- MNRF Make a Map: Natural Heritage Areas mapping application;
- DFO Aquatic Species at Risk Mapping Tool;
- Fish On-line resource (MNRF);
- The Ontario Butterfly Atlas (OBA) (Toronto Entomologists' Association, 2020);
- South Nation Conservation Authority, and
- United Counties of Prescott & Russell Official Plan.

Field investigations were conducted on May 26, 2021 to collect current, and site-specific information related to terrestrial and aquatic ecosystems within the study area by McIntosh Perry. Field investigation included identification of the following where applicable:

- Existing vegetation communities;
- Existing fish habitat;
- Species at Risk (SAR) and their habitat;
- Resident or migrant bird and wildlife species;
- Critical habitat areas, and
- Existing land uses surrounding the study area.

For detailed information obtained through McIntosh Perry's desktop review and field investigations at the Bridge C001 study area, please refer to the Summary of Existing Environmental Conditions Memo (**Appendix A**). The following sections summarize the natural environmental conditions of the study area.

4.1.1 Vegetation

The study area is located within the Lake Simcoe-Rideau Ontario Ecozone (Ecoregion 6E), of the Mixedwood Plains Ecozone within the Great Lakes-St. Lawrence Forest Region (Crins et al., 2009). The region is largely comprised of cropland (57%), pastures (44.4%), and abandoned fields (12.8%). Forested areas of the Lake Simcoe-Rideau Ecozone are composed primarily of deciduous forest (16%) with some additional coniferous and mixed forests. Typical tree species include green ash (*Fraxinus pennsylvanica*), silver maple (*Acer saccharinum*), red maple (*Acer rubrum*), eastern white cedar (*Thuja occidentalis*), yellow birch (*Betula alleghaniensis*) balsam fir (*Abies balsamea*), black ash (*Fraxinus nigra*), black spruce (*Picea mariana*), tamarack (*Larix laricina*) and numerous other species (Crins et al., 2009).

The study area is dominated by agricultural land with rural residential properties and a few commercial businesses. Vegetation communities within the study area include an agricultural field, Dry-Fresh Graminoid Meadow (MEGM3), Dry-Fresh Deciduous Woodland (WODM4), and Dry-Fresh White Ash Deciduous Woodlot (WODM4-1). No species at risk (SAR) or rare vegetation was identified during the field investigation.

The following species classified as 'noxious weeds' under the *Weed Control Act*, 1900 were observed within the study area during the 2021 field investigation:

- bull thistle (*Cirsium vulgare*);
- coltsfoot (*Tussilago farfara*);
- common buckthorn (*Rhamnus cathartica*);
- giant ragweed (*Ambrosia trifida* L.), and
- wild parsnip (*Pastinaca sativa*).

4.1.2 Wetland Habitat

There are no Provincially Significant Wetlands (PSW) located within the study area. The Moose Creek wetland (evaluated – other) is located approximately 2 km east of the study area.

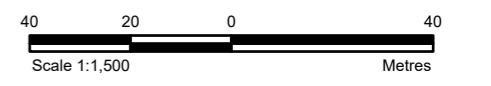
SNC Online Mapping Portal identifies a wetland as evaluated-other within the study area associated with Butternut Creek upstream of Bridge C001.

C:\Users\ale.ungun\Documents\Projects\2019\CM\CM-19-0127 - The Nation Municipality - Route 800 Road Realignment\aprx\Env\CM-19-0127_ELC_and_ConstraintsOpportunities.aprx



- LEGEND**
- Bridge Location
 - Study Area
 - Active Eastern Phoebe Nest
 - Active Rock Pigeon Nest
 - Barn Swallows Aerially Foraging
 - Eastern Meadowlark (heard)
 - Unevaluated Wetland
 - Watercourse

REFERENCE
 GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2021.



CLIENT:	THE NATION MUNICIPALITY	
PROJECT:	BRIDGE C001 AND ROUTE 800 ROAD ALIGNMENT	
TITLE:	CONSTRAINTS OPPORTUNITIES	
McINTOSH PERRY <small>115 Walgreen Road, RR3, Carp, ON K0A1L0 Tel: 613-836-2184 Fax: 613-836-3742 www.mcintoshperry.com</small>	PROJECT NO: CM-19-0127	FIGURE:
	Date	Aug., 16, 2021
	GIS	EU
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		3

4.1.3 Wildlife

Characteristic wildlife of the area includes: white-tailed deer (*Odocoileus virginianus*), northern raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), woodchuck (*Marmota monax*), Red-spotted Newt (*Notophthalmus viridescens*), Snapping Turtle (*Chelydra serpentina*), Eastern garter snake (*Thamnophis sirtalis sirtalis*) and common watersnake (*Nerodia sipedon*). Representative bird species include Field Sparrow (*Spizella pusilla*), Grasshopper Sparrow (*Ammodramus sarnnarum*), and Eastern Meadowlark (*Sturnella magna*) (Crins et al., 2009).

During the 2021 field investigation, the following wildlife were observed: Eastern chipmunk (*Tamias striatus*), least weasel (*Mustela nivalis*) and Northern leopard frog (*Lithobates pipiens*).

During the 2021 field investigation, the following migratory bird species were observed: American Crow (*Corvus brachyrhynchos*), American Goldfinch (*Spinus tristis*), American Robin (*Turdus migratorius*), Baltimore Oriole (*Icterus glabula*), Barn Swallow (*Hirundo rustica*), Belted Kingfisher (*Megaceryle alcyon*), Blue Jay (*Cyanocitta cristata*), Brown-headed Cowbird (*Molothrus ater*), Chestnut-sided Warbler (*Setophaga pensylvanica*), Chipping Sparrow (*Spizella passerine*), Common Crackle (*Quiscalus quiscula*), Eastern Meadowlark, Eastern Phoebe (*Sayornis phoebe*), European Starling (*Sturnus vulgaris*), Killdeer (*Charadrius vociferus*), Mourning Dove (*Zenaida macroura*), Northern Cardinal (*Cardinalis cardinalis*), Red-winged Blackbird (*Agelaius phoeniceus*), Red-eyed Vireo (*Vireo olivaceus*), Rock Dove (*Columba livia*), Song Sparrow (*Melospiza melodia*), Spotted Sandpiper (*Actitis macularius*), Tree Swallow (*Tachycineta bicolor*), Turkey Vulture (*Cathartes aura*), Warbling Vireo (*Vireo gilvus*), and Yellow Warbler (*Setophaga petechia*).

An active Eastern phoebe nest was observed within the St. Albert Road culvert and active Eastern phoebe and Rock pigeon nests were observed on the existing Bridge C001 during the natural science field investigation.

4.1.4 Fisheries and Aquatic Ecosystems

The watercourse associated with the Bridge C001 study area is Butternut Creek, which drains into the South Nation River. Land Information Ontario (LIO) and Aquatic Resource Area (ARA) mapping has defined Butternut Creek as having an unknown thermal regime and is likely a warmwater thermal regime. Butternut Creek is a permanent watercourse and contains the following fish species: Brook Stickleback (*Culaea inconstans*), Central Mudminnow (*Culaea inconstans*), Northern Pike (*Esox Lucius*), Northern Redbelly Dace (*Chrosomus eos*), and White Sucker (*Catostomus commersonii*).

The field investigation was completed by walking along the shoreline of Butternut Creek within the study area. Electrofishing surveys were not part of the scope of work this project. As such background information and watercourse habitat information was recorded. Young-of-year fish species from the minnow family (Cyprinidae) were observed within Butternut Creek at the time of the field investigation.

Butternut Creek flows towards the east and at the time of the field investigation had very still, turbid water with abundant emergent plants, mostly grasses with some arrowhead sp. The banks were undercut, dominated by grass species with sparse trees and shrubs. The substrate consisted of clay with some boulders and cobble. Erosion issues and heavily undercut banks were evident along the left bank. Butternut Creek provides warm water fish habitat.

As per the MNRF Kemptonville District's in-water timing guidelines for small rivers and streams within the district, no in-water works are to occur between March 15 and June 30, of any year (in order to avoid impacting spring spawning baitfish species).

4.1.5 Species at Risk

Ontario wildlife atlases were reviewed for species at risk (SAR) Element Occurrence (EO) records within 5 km of the study area. The Ontario Reptile and Amphibian Atlas (Ontario Nature, 2017) identified records of:

- Snapping Turtle (*Chelydra serpentina*);
- Blanding's Turtle (*Emydoidea blandingii*), and
- Northern Map Turtle (*Graptemys geographica*).

Suitable Snapping Turtle habitat is present within Butternut Creek.

The Ontario Breeding Bird Atlas (Bird Studies Canada et al., 2006) identified eight (8) SAR birds known to occur within 10 km of the study area:

- Bank Swallow (*Riparia riparia*);
- Barn Swallow (*Hirundo rustica*);
- Black Tern (*Chlidonias niger*);
- Chimney Swift (*Chaetura pelagica*);
- Eastern Meadowlark;
- Eastern Wood-peewee (*Contopus virens*);
- Grasshopper Sparrow (*Ammodramus savannarum*);
- Wood Thrush (*Hylocichla mustelina*).

An Eastern Meadowlark was heard in the graminoid field south of the study area (south of Route 800 East) and several Barn Swallows were observed foraging over the wheat field northeast of the watercourse within the study area. No Barn Swallow nests were observed in association with Bridge C001. The open fields (grassed and agricultural) surrounding the study area may provide habitat for species such as Bobolink (*Dolichonyx oryzivorus*) and Grasshopper Sparrow. Additionally, the wooded areas surrounding the study area may provide suitable habitat for Wood Thrush and other migratory bird species.

At the time of this report, Eastern Meadowlarks and Barn Swallows were listed as a threatened species both provincially and federally and receive habitat protection under the *Endangered Species Act*. However, as of January 26, 2023, Barn Swallows were down listed to Special Concern. No other SAR were observed during the field investigation.

MNRF Make a Map: Natural Heritage Areas (Natural Heritage Information Centre) mapping application identified the following SAR within 2 km of the study area:

- American Eel (*Anguilla rostrata*);
- Bobolink, and
- Eastern Meadowlark.

DFO Aquatic SAR mapping tool found no aquatic SAR records within or adjacent to the study area.

No snag trees were observed with the forested area, that could be potentially used by SAR bats as maternity roosting trees. Furthermore, common milkweed was observed within the study area and therefore, it is possible that Monarch use this area for various life stages.

4.1.6 Groundwater

A search of the publicly accessible MECP well records within 500 m of the study area identified six (6) water supply wells; three (3) of the wells are domestic, one (1) public well and two (2) wells used for livestock. The wells were constructed between 1950 and 2009 to an average depth of 17.18 m below ground surface (MECP, 2021). Evidence of groundwater seepage was present within the study area, indicated by the presence of watercress within Butternut Creek at the St. Albert Road culvert.

4.1.7 Surface Water

Bridge C001 crosses Butternut Creek which is a tributary of the South Nation River. Butternut Creek is approximately 0.92 km long.

4.1.8 South Nation Source Protection Area

The study area is located within the South Nation Source Protection Area (SNSPA), which is subject to the Raisin-South Nation Source Protection Plan (RSNSPP, 2016). The Bridge C001 study area is located within an Intake Protection Zone 2 (IPZ).

The Ministry of Environment, Conservation, and Parks (MECP) Source Protection Information Atlas indicates the Bridge C001 study area with the following:

- Wellhead Protection Area: No
- Wellhead Protection Area E (GUDI): No
- Intake Protection Zone: Zone 2
- Issue Contributing Area: No
- Significant Groundwater Recharge Area: No
- Highly Vulnerable Aquifer: Yes
- Event-Based Area: No
- Wellhead Protection Area Q1: No
- Wellhead Protection Area Q2: No
- Intake Protection Zone Q: No

4.1.9 Physiography, Soils and Bedrock

The study area lies within in the Lake Simcoe-Rideau Ecoregion (Ecoregion 6E), of the Mixed Plains Ecozone within the Great Lakes-St. Lawrence Forest Region. This ecoregion is exemplified by its limestone substrate characteristics. The substrate predominantly contains a deep layer of mixed limestone with underlying bedrock. The majority of the ecoregion consists of croplands, pastures, and abandoned fields (Crins et al., 2009). Soil materials are of deep marine depositional origin and consist of non-stoney clay loam and silty clay loam (Schut et al., 1987). North Gower association landscapes are nearly level to very gently sloping and have relatively high agricultural capability (Schut et al., 1987).

4.1.10 Designated Areas

The study area is in close proximity to a wetland evaluated as other identified as the Moose Creek Wetland, located approximately 2 km east of the study area.

A Candidate Life Science Area of Areas of Natural and Scientific Interest (ANSI) identified as the Moose Creek Bog was noted approximately 2 km east of the study area.

4.2 Existing Bridge Condition

The existing Bridge C001 is a single-span 8.0 m long concrete slab on steel girder bridge. Bridge C001 spanned over a section of the Butternut Creek, with each abutment located approximately at the edge of the watercourse and was built in 1951. The bridge is a single lane, asphalted road that accommodates two-way traffic and terminates in a dead end approximately 1 km east of the bridge. The bridge railings are comprised of steel posts set into the concrete abutment or attached to the steel girders and linked by steel cables. Railing along the approach to the bridge are comprised of timber posts linked by steel cables.

OSIM inspections noted that bridge required an updated barrier system, deck drains, barrier wall replacement, bearing replacement and painting of the structural steel. The deck top requires patch deck top waterproof and pave and noted the abutments and girders were salvageable.

4.3 Archaeological Resources

McIntosh Perry retained Past Recovery Archaeological Services Inc. to carry out a Stage 1 & 2 Archeological Assessment of lands with the potential to be impacted by the construction of the new road alignment (St. Albert Road to Route 800 East) to by-pass the creek on the north-east side.

4.3.1 Stage 1 and 2 Archeological Assessment

A Stage 1 and 2 Archeological Assessment was conducted by Past Recovery Archeological Services Inc. (Past Recovery) on April 20, 2022. The objective of the Stage 1 Archeological Assessment was to compile available information known and potential cultural heritage resources within the study area and provide direction for the protection, management and/or recovery of these resources, consistent with the Ministry of Tourism, Sport and Culture (MTSC) Guidelines.

The Stage 1 Archeological Assessment resulted in portions of the subject property possessed potential for pre-Contract and post-Contact archaeological resources.

The purpose of the Stage 2 assessment was to determine whether the property contained archaeological resources requiring further assessment, and if so to recommend an appropriate Stage 3 assessment strategy. The study area is comprised of an active agricultural field, small wooded areas, and road rights-of-way, the assessment was conducted by means of a combination of shovel test pit survey at five metre intervals and pedestrian survey at five metre intervals across all portions of the study area determined to exhibit archaeological potential.

No archaeological resources were recovered as part of the Stage 2 assessment.

For information on the Stage 1 and 2 Archeological Assessment, please refer to the Stage 1 and 2 Archeological Assessment Report prepared by Past Recovery (**Appendix B**).

4.4 Cultural Heritage Value

Under the MCEA system, any bridge that is 40 years old and over is subject to a Cultural Heritage Evaluation Report (CHER). Laurie Smith Heritage Consulting carried out a Cultural Heritage Evaluation and Heritage Impact Assessment (CHE/HIA) for Bridge C001 in 2013, as it is known that the bridge was constructed in 1951 and was 62 years old at the time of the evaluation.

To be designated under *O. Reg. 9/06*, a property must meet one or more of the criteria grouped into the categories of design or physical value, historical or associative value, and contextual value. The bridge was determined to not have cultural heritage value. There are no potential impacts on cultural heritage value and no mitigation measures are required.

Please refer to the Cultural Heritage Evaluation and Heritage Impact Assessment Report prepared by Laure Smith Heritage Consulting (**Appendix C**).

4.5 Transport Canada's Navigation Protection Program

The updated *Canadian Navigable Waters Act* (CNWA) came into effect August 2019. Under this act, owners of works who propose to construct, place, alter, rebuild, remove or decommission works that are in, on, over, under, through or across any navigable water may be required to apply for an approval to Transport Canada (TC), or seek authorization through the public resolution process.

Butternut Creek is not listed as a scheduled waterway. However, given the width and depth of the watercourse and the connectivity to the South Nation River, which has public boat launches and is used for canoeing and kayaking, Butternut Creek is considered navigable. Approval from TC will be required.

5.0 CONSULTATION PROGRAM

Consultation is a key component of the MCEA process for Schedule “B” projects. It is important for members of the community and stakeholders to provide balanced and objective information and consulting them to obtain feedback on the study process, alternatives, and preliminary technically preferred solution.

A consultation program was developed specific to this study under the following basis:

- Present clear and concise information at key stages of the study process;
- Solicit community, regulatory and municipal staff input;
- Identify concerns related to the undertaking;
- Consider stakeholder comments when developing the technically preferred solution; and
- Meet MCEA consultation requirements.

Consultation early and throughout the MCEA process attempts to meet the growing expectation on the part of the public that they will be consulted regarding decisions made by public decision-making bodies.

5.1 Project Contact List

A Project Contact List was developed at the initiation of this study and regularly updated throughout the course of the project to add, remove or revise information as necessary. The Project Contact list includes government ministries/agencies, municipal staff, emergency services, school boards, student transportation, businesses, potentially affected public, member of provincial parliament, Indigenous Communities and key interest groups (**Appendix D**).

All notices will be sent out via email and/or mailout through Canada Post, as required. There is no local newspaper publication and therefore all notices have been posted to the Nation Municipality’s website.

5.2 Study Commencement

Notice of Study Commencement letters were distributed by McIntosh Perry on September 19, 2022, to the project Contact List. The Notice of Study Commencement was posted to the Nation Municipality’s website. The Notice of Study Commencement can be found in **Appendix D**.

A summary of the comments received from the Notice of Study Commencement are summarized in a table in **Appendix E**. Responses received by various stakeholders as a result of the Notice of Study Commencement and consultation responses, including emails received and sent by the project team, will be enclosed in **Appendix E**.

5.1 Indigenous Community Involvement

Engaging Indigenous Communities is an important way of acknowledging interest in the stewardship of their heritage. The project team reached out to the Ministry of Environment, Conservation and Parks (MECP) for input and recommendations on the Indigenous Communities contacts who may have an interest in this project.

The following Indigenous Communities were engaged during the consultation process for this MCEA study: Mohawk Council of Akwesasne and Metis Nation of Ontario. A summary of the consultation responses with Indigenous Communities has been included in a summary table which can be found in **Appendix E**.

5.2 Public Information Centre

In compliance with the MCEA process, the Municipality hosted a Public Information Centre to elicit input on the study process and the design alternatives on January 11, 2023. Notice of Public Information Centre (PIC) letters were distributed on December 12, 2022 via email to the project contact list including all agencies, stakeholder and property owners. Notices were also mailed out to adjacent property owners. The Notice of PIC was posted on the Nation Municipality's website on December 12, 2022. The Notice of PIC can be found in **Appendix D**.

Residences voiced several comments and concern during the PIC which were directly addressed by the Nation and the McIntosh Perry team. Comments and concerns have been summarized in **Table 2**, as well as all comments and responses provided during the PIC have been summarized in meeting minutes. PIC materials including information slides can be found in **Appendix D** and meeting minutes can be found in **Appendix E**.

5.3 Study Completion

The MECP process requires mandatory two-points of contact with the public, including a 30-day public review period for the review of the Project File. A Notice of Study Completion will be distributed on May 1, 2023, to the project Contact List to advise of the commencement of the 30-day Project File public review period. The Notice of Study Completion advises that Interested persons may provide comment or objections to the project team within 30 calendar days from the start of the public review period. In addition, the letter advises that a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (i.e., requiring an individual/comprehensive EA approval before being able to proceed), or that conditions be imposed (e.g. require further studies), only on the grounds that the request order may prevent, mitigate or remedy adverse impacts to constitutionally protected Aboriginal and treaty rights. Requests on other ground will not be considered.

The Notice of Study Completion will be posted on the Nation Municipality's website. The Notice of Study Completion can be found in **Appendix D** and any comments/responses can be found in **Appendix E**.

Following the expiry of the 30-day public review period, the Project File will be updated based on comments received and confirmation provide if Nation Municipality can proceed with detail design and implementation.

Table 1: Comments Received During the Public Information Centre

Stakeholder	Comments Received
Resident	Residents raised concerns pertaining to the line of sight in relation to the existing curve and the proposed intersection of the newly aligned road and St. Albert Road. Residents spoke of vehicles travelling at high speeds along St. Albert Road and Route 800 and safety concerns with traffic merging from the newly aligned road onto St. Albert Road.
Resident	Residents questioned why rehabilitation of the structure was not further considered a viable alternative?
Resident	Why not construct a new bridge? Were alternative bridge/culvert types and configurations considered?
Resident	What is the estimated cost associated with each alternative? Were fees generated based on Industry Standards or the Nation Municipality undertaking the work themselves?
Resident	Did cost for <i>Alternative #4 - Decommission the Existing Bridge and Construct a New Road Alignment for Route 800</i> include the cost for expropriation? Approximately how much would the expropriation fee be approximately (per acre)?
Resident	Residence requested to know how much the engineering fees were to undertake this study?
Resident	Residents expressed concerns pertaining to traffic control along Route 800 E/Chemin Paul Latour once a dead end has been constructed. The residents present at the PIC especially expressed concerns on behalf of the resident that currently resides directly adjacent to Bridge C001 (west side of the bridge) and the negative impacts associated to them and their property.
Resident	A resident raised concerns pertaining to the loss of environmental habitat with the extension of the new road realignment.
Resident	Residents inquired if this project would be constructed this year?
Resident	Residents inquired as to when a decision will be made on the selection of the preferred alternative.
Landowner	Is not in support of the proposed new municipal road location, which is to be located on their property.

6.0 EVALUATION OF ALTERNATIVE SOLUTIONS

An evaluation of Alternative Solutions was undertaken to address the problem and opportunity statement identified for this project (Section 3.1), considering all aspects of the MCEA study. The overall assessment and evaluation process followed two basic concepts:

1. Assessment of Alternatives: the potential benefits of each alternative are assessed against a comprehensive set of criteria for Transportation/Operational, Structural Integrity/Public Safety, Natural Environment, Socio-Economic/Cultural Environment and Implementation factor groups.
2. Evaluation of Alternatives: A comparative evaluation of alternatives to identify a preliminary technically preferred design alternative.

An evaluation framework was developed by the Project Team, including technical considerations and environmental components that address the broad definition of the environment as described in the EAA and those based on comments received from relevant agencies. The evaluation of alternatives was carried out using the Reasoned Argument method of comparing differences in impacts and providing a clear rationale for the selection of the technically preferred alternative. **Table 2** identifies the evaluation criteria and rationale, as well as the criteria measures and corresponding descriptions.

The evaluation of Alternative Solutions considers the positive and negative potential impacts associated with each of the design alternatives in consideration of the criteria listed in **Table 2**. This evaluation is a relative comparison to be used to determine which alternative is technically preferred.

As illustrated in **Figure 3**, each criterion was given a score on a scale from least preferred (empty circle) to most preferred (solid circle).

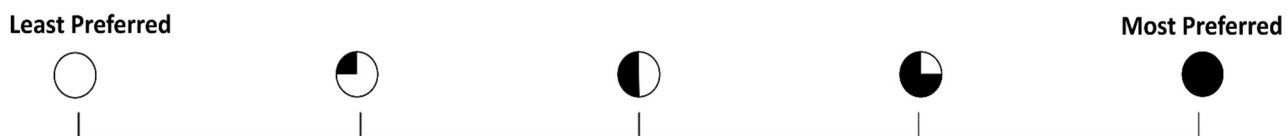


Figure 3: Evaluation of Alternative Solutions Scale of Preference

Table 2: Evaluation Criteria and Measures

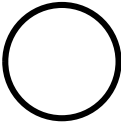
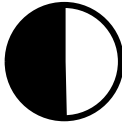
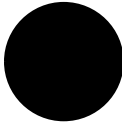
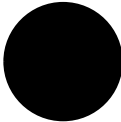
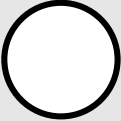



Evaluation Criteria	Description of Criteria	Criteria Measures	Description of Criteria Measures	Alternative 1 (Do Nothing)	Alternative 2 (Rehabilitate the Existing Bridge)	Alternative 3 (Replace the Existing Bridge with a New Structure)	Alternative 4 (Decommission the Existing Bridge and Construct a New Road Alignment for Route 800)
Transportation / Operational	Criteria to evaluate whether the alternative Solution addresses the problem and opportunities identified at Bridge C001; as well as evaluate the operational suitability and engineering characteristics of the Solution.	Safety	Potential to address safety considerations related to current road/bridge standards.	 <ul style="list-style-type: none"> - Does not address safety concerns with the conditions of the existing bridge (structurally and roadside safety). - Continued deterioration of the bridge may result in no connectivity/access to St. Albert Road and Route 800 East. 	 <ul style="list-style-type: none"> - Addresses safety concerns with the existing bridge for the short term. - No changes to accessibility. Bridge would continue to provide only a single lane of two-way traffic. - Meet current standards. 	 <ul style="list-style-type: none"> - Addresses safety concerns with the existing bridge for the long term. - Improvements to accessibility. New structure would have sufficient width to accommodate two lanes of traffic. - Meet current standards. 	 <ul style="list-style-type: none"> - Addresses safety concerns with the existing bridge for the long term as the bridge would be decommissioned. Enhancements to the structure guards would be required if the structure remains open for pedestrians and cyclists. - No changes to accessibility. - Condition of structure would need to be continuously monitored to ensure safety (for pedestrians, cyclists, etc.).
		Accessibility	Potential impacts on existing residential access along the corridor				
Technical / Structural	Criteria to evaluate the alternative Solutions to determine which will have the least risks and greatest extension of service life.	Extension of Service Life	The amount of time that is anticipated for the design alternative to provide safe service, before needing rehabilitation/replacement works.	 <ul style="list-style-type: none"> - This alternative does not extend the service life of the existing bridge. 	 <ul style="list-style-type: none"> - This alternative would extend the service life of the existing bridge by up to 15 years. - Durability is marginally improved as most 	 <ul style="list-style-type: none"> - This alternative would extend the service life of the existing bridge by up to 75 years. - Durability is improved with a new structure. 	 <ul style="list-style-type: none"> - This alternative does not extend the service life of the existing bridge, however, provides an alternative route.
		Durability	The ability to withstand wear, pressure or damage.				

Table 2: Evaluation Criteria and Measures

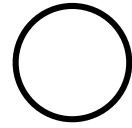
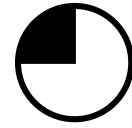
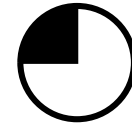
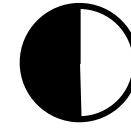
Evaluation Criteria	Description of Criteria	Criteria Measures	Description of Criteria Measures	Alternative 1 (Do Nothing)	Alternative 2 (Rehabilitate the Existing Bridge)	Alternative 3 (Replace the Existing Bridge with a New Structure)	Alternative 4 (Decommission the Existing Bridge and Construct a New Road Alignment for Route 800)
		Structural Engineering Risks	Based on the existing information known about the bridge, what level of structural engineering risk does each alternative consider.	<ul style="list-style-type: none"> - This option does not improve the durability of Bridge C001. - High structural engineering risk as inspections have already concluded that the bridge is at the end of its lifespan. - No impacts to utilities. 	components of the existing bridge are in poor condition and after rehabilitation would only be considered in fair condition. <ul style="list-style-type: none"> - High structural engineering risks due to poor condition of substructure and superstructure resulting in reduced feasibility of this alternative. - No impacts to utilities 	<ul style="list-style-type: none"> - Low structural engineering risks are as all components would be new and designed to current engineering standards. - Impacts to existing overhead communication line during construction is anticipated. 	<ul style="list-style-type: none"> - Durability is maintained as vehicles would be prohibited from using the decommissioned structure. - Low structural engineering risks as loading on the bridge would be reduced with decommissioning. (Condition of structure would need to be continuously monitored to ensure safety). - No impacts to utilities.
		Utilities	Potential impacts on existing utilities within study area. Coordination with utilities is expected for all Alternatives considered.				
Natural Environment	Criteria to evaluate the alternative Solution's effects on the natural heritage systems, natural environment and habitats, and water quality.	Environmentally Sensitive Areas	Proximity, size, characteristics and sensitivity of significant natural areas and potential impacts on these natural systems	 <ul style="list-style-type: none"> - Continued deterioration of the bridge will have significant impacts to the natural environment with structure debris and erosion from the road embankment entering into Butternut Creek. There is also the 	 <ul style="list-style-type: none"> - High impacts to environmentally sensitive areas/wildlife habitat for the construction of the detour road and bailey bridge which would impact the riparian zone on both sides of Butternut Creek. - High impacts to wildlife habitats with the 	 <ul style="list-style-type: none"> - High impacts to environmentally sensitive areas/wildlife habitat for the construction of the detour road and bailey bridge which would impact the riparian zone on both sides of Butternut Creek. - High impacts to wildlife habitats with the 	 <ul style="list-style-type: none"> - Low impacts to environmentally sensitive areas/wildlife habitat as the new road alignment would avoid the riparian zone and would not require tree removal. - Low to moderate impacts to wildlife habitat for nesting birds within the
		Wildlife Habitats (Terrestrial)	Presence of terrestrial wildlife habitat areas and potential impacts				
		Fisheries/Aquatic Impacts	Presence of fish communities and aquatic habitats; and potential impacts, including to water quality				

Table 2: Evaluation Criteria and Measures

Evaluation Criteria	Description of Criteria	Criteria Measures	Description of Criteria Measures	Alternative 1 (Do Nothing)	Alternative 2 (Rehabilitate the Existing Bridge)	Alternative 3 (Replace the Existing Bridge with a New Structure)	Alternative 4 (Decommission the Existing Bridge and Construct a New Road Alignment for Route 800)		
		Species at Risk	Presence of SAR and potential impacts/opportunities for mitigation	<p>potential for the structure to collapse into the watercourse which would require extensive in-water work for removal.</p> <ul style="list-style-type: none"> - High impacts to fisheries and aquatic habitats with the potential for erosion/debris and structure collapse. - Moderate impacts to water quality in Butternut Creek from erosion/debris. - No impacts to climate change. 	<p>removal of trees and vegetation for the construction of the detour road.</p> <ul style="list-style-type: none"> - Low impacts to fisheries and aquatic habitats as there would be no-in-water work. - High impacts to species at risk habitat with the rehabilitation of the bridge deck (common for barn swallow nests), disturbance of the riparian zone (common for bank swallows, turtles, etc.) - No impacts to ground and surface water quality/quantity as there would be no in-water work. - No impacts to climate change. 	<p>removal of trees and vegetation for the construction of the detour road.</p> <ul style="list-style-type: none"> - High impacts to fisheries and aquatic habitats as there would be in-water work for the construction of the new structure and dewatering required to facilitate construction. - Low impacts to ground and surface water quality/quantity with potential risk of sediment being released to Butternut Creek during dewatering. - No impacts to climate change. 	<p>agricultural lands and roadside ditches.</p> <ul style="list-style-type: none"> - No impacts to fisheries and aquatic habitat as there would be no-in-water work. - Low impacts to species at risk with removal of agricultural lands. - Low to moderate impacts to ground and surface water quality/quantity with the conversion of overland flow paths (sheet flow across agricultural field) to chanelized flow paths (new ditches along new road alignment) and increase in run-off resulting from the change from agricultural land to hard surface pavement. - Low impacts to climate change with the conversion of agricultural lands to hard surface pavement. 		
Ground and Surface Water Quality/Quantity	Potential impacts to surface water and ground water resources and quality								
Climate Change	Expected production of greenhouse gas emissions and impacts on carbon sinks; and resilience or vulnerability to changing climatic conditions (climate change adaptation)								

Table 2: Evaluation Criteria and Measures

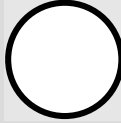



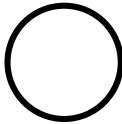
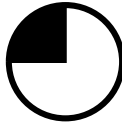
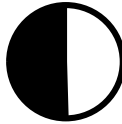
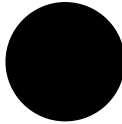
Evaluation Criteria	Description of Criteria	Criteria Measures	Description of Criteria Measures	Alternative 1 (Do Nothing)	Alternative 2 (Rehabilitate the Existing Bridge)	Alternative 3 (Replace the Existing Bridge with a New Structure)	Alternative 4 (Decommission the Existing Bridge and Construct a New Road Alignment for Route 800)
Social and Cultural Environment	Criteria to evaluate the alternative Solution's effects on community and social features, businesses, properties, and archaeological, built and cultural heritage features within the study area.	Land Use / Socio-Economic Conditions	Presence, number and characteristics of residences, community facilities, public parks, institutions or businesses within or adjacent to the study corridor.	 <ul style="list-style-type: none"> - No impacts to land use/socio-economic conditions - No anticipated impacts to cultural heritage and archaeological resources. - No construction impacts. 	 <ul style="list-style-type: none"> - Low impacts to land use/socio-economic conditions with temporary limited interest (temporary property required) for the detour road and bailey bridge. - No anticipated impacts to cultural heritage and archaeological resources. - Low construction impacts to local residents with construction duration anticipated to be one construction season. 	 <ul style="list-style-type: none"> - Low impacts to land use/socio-economic conditions with temporary limited interest (temporary property required) for the detour road and bailey bridge. - No anticipated impacts to cultural heritage and archaeological resources. - Moderate construction impacts to local residents with construction duration anticipated to be multiple construction seasons. 	 <ul style="list-style-type: none"> - High impacts to land use/socio-economic conditions with permanent property acquisition required for the road realignment. - No anticipated impacts to cultural heritage and archaeological resources. - Low construction impacts to local residents with construction duration anticipated to be completed in one construction season.
		Archaeological, Built Heritage and Cultural Heritage Features	Presence and characteristics of registered archaeological resources and designated built heritage resources under the Heritage Act, as well as potential impacts on archaeological/built and cultural heritage resources within study area				
		Construction Impacts	Duration of construction, staging options and potential for construction-related impacts on traffic circulation, access, noise and dust.				
Implementation	Criteria to evaluate the financial implications and implementation opportunities of the alternative Solution.	Capital Costs	Capital cost of proposed improvement	 <ul style="list-style-type: none"> - Lowest capital cost. - Operational and Maintenance costs are anticipated to be low. With no extension of 	 <ul style="list-style-type: none"> - Second lowest capital cost. This alternative is considered to be the least economical 	 <ul style="list-style-type: none"> - Highest capital costs. This alternative is the more economical solution compared to 	 <ul style="list-style-type: none"> - Costs associated with this alternative are the second highest capital cost.

Table 2: Evaluation Criteria and Measures

Evaluation Criteria	Description of Criteria	Criteria Measures	Description of Criteria Measures	Alternative 1 (Do Nothing)	Alternative 2 (Rehabilitate the Existing Bridge)	Alternative 3 (Replace the Existing Bridge with a New Structure)	Alternative 4 (Decommission the Existing Bridge and Construct a New Road Alignment for Route 800)
		Operational and Maintenance Costs	Operational and maintenance costs of proposed improvement over life-cycle	service life, this option will require annual structural assessments and recurring maintenance for erosion of the road embankment.	option based on the lower extension of service life (15 years) and it should also be noted that the cost estimate may be significantly variable based on the conditions revealed during the inspection. - Operational and Maintenance costs are anticipated to be high.	rehabilitation based on the higher extension of service life (75 years). - Operational and Maintenance costs are anticipated to be low to moderate.	- Operational and Maintenance costs are anticipated to be low to moderate due to this option requiring annual structural assessments.

7.0 RECOMMENDED ALTERNATIVE SOLUTION

The alternatives were assessed against the evaluation criteria as appropriate. The overall comparative evaluation of alternatives was based on a qualitative methodology and did not include the assignment of factor significance weightings.

The selection of the recommended alternative solution involved identifying and making trade-offs among the advantages and disadvantages of the alternatives. The alternative that had the most overall advantages was recommended as the technically preferred alternative.

Based on the comparative analysis of alternative planning solutions, the alternative design solutions address the problem and opportunity statement for the project, apart from Alternative 1. However, in consideration of negative natural environment impacts and implementation cost vs benefit impacts associated with Alternative Solution 3 and 4 and significant engineering risks associated with Alternative Solution 2, the recommended alternative solution has been selected as Alternative Solution 4. Alternative Solution 4 allows the Nation Municipality to provide safe and reliable connectivity on Route 800 East over Butternut Creek. This option was determined to have the best balance of benefits for transportation/operational, technical/structural while having moderate impacts to socio-economics and the natural environment. This option does have the second highest costs; however, this alternative is the more economical solution based on the low to moderate operational and maintenance costs.

However, during the January 11, 2023 Public Information Centre, residence of Nation Municipality voiced a number of concerns with respect to moving forward with **Alternative 4 - Decommission the existing Bridge C001 and Construction of a new Road Alignment**. Residence identified the following key concerns:

- Line of sight in relation to the existing curve and the proposed intersection of the newly aligned road and St. Albert Road;
- Vehicles travelling at high speeds along St. Albert Road and Route 800 and safety concerns with traffic merging from the newly aligned road onto St. Albert Road;
- Expropriation impacts and associated costs;
- Concerns pertaining to traffic control along Route 800 E/Chemin Paul Latour once a dead end has been constructed;
- Loss of environmental habitat with the extension of the new road realignment, and
- Impacts to farmland and operations.

Mayor Francis Brière concluded the meeting by indicating that information received during the PIC would be brought back to Council for consideration and a decision would be made in the near future. On January 17, 2023, the Nation Municipality advised McIntosh Perry that the Mayor and Council have endorsed moving forward with **Alternative 3 - Replace Existing Bridge C001 with new Structure**.

8.0 SUMMARY AND CONCLUSIONS

During this MCEA, the Nation Municipality and McIntosh Perry Project Teams worked with key stakeholders to address and resolve key issues and challenges associated with evaluating alternative options to resolve issues related to Bridge C001.

Based on the comprehensive review of four (4) different alternative solutions against a multiple bottom line evaluation process that takes into consideration environmental, social, constructability, financial, and operational factors, Alternative 4 - Decommission the Existing Bridge and Construct a New Road Alignment, was identified as the **Recommended Alternative solution** to the problem statement for this study. However, following public consultation, the Nation Municipality had decided to move forward with replacing the bridge with a new structure (Alternative 3).

8.1 Public Review Period

This Project File Report meets the requirements of a Schedule “B” Municipal Class EA study. The Project File Report has been filed for 30-days, from May 1, 2023, to May 30, 2023, for public reviewing and comment.

During the Public Review Period, a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study, or that conditions may be imposed, only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Request on other grounds will not be considered. Requests should include the requesters contact information and full name for the ministry.

Minister of the Environment, Conservation and Parks
Ministry of Environment, Conservation and Parks
77 Bay Street, 5th Floor
Toronto, ON M7A 2J3
Minister.mecp@ontario.ca

Director, Environmental Assessment Branch
Ministry of Environment, Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto, ON M4V 1P5
EABDirector@ontario.ca

Requests should specify what kind of order is being requested, how an order may prevent, mitigate or remedy those potential adverse impacts, and any information in support of the statements in the request. The request should be sent in writing or by email to the proponent and the following:

Provided no comments or Part II Orders are received during the 30-day review process, it is recommended that the Nation Municipality proceed with detail design and implementation.

8.2 Permitting and Approvals

Following permitting and approvals will be required during the detail design stage:

South Nation Conservation Authority (SNCA) - Administers a regulation made under Section 28 of the Conservation Authorities Act known as Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (O. Reg. 170/06). This regulation regulates areas that are subject to flooding and shoreline erosion contain wetlands, watercourses, slopes stable and unstable stream valleys, and applicable setback areas. The straightening, changing, diverting, or interfering with the existing channel of a river, creek, stream, or watercourse; or changing or interfering with a wetland works requires permission in a regulated area. The property is regulated under Ontario Regulation 170/06 by the SNCA and as such, requires a permit.

Department of Fisheries and Oceans (DFO) - The Fish and Fish Habitat Protection Program ensures compliance with relevant provisions under the *Fisheries Act* and the *Species at Risk Act*. The program reviews proposed works, undertakings and activities that may impact fish and fish habitat. If the scope of the project does not fall within the standards and codes of practice, a request for review should be submitted. The program will review the proposed project to identify the potential risks to the conservation and protection of fish and fish habitat. The Fish and Fish Habitat Protection Program will ensure that impacts are managed in the best way possible. During the review, DFO will determine if the project will need an authorization under the *Fisheries Act*. If it is determined that the project will cause the death of fish, and/or harmful alteration, disruption or destruction of fish habitat, an authorization is required. The authorization will include terms and conditions that must be followed to avoid, mitigate, offset and monitor the impacts to fish and fish habitat resulting from the project.

Transport Canada (TC) – Under the *Canadian Navigable Waters Act* (CNWA), owners of works who propose to construct, place, alter, rebuild, remove, or decommission works that are in, on, over, under, through or across any navigable water, may be required to apply for an approval to Transport Canada, or seek authorization through the public resolution process. The Navigation Protection Program (NPP) is responsible for administering and processing applications for approval. The Minister of Transport has the authority to issues terms and conditions with an approval.

Since Butternut Creek is considered navigable, replacing the existing bridge with a new structure will impact navigation and will therefore require the Application for Approval process to be followed. The Application for Approval process requires submitting an application to the Navigation Protection Program (NPP), in order for the program to review and approve the work, depositing the project information on the public registry (Common Project Search (CPS) website) and publication of a public notice in a local newspaper to notify the public of the project and provide Indigenous Communities the opportunity to understand the potential impact on their rights to navigation during and after construction. Once the public notice has been published, the public has 30-days to provide comments on the work to Transport Canada. Work may proceed once approval from Transport Canada has been received.

Ministry of Environment, Conservation and Parks (MECP) – A Permit to Take Water is required if you plan to take 50,000 + litres of water a day from the environment. Applying for the permit involves the submission of an application and appropriate scientific evaluation/studies. MECP will review the permit application, measuring it against a number of requirements. Designated PTTW applications will be posted on the Environmental Registry in accordance with the Environmental Bill of Rights and consider public comments in its decision. The permit authorizes you to withdraw water from a water source(s) according to the terms and conditions on the permit.

The EASR regulation prescribes the takings of ground water and stormwater for the purpose of dewatering construction projects that require dewatering between 50,000 and 400,000 L/day. Activities required to be registered in the EASR do not require a PTTW for the water taking. An environmental compliance approval (ECA) under section 53 of the *Ontario Water Resources Act* (OWRA) is also not required for the discharge of stormwater.

A Permit-to-Take-Water regulation prescribes the takings of ground water and stormwater for the purpose of dewatering construction projects that require dewatering greater than 400,000 L/day. Applying for the permit involves the submission of an application and appropriate scientific evaluation/studies. MECP will review the permit application, measuring it against a number of requirements. Designated PTTW applications will be posted on the Environmental Registry in accordance with the Environmental Bill of Rights and consider public comments in its decision. The permit authorizes you to withdraw water from a water source(s) according to the terms and conditions on the permit.

8.3 Monitoring

Environmental monitoring is essential to characterize and monitor the quality of the surrounding environment, identify potential negative effects and refine mitigation measures, ensure compliance with environmental regulations, and prevent long-term adverse impacts on the environment.

A comprehensive monitoring program will be developed in the detailed design phase for the replacement of Bridge C001. This program will be designed to monitor impacts to the environment during the various stages of construction and following construction completion. This will allow for an inclusive assessment of cumulative impacts. The key elements of the comprehensive monitoring program will include, but are not limited to, the following, described below:

- Construction works monitoring; and
- Environmental compliance monitoring

8.3.1 Construction Works Monitoring

The objective of Constructed Works monitoring is to assess the structural integrity of the construction and their effectiveness with respect to controlling environmental impacts during construction (i.e., erosion and sediment control, etc.).

Construction-phase and post-construction monitoring may include recording of water levels, photographic record of the constructed works, and a review of constructed works by a qualified engineer. Construction-phase monitoring may also include ongoing monitoring of turbidity upstream and downstream of the construction. Post-construction monitoring may also be undertaken to monitor and maintain the proposed bridge replacement including site investigations to confirm no negative impacts are occurring upstream and downstream of the bridge.

8.4 Commitments During Detail Design

During this study, the following items were identified for consideration during the Detail Design phase of this MCEA study:

- Archaeological Resources
 - MCM recommends that any required further assessments (e.g., Stage 2-4) be completed as early as possible in the Detail Design phase and prior to any ground disturbing activities. The following approaches will be used to mitigate potential negative impacts of the project:
 - Compliance with the recommendations from the Stage 1 & 2 archaeological assessment report.
 - If archaeological resources are impacted by EA project work, notify MHSTCI at archaeology@ontario.ca. All activities impacting archaeological resources must cease immediately, and a licenced archaeologist is required to carry out an archaeological assessment in accordance with the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists*.
 - If human remains are encountered, all activities must cease immediately, and the local police and coroner must be contacted. In situations where human remains are associated with archaeological resources, MHSTCI should also be notified (at archaeology@ontario.ca) to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.
 - During the detail design, requirements for in-water works will need to be determined. Should further archaeological assessment work (i.e., Marine Archaeological Assessments) be deemed to be required, MCM recommends that further assessment(s) be completed as soon as possible during detail design and prior to any ground disturbing activities.
- South Nation Conservation Authority (SNCA)
 - The SNCA advised during consultation that a letter of permission for alteration or interference to watercourses or interference or development to and within regulatory floodplains will be required in accordance with O. Reg. 174/06 will be required.
 - Any changes to the existing hydraulic opening, shall be reviewed during the detail design to confirm that there are no impacts on the conveyance to the upstream and downstream reaches.
 - Prepare an Erosion and sediment control (ESC) and Dewatering Plan. ESC measures must be installed before, during and post construction and remain until the site is permanently stabilized.
- Ministry of Environment Conservation and Parks (MECP)
 - Noise control measures should be addressed and included in the construction plans to ensure that nearby residents and sensitive land uses within the study area are not adversely affected during construction.
 - All waste generated during construction must be disposed of in accordance with ministry requirements and under the Environmental Protection Act, all excess materials must be managed in accordance with O. Reg 406/19.
 - Consultation should be continued with **Indigenous Communities** during Preliminary and Detail Design.

- The MECP advised that if the proponent believes that the proposed activities will have an impact on SAR or are unsure of the impacts, they should contact SAROntario@ontario.ca to undergo a formal review under the ESA, and ensure that if the proposed activities cannot avoid impacts to species and/or their habitat, then authorization under the *Endangered Species Act* (ESA) is required.
- Migratory Birds and Wildlife:
 - Due to the history of Eastern Phoebe nesting on the bridge, the following mitigation measures are recommended:
 - It is recommended that exclusionary measures are installed (i.e., exclusionary bird netting) to prevent nesting activities prior to the bird nesting period of April 15 to September 15 to avoid contravention of the Migratory Birds Convention Act, if the replacement works are proposed to occur during the nesting period.
 - If the existing bridge is to be removed during the active nesting window, the exclusionary measures such as netting, should be installed prior to April 15 to prevent nesting.
 - Due to the presence of several migratory birds, vegetation clearing must occur outside the bird nesting window to avoid contravention of the MBCA and FWCA. If vegetation removal must occur within the nesting window, the Contractor must retain a qualified avian biologist to conduct a nesting survey prior to clearing.
 - If actively nesting migratory birds are encountered at any time of year, works should not continue in the location of the nest until:
 - After it has been determined by a qualified avian biologist that the young have fledged and vacated the nest and work area; or
 - A qualified avian biologist determines a suitable buffer distance at which work may continue to prevent disturbance of the bird(s);
 - Where a buffer distance has been implemented, a qualified avian biologist must undertake monitoring during construction to ensure migratory birds and their eggs are not disturbed, destroyed or taken.
- Fish and Fish Habitat
 - During the detail design, requirements for in-water works will need to be determined.

9.0 REFERENCES

Bird Studies Canada, 2006. *Atlas of the Breeding Birds of Ontario*. <http://www.birdsontario.org/atlas/index.jsp>. Accessed November 2021.

Canada Department of Agriculture. 1967. *Soils Map of Lanark County Ontario. Soil Survey Report No. 40, Ontario. South Sheet. Soil Research Institute, Research Branch.* <http://sis.agr.gc.ca/cansis/publications/surveys/on/on40/index.html>. Accessed November 2021.

Canada Navigable Water Act. 1985. R.S.C. 1985, c. N-22. Current version April 4, 2023.

Crins, W.J., P.A. Gray, P.W.C. Uhlig, and M.C. Wester. 2009. *The Ecosystems of Ontario, Part 1: Ecozones and Ecoregions*. Inventory, Monitoring and Assessment Section. Science and Information Branch. Ontario Ministry of Natural Resources. Ontario, Canada: Queen’s Printer for Ontario. 87p.

Department Fisheries and Oceans Canada. 2018. *Aquatic species at risk mapping tool*. <https://open.canada.ca/data/en/dataset/e0fabad5-9379-4077-87b9-5705f28c490bj>. Accessed November 2021.

Endangered Species Act. 2007. S.O. 2007, c. 6. Current version October 19, 2021.

Environmental Assessment Act. 1990. R.S.O. 1990, c. E-18. Current version January 1, 2022.

Fish and Wildlife Conservation Act. 1997. S.O. 1997, c. 41. December 2020 – June 2021 version.

Fisheries Act. 1985. R.S.C. 1985, c. F-14. Current version April 4, 2023.

Impact Assessment Act. 2019. S.C. 2019, c. 28, s.1. Current version April 4, 2023.

Migratory Birds Convention Act. 1994. S.C. 1994, c. 22. December 2017 version.

Ministry of the Environment, Conservation and Parks (MECP). 2021. *Map: Well Records*. <https://www.ontario.ca/environment-and-energy/map-well-records>. Accessed November 2021.

Ministry of Natural Resources (MNR). 2013b. *In-water Work Timing Window Guidelines*. Queen’s Printer for Ontario 2013. p. 2.

Ministry of Natural Resources and Forestry (MNRF). 2015. *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E*. <https://dr6j45jk9xcmk.cloudfront.net/documents/4775/schedule-6e-jan-2015-access-ver-final-s.pdf>. Accessed November 2021.

Ministry of Natural Resources and Forestry (MNRF). 2018. *Land Information Ontario metadata tool*. <https://www.ontario.ca/page/land-information-ontario>. Queen’s Printer of Ontario. Accessed November 2021.

Ministry of Natural Resources and Forestry (MNRF). 2021. *Make A Map: Natural Heritage Areas*. Ministry of Natural Resources and Forestry.

http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US. Queen's Printer for Ontario. Accessed November 2021.

Ministry of Natural Resources and Forestry (MNRF). 2021. *Fish ON-Line*. Queen's Printer of Ontario. <https://www.gisapplication.lrc.gov.on.ca/FishONLine/Index.html?site=FishONLine&viewer=FishONLine&locale=en-US>. Accessed November 2021.

Ontario Nature. 2020. *Ontario Reptile and Amphibian Atlas: A citizen science project to map the distribution of Ontario's reptiles and amphibians*. Ontario Nature. <http://www.ontarionature.org/atlas>. Accessed November 2021.

Past Recovery Archaeological Services Inc. 2022. Stage 1 & 2 Archaeological Assessment for Route 800 Realignment and Bridge C001, April 20, 2022.

Smith, L. 2013. *Cultural Heritage Evaluation and Heritage Impact Assessment Report*. Laurie Smith Heritage Consulting. November 27, 2013.

Snell, S. Ministry of the Environment, Conservation and Parks (MECP). 2021. Personal Communication.

South Nation Conservation Authority. 2021. South Nation Conservation Authority Regulation Mapping. <https://camaps.maps.arcgis.com/apps/webappviewer/index.html?id=7223f276b67c42e0959c1d0727f30a77>. Accessed November 2021.

Species at Risk Act. 2002. S.C. 2002, c. 29. Current version April 4, 2023.

Toronto Entomologist' Association. 2020. *Ontario Butterfly Atlas*. <https://www.ontarioinsects.org/atlas/>. Accessed November 2021.

United Counties of Prescott and Russell. 2018. *Official Plan – United Counties of Prescott*. https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_2375121/File/Stay/planning_forestry/official_plan_accessible_document.pdf. Accessed November 2021.

Weed Control Act. 1990. R.S.O, 1990, c. W.5. December 2019-2021 version.

APPENDIX A – SUMMARY OF EXISTING ENVIRONMENTAL CONDITIONS

MEMORANDUM

To: Marc Legault, Director of Public Works
The Nation Municipality
County Road 9, Fournier, ON

From: Erik Pohanka, Biologist
McIntosh Perry Consulting Engineers Ltd.

c.c. Kerry Reed, Environmental Planner
McIntosh Perry Consulting Engineers Ltd.

Date: December 17, 2021

Re: The Nation Municipality Route 800 – Environmental Screening

This memorandum provides a summary of the environmental screening services completed by Erik Pohanka of McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) to document the existing environmental conditions at the intersection of Route 800 and St. Albert Road within The Nation Municipality (the Nation) that has been proposed to be reconfigured. The study area is comprised of Route 800 from St. Albert Road for approximately 220 m eastward, St. Albert Road from Route 800 for approximately 250 m northward, and adjacent land in the northeast quadrant of the intersection.

Methodology

Prior to McIntosh Perry conducting the field investigation of the study area, background SAR information was collected through a desktop review obtained from various sources including:

- Correspondence with the Ministry of Environment, Conservation and Parks (MECP) (Appendix A);
- The Land Information Ontario (LIO) Metadata Management Tool Aquatic Resource Area (ARA) database (Ministry of Northern Development, Mines, Natural Resources and Forestry [NDMNRF], 2021);
- The Fish ONLINE database (NDMNRF, 2021);
- Fisheries and Oceans Canada (DFO) Species at risk (SAR) mapping tool (DFO, 2021);
- LIO was consulted for natural heritage information in the vicinity of the study area (NDMNRF, 2021);
- Natural Heritage Information Centre (NHIC) Make a Map Data Tool (NDMNRF, 2021);
- The Atlas of the Breeding Birds of Ontario (OBBA) (Bird Studies Canada et al., 2008);
- The Ontario Reptile and Amphibian Atlas (ORAA) (Ontario Nature, 2020), and
- The Ontario Butterfly Atlas (OBA) (Toronto Entomologists' Association, 2020).

In order to acquire information on SAR habitat present within and adjacent to the study area, a field investigation was carried out by McIntosh Perry staff on May 26, 2021. The investigation included identification and mapping of

the following, where applicable:

- Watercourse morphology;
- Habitat features (e.g., riffles, pools, woody debris, undercut banks, boulder clusters, etc.);
- Groundwater seepage areas, watercourse substrate, bank stability, riparian and aquatic vegetation;
- Specialized habitat areas (spawning, nursery, rearing, migratory, and food supply areas);
- Physical migration barriers;
- Suitable habitat for aquatic and terrestrial species at risk (SAR) and potential nesting opportunities for migratory birds, and
- Potential habitat compensation or enhancement opportunities.

Desktop SAR Screening

The Nation retained McIntosh Perry to provide a desktop review of background information regarding fisheries and SAR information within and adjacent to the study area. Background fisheries and SAR information is summarized in Table 1.

Source	Data
Correspondence with MECP (2021)	<ul style="list-style-type: none"> • MECP indicated that Bobolink (<i>Dolichonyx oryzivorus</i>) and Eastern Meadowlark (<i>Sturnella magna</i>) are known to be present directly adjacent to the study area and species specific (targeted) surveys will be required to determine the extent of the habitat use within the study area.
ARA data from the LIO database (NDMNRF, 2021)	<ul style="list-style-type: none"> • Butternut Creek is known to contain the following species of fish: Brook Stickleback (<i>Culaea inconstans</i>), Central Mudminnow (<i>Umbra limi</i>), Northern Pike (<i>Esox lucius</i>), Northern Redbelly Dace (<i>Chrosomus eos</i>), and White Sucker (<i>Catostomus commersonii</i>), and • Butternut Creek is a tributary of South Nation River which is known to contain the following species of fish: American Eel (<i>Anguilla rostrata</i>), Banded Killifish (<i>Fundulus diaphanus</i>), Black Crappie (<i>Pomoxis nigromaculatus</i>), Blackchin Shiner (<i>Notropis heterodon</i>), Bluntnose Minnow (<i>Pimephales notatus</i>), Brown Bullhead (<i>Ameiurus nebulosus</i>), bullheads (<i>Ameiurus</i> sp.), Carps and Minnows (<i>Cyprinidae</i>), Common Carp (<i>Cyprinus carpio</i>), Common Shiner (<i>Luxilus cornutus</i>), Golden Shiner (<i>Notropis aureoventris</i>), Johnny Darter/Tesselated Darter (<i>Etheostoma</i> spp.), Logperch (<i>Percina caprodes</i>), Mimic Shiner (<i>Notropis volucellus</i>), redhorses (<i>Moxostoma</i> sp.), Northern Pike, Pumpkinseed (<i>Lepomis gibbosus</i>), Smallmouth Bass (<i>Micropterus dolomieu</i>), suckers (<i>Catostomidae</i>), sunfishes (<i>Centrarchidae</i>), Walleye (<i>Sander vitreus</i>), White Sucker, Yellow Bullhead (<i>Ameiurus natalis</i>), and Yellow Perch (<i>Perca flavescens</i>).
Fish ON-Line database (NDMNRF, 2021)	<ul style="list-style-type: none"> • Butternut Creek is a tributary of South Nation River which is known to contain the following species of sport fish: Black Crappie, Brown Bullhead, Channel Catfish (<i>Ictalurus punctatus</i>), Common Carp, Freshwater Drum (<i>Aplodinotus grunniens</i>), Goldeye (<i>Hiodon alosoides</i>), Largemouth Bass (<i>Micropterus salmoides</i>), Mooneye (<i>Hiodon tergisus</i>),

Table 1: Background Information for Route 800

Source	Data
	Muskellunge (<i>Esox masquinongy</i>), Northern Pike, Pumpkinseed, Rock Bass (<i>Ambloplites rupestris</i>), Sauger (<i>Sander canadensis</i>), Smallmouth Bass, Walleye, White Crappie (<i>Pomoxis annularis</i>), White Sucker, Yellow Bullhead, and Yellow Perch.
NHIC Data from the LIO database (NDMNRF, 2021)	<ul style="list-style-type: none"> The following SAR have been recorded within 2 km of the study area: American Eel, Bobolink, and Eastern Meadowlark, and The following Natural Areas are present within 2 km of the study area: Moose Creek Wetland and Moose Creek Bog.
LIO Data (NDMNRF, 2021)	<ul style="list-style-type: none"> Unevaluated wetlands (swamps) associated with Butternut Creek are present north and directly south of the study area, and Moose Creek Wetland (swamp) evaluated swamp (designated as 'other') and Moose Creek Bog Area of Natural and Scientific Interest (ANSI) that are located approximately 1.9 km east of the study area.
DFO Aquatic SAR Mapping (DFO, 2021)	<ul style="list-style-type: none"> No aquatic SAR were identified within or adjacent to the study area.
OBBA (Bird Studies Canada et al., 2008)	<ul style="list-style-type: none"> The following SAR birds are known to breed within a 10 km range of the study area: Bank Swallow (<i>Riparia riparia</i>), Barn Swallow (<i>Hirundo rustica</i>), Black Tern (<i>Chlidonias niger</i>), Bobolink, Chimney Swift (<i>Chaetura pelagica</i>), Eastern Meadowlark, Eastern Wood-Pewee (<i>Contopus virens</i>), Grasshopper Sparrow (<i>Ammodramus savannarum</i>), and Wood Thrush (<i>Hylocichla mustelina</i>).
ORAA (Ontario Nature, 2020)	<ul style="list-style-type: none"> The following SAR herptiles are known to be present within a 10 km range of the study area: Common Snapping Turtle (<i>Chelydra serpentina</i>) and Northern Map Turtle (<i>Graptemys geographica</i>).
OBA (Toronto Entomologists' Association, 2020)	<ul style="list-style-type: none"> The following SAR butterflies are known to be present within a 10 km range of the study site: Monarch (<i>Danaus plexippus</i>).
Official Plan – United Counties of Prescott and Russell (United Counties of Prescott and Russell, 2018)	<ul style="list-style-type: none"> The study area is in an 'Agriculture Resource Area'; Butternut Creek is considered a wildlife travel corridor throughout the study area, and Butternut Creek within the study area is considered an 'Intake Protection Zone (Type 2)'.
South Nation Conservation Authority (SNC) Regulation Mapping (SNC, 2021)	<ul style="list-style-type: none"> The property is located outside of regulated areas under Ontario Regulation 170/06; A wetland is present directly south of the Route 800 culvert, and The study area is located within 'Drinking Water Source Protection Area'.

Field Investigations

McIntosh Perry staff conducted a field investigation on May 26, 2021 to inspect the study area for any fisheries and SAR concerns. The field investigation included a walkthrough of the study area to document existing conditions and

document fish habitat, SAR, and SAR habitat. The study area was inspected for hollow and snag trees as well as Butternuts within 25 m of the proposed footprint of the reconfiguration.

During the field investigation, the study area consisted of the following vegetation communities:

- Dry – Fresh Graminoid Meadow (MEGM3) was present in the northeast corner of the St. Albert Road/Route 800 intersection. This area was roughly square in area with approximately 60 of frontage on each road. The vegetation community consisted of a meadow dominated by grasses with sparse individual white elm (*Ulmus americana*) and red maple (*Acer rubrum*) trees. These conditions were also present on the north side of Butternut Creek, on the east side of St. Albert Road;
- Dry – Fresh White Ash Deciduous Woodland (WODM4-1) was present on the north and east sides of the MEGM3 vegetation community. This area consisted of a wooded area dominated by dead white ash (*Fraxinus americana*);
- Dry – Fresh Deciduous Woodland (WODM4) was present along the southwest bank of Butternut Creek as well as on the east side of Butternut Creek directly north of Route 800. These areas consisted of wooded areas dominated by basswood (*Tilia americana*) and bur oak (*Quercus macrocarpa*);
- The majority of the east and north sides of Butternut Creek consisted of an agricultural field (AG) comprised of wheat which also formed the adjacent land to the northeast;
- Adjacent land to the south and southwest of the study area consists of agricultural fields and residential property. An unevaluated wetland (swamp) is adjacent to the study area to the southeast. Adjacent land to the west of the study area consists of residential property and agricultural fields;
- No Butternuts (*Juglans cinerea*) were observed within the study area, and
- No significant snag trees or hollow trees were observed within the study area.

A permanent warm-water watercourse called Butternut Creek flows through the study area in a northwest direction. The flow was very slow and mainly still throughout the study area, during the May 26, 2021 field investigation. The water was turbid (brown) with abundant emergent grasses and very limited submergent watercress (*Nasturtium officinale*). In areas where substrate was visible (adjacent to the culverts), clay was dominant with some boulders and cobble mixed into the substrate. Some portions of the banks were observed to be bare and undercut with heavier undercutting and erosion along the left bank (looking upstream). Riparian vegetation consisted of dominant grasses with sparse deciduous trees and shrubs. Young-of-year (YOY) minnows (Cyprinidae) were observed in the watercourse flowing through the Route 800 culvert. Habitat for warm-water sport fish and baitfish is present throughout the study area. Potential Northern Pike Spawning habitat is present along the grassed banks of the watercourse within the study area, particularly the low-lying right bank (looking upstream) during periods of high water in early spring. Other specialized habitat was unable to be determined due to the turbidity of the water and lack of detailed fish surveys.

Suitable migratory and foraging habitat for Common Snapping Turtle is present throughout Butternut Creek in the study area. There were no granular shoulders adjacent to either of the culverts in the study area that could provide potential nesting habitat for Common Snapping Turtle. Although Northern Map Turtle was identified in the background information, suitable habitat is not available for Northern Map Turtles in the study area.

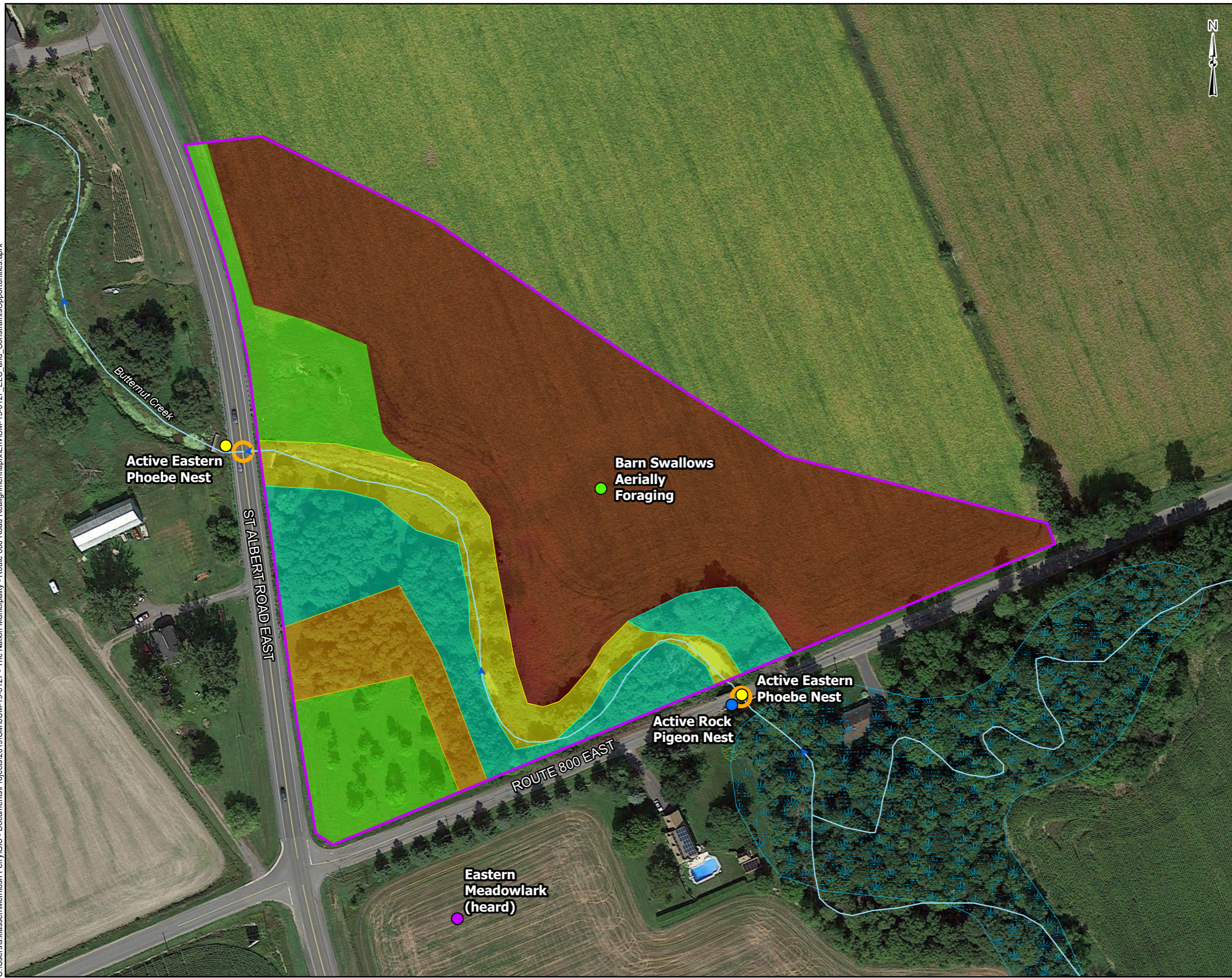
Active Eastern Phoebe (*Sayornis phoebe*) nests were observed in the St. Albert Road culvert and Route 800 culvert (one each) during the May 26, 2021 field investigation. An active Rock Pigeon (*Columba livia*) nest was also observed in the Route 800 culvert.

Several Barn Swallows were observed in the study area during the field investigation. The Barn Swallows were observed aerially foraging over the wheat field in the northeast end of the study area. Although the St. Albert Road culvert and Route 800 culvert provided features suitable for Barn Swallow nesting, no nesting activity or nests from previous breeding season were observed for this species.

An Eastern Meadowlark was heard singing from the agricultural field in adjacent land to the south of the study area. Although an Eastern Meadowlark was identified directly adjacent to the study area and meadows are present within the study area, it is unlikely that SAR grassland birds (i.e., Bobolink, Eastern Meadowlark, Grasshopper Sparrow) would utilize the meadow vegetation communities due to active management (mowing) of the areas and limited size of the meadows. The wheat field in the northeast end of the study area provides potential breeding habitat for SAR grassland bird habitat.

Photos from the field investigation have been included in Appendix B of this memo. A list of flora and fauna observed in the study area during the field investigation is included in Appendix C. Figure 1 illustrates the natural heritage features of the study area based on the field investigation.

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- LEGEND**
- Culvert Location
 - Study Area
 - Active Eastern Phoebe Nest
 - Active Rock Pigeon Nest
 - Barn Swallows Aerially Foraging
 - Eastern Meadowlark (heard)
 - Agricultural Field - Wheat (AG)
 - Warm-Water Fish Habitat/Potential Common Snapping Turtle Habitat
 - Dry - Fresh Deciduous Woodland (WODM4)
 - Dry - Fresh Graminoid Meadow (MEGM3)
 - Dry - Fresh White Ash Deciduous Woodlot (WODM4-1)
 - Unevaluated Wetland
 - Waterbody
 - Watercourse

REFERENCE
 GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2021.



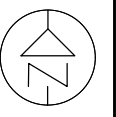
CLIENT:	THE NATION MUNICIPALITY	
PROJECT:	ROUTE 800 ENVIRONMENTAL SCREENING MEMO	
TITLE:	NATURAL HERITAGE FEATURES MAP	
 115 Walgreen Road, RR3, Carp, ON K0A1L0 Tel: 613-836-2184 Fax: 613-836-3742 www.mcintoshperry.com	PROJECT NO: CM-19-0127	FIGURE:
	Date	Dec., 09, 2021
	Checked By	EP
		1

Proposed Works

The Nation is proposing to reconfigure the St. Albert Road/Route 800 intersection. Route 800 will be cut off on the west side of the culvert, creating a dead-end road leading to St. Albert Road. Route 800 on the east side of the culvert will be permanently closed. A new extension of Route 800 will be constructed in a northwest orientation along the north side of Butternut Creek through the existing agricultural field. No in-water work or works on the culverts are proposed as part of the reconfiguration. Route 800 will intersect with St. Albert approximately 220 m north of the existing intersection. The work is proposed to be conducted in 2022. Figure 2 outlines the proposed alignment for the new intersection configuration.

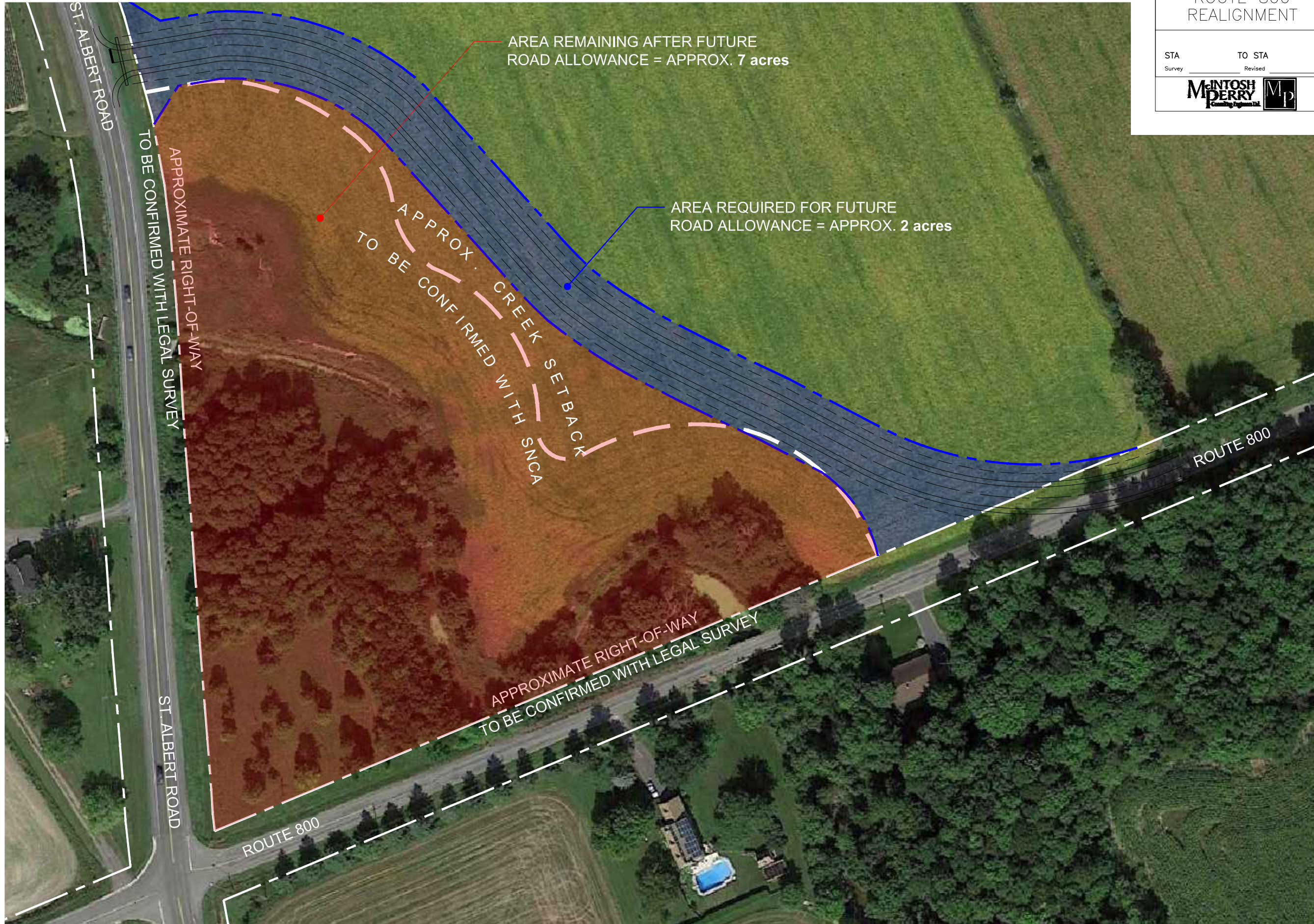
METRIC

PLATE No. PLATE
ROUTE 800
REALIGNMENT



STA TO STA
Survey Revised

SHEET
01



AREA REMAINING AFTER FUTURE
ROAD ALLOWANCE = APPROX. 7 acres

AREA REQUIRED FOR FUTURE
ROAD ALLOWANCE = APPROX. 2 acres

APPROXIMATE RIGHT-OF-WAY
TO BE CONFIRMED WITH LEGAL SURVEY

APPROX. CREEK SETBACK
TO BE CONFIRMED WITH SNCA

APPROXIMATE RIGHT-OF-WAY
TO BE CONFIRMED WITH LEGAL SURVEY

ST. ALBERT ROAD

ST. ALBERT ROAD

ROUTE 800

ROUTE 800

Impact Assessment

Fish and Fish Habitat

Butternut Creek flowing through the study area was confirmed to be fish habitat. Potential Northern Pike spawning habitat is present; however, other specific fish habitat was not able to be determined due to site conditions (i.e., turbid waters) and lack of fish surveys. Fish in this watercourse and their habitat are protected under the Fisheries Act, 1985. No in-water works are proposed as part of the construction of the new road and intersection reconfiguration. No disturbance is anticipated to occur in the potential Northern Pike spawning habitat of the right bank in the study area as the new road will be constructed adjacent to the left bank. However, the construction of the new road adjacent to the watercourse may increase potential for road runoff and decreasing the stability of the watercourse bank which has existing erosion and undercutting. Direct negative impacts to fish and fish habitat are not anticipated to occur (i.e., no in-water work); however, indirect negative impacts to fish and fish habitat may occur if proper sediment/erosion control during construction and post-construction are not implemented.

Migratory Birds

Eastern Phoebes were observed nesting in both culverts associated with the study area. This species, their nests, eggs, and fledgelings are protected under the Migratory Birds Convention Act, 1994 (MBCA). No works are proposed on the culverts; therefore, no negative impacts to migratory birds are anticipated as part of the proposed intersection reconfiguration. Rock Pigeons are not considered native species and do not receive any protection.

SAR Fish

The American Eel is designated as 'Endangered' under the Endangered Species Act, 2007 (ESA) and receives habitat protection. Although American Eel was identified within the South Nation River, it is not likely that this species is present in Butternut Creek. The watercourse throughout the study area has a history of disturbance such as active agriculture leaving limited riparian vegetation (leading to erosion and undercutting) as well as further downstream where the watercourse is heavily impacted by recreational development (i.e., golf course). American Eels are sensitive to significant disturbance and impacts to watercourses which deters their presence. Dams are also known to create migration barriers to American Eels. Two (2) dams are present in the High Falls Conservation Area on the north side of Casselman (downstream of the study area) which likely limits migration of American Eels into the study area. As no in-water work is proposed as part of the reconfiguration and it is not likely that the study area provides suitable habitat for American Eel, it is not anticipated that negative impacts to American Eel will occur.

SAR Turtles

The Common Snapping Turtle is designated as 'Special Concern' under the ESA and Species at Risk Act, 2002 (SARA) and does not receive habitat protection. However, individuals of this species, their eggs, and nests are protected under the Fish and Wildlife Conservation Act, 1997 (FWCA). No in-water work will occur as part of the proposed reconfiguration and no nesting habitat is present within or directly adjacent to the study area; therefore, the proposed works are not anticipated to negatively impact Common Snapping Turtles.

SAR Birds

Barn Swallows were observed aurally foraging within the study area during the field investigation. The Barn Swallows were utilizing a large area of the agricultural field within and adjacent to the study area. This species is designated as 'Threatened' under the ESA and receives habitat protection. No nesting or previous nests of this species were observed in the culverts associated with the project. Although the culverts provide suitable habitat

for Barn Swallow nesting, no works on the culverts are proposed as part of the intersection reconfiguration. Critical habitat is not able to be defined due to the lack of nests. The construction of the new road will permanently remove part of the agricultural field; however, this area is not considered limiting habitat for aerial foraging as Barn Swallows will utilize a wide scale of open areas where flying insects are present. It is not anticipated that the construction of the new road will significantly reduce food abundance for Barn Swallows and does not limit aerial foraging opportunities for Barn Swallows. The proposed intersection reconfiguration is not anticipated to negatively impact Barn Swallows.

An Eastern Meadowlark was heard singing adjacent to the study area. The Eastern Meadowlark is designated as 'Threatened' under the ESA and receives habitat protection. No nesting behaviour or presence of Eastern Meadowlark or other SAR grassland birds were observed within the study area. Although no SAR grassland birds were observed, the wheat field in the northeast end of the study area provides suitable habitat for SAR grassland birds. Due to the presence of Eastern Meadowlark adjacent to the study area, it is possible that this species could utilize the study area for breeding. The single field investigation was not sufficient to determine absence/presence of SAR grassland birds in the study area; therefore, the construction of the new road through the wheat field can potentially remove SAR grassland bird habitat, including protected habitat for Eastern Meadowlark.

Recommendations and Mitigation Measures

In order to minimize or eliminate environmental impacts and to help achieve ecological and environmental improvements from the proposed construction, the following mitigation measures are recommended.

Vegetation

- Vegetation removal should be minimized to only what is required for the proposed works. If vegetation removal is to occur outside of the study area as defined during the preparation of this memo, additional surveys and/or documentation may be necessary to determine the environmental opportunities and constraints of the study area;
- To prevent the introduction and spread of invasive plant species into the site, equipment utilized during construction should be inspected and cleaned in accordance with the Clean Equipment Protocol for Industry (Appendix D);
- It is recommended that disturbed areas (i.e., laydown areas) should be replanted with locally grown native species. This would contribute to re-establishing native plants within the wider landscape and potentially have a positive impact for biodiversity (i.e., using native species of wildflowers for pollinators such as bees). Use of non-native plant material should be discouraged, and
- Exposed soils should be revegetated as soon as possible using a seed mix composed of locally native herbaceous species, and native trees and shrubs, which are appropriate for the site conditions.

Fish and Fish Habitat

- Due to the presence of a watercourse within 50 m of the proposed road construction, the following is recommended:
 - Mobile equipment refuelling should take place no closer than 30 m from any waterbody, watercourse, or wetland in order to prevent water contamination due to accidental fuel spills. For non-mobile equipment, refuelling should be carried out in a controlled manner so as to prevent fuel spillage, and drip pans should be located under parked equipment at all times;

- Equipment operating near any watercourse, waterbody or wetland should be in good working condition, properly maintained and free of excess oil/grease to reduce the risk of contaminant leakage. In the event that a spill occurs, proper containment, clean up, and reporting, in accordance with federal and provincial requirements, must be completed. The Ontario Spills Action Centre (1-800-268-6060) should be contacted and emergency spill procedures implemented immediately;
- The Contractor should take all necessary precautions to prevent the accumulation of litter and construction debris within 30 m of any watercourse;
- All watercourses are off-limits to any construction equipment;
- Replanting of riparian vegetation must follow the recommendations listed above for Vegetation;
- Proper sediment and erosion control measures must be implemented to prevent deleterious substances and deposits from entering the watercourse or altering the watercourse banks. This may include, but is not limited to: installation of geotextile fencing to prevent sediment from entering the watercourse, creating a berm stabilized with seeding and planting of native plants, and stabilizing the existing eroding bank.

Wildlife

- Before commencing any site alterations, visually inspect the work area for wildlife presence;
- Do not feed any wildlife or leave food out that may attract wildlife;
- If wildlife is encountered within the work area, keep distance and allow the animal to exit the work area, and
- The nests and eggs of many species are protected under federal and/or provincial legislation (i.e., MBCA, FWCA). Due to the presence of several migratory birds, including SAR birds (i.e., Barn Swallow, Eastern Meadowlark), vegetation clearing must occur outside of the bird nesting window of April 15 to September 15 to avoid contravention of the MBCA, FWCA, and ESA. If vegetation removal must occur within the nesting window, the Contractor must retain a qualified avian biologist to conduct a nesting survey prior to clearing. If actively nesting migratory birds are encountered at any time of year, works should not continue in the location of the nest until:
 - After it has been determined by a qualified avian biologist that the young have fledged and vacated the nest and work area; or
 - A qualified avian biologist determines a suitable buffer distance at which work may continue to prevent disturbance of the bird(s);
 - Where a buffer distance has been implemented, a qualified avian biologist must undertake monitoring during construction to ensure migratory birds and their eggs are not disturbed, destroyed or taken, and
 - Targeted "nests searches" should be avoided as this may be in contravention of the MBCA and its regulations (Note: The Canadian Wildlife Service does not support relying on inspections for migratory bird nests in such habitats due to the difficulty of locating all nests and risk to birds; therefore, it is always a better option to clear vegetation outside of the breeding bird period).

SAR

- Should any SAR be discovered during construction, a management biologist at MECP – Ottawa District should be contacted immediately, and operations modified to avoid any negative impacts to SAR or their habitat until further direction is provided by MECP;

- During the active season for turtles and snakes (May 1 to October 15), a thorough inspection of the construction area should be conducted daily by the contractor to ensure that no SAR (including Common Snapping Turtles) have entered the work area;
- All stockpiled topsoil, sand, and gravel must be completely encircled with silt fence or completely covered with geotextile to prevent turtles from accessing and nesting in the materials from May 15 to July 15 of any year;
- The timing window recommended for vegetation removal to protect migratory birds also applies to SAR birds as this timing window will accommodate the active breeding season for Barn Swallows and Eastern Meadowlark, and
- Due to the presence of Eastern Meadowlarks directly adjacent to the study area and potential breeding habitat within the study area, it is recommended that targeted surveys for Eastern Meadowlarks (and other SAR grassland birds) are conducted. The targeted surveys should be conducted following the Survey Methodology under the Endangered Species Act, 2007: *Dolichonyx Oryzivorus* (Bobolink) prepared by the Ministry of Natural Resources (2011) which is also applicable for Eastern Meadowlark. If it is determined that SAR grassland birds are utilizing the study area for breeding, the project must be registered to MECP under the Ontario Regulation (O. Reg.) 242/08 – General. Further mitigation measures and possible limitations may be applicable to the project after registration and consultation with MECP.

Conclusion

The proposed works are considered to have very low impacts to fish, fish habitat, wildlife habitat, and SAR, provided that the recommendations listed above are implemented. It is not anticipated that negative long-term impacts will occur to these environmental features as part of the proposed road construction and intersection reconfiguration.

Please contact the undersigned if you have any questions.

Respectfully,
McIntosh Perry Consulting Engineers Ltd.



Erik Pohanka
Biologist
Cell: 613-203-5470
e.pohanka@mcintoshperry.com

APPENDIX A: REGULATORY AGENCY CORRESPONDENCE

Erik Pohanka

From: Snell, Shamus (MECP) <Shamus.Snell@ontario.ca>
Sent: January 7, 2021 3:06 PM
To: Erik Pohanka
Subject: MECP SARB Review: The Nation Municipality Route 800 SAR Info Request
Attachments: Draft_Survey_Protocol_for_Bobolink.pdf; GHD_Bobolink.pdf; GHD_Chimney_Swift.pdf

Hi Erik,

Due to a high volume of requests received during the transition of the Endangered Species Act (ESA) from the Ministry of Natural Resources and Forest (MNRF) to the Ministry of Environment, Conservation and Parks (MECP) and work restrictions and delays as a result of COVID-19 a number of requests which came into our office during that time may not have been responded to. I am working though these requests to ensure that someone has responded to you.

The Species at Risk Branch (SARB) has conducted review of the Nation Municipality Route 800, and the areas adjacent to it for Species at Risk (SAR) occurrences and did not detect any additional SAR occurrences which were not already identified in the information request.

While this review represents MECP's best currently available information, it is important to note that a lack of information for a site does not mean that SAR or their habitat are not present. There are many areas where the Government of Ontario does not currently have information, especially in areas not previously surveyed. On-site assessments will be required to better verify site conditions, identify and confirm presence of species at risk and/or their habitats.

The location of the site is adjacent to observations of Bobolink and Eastern Meadowlark and the habitat onsite suggests there is a very high potential they could be nesting there. Species specific surveys will be required to determine the extent of the habitat use in these areas. A copy of a survey protocol and General Habitat Descriptions for these species have been attached to assist with this.

It is the responsibility of the proponent to ensure that SAR are not killed, harmed, or harassed, and that their habitat is not damaged or destroyed through the proposed activities to be carried out. If the proposed activities can not avoid impacting protected species and their habitats then the proponent will need to apply for a authorization under the Endangered Species Act.

Please note the MECP is not tasked with confirming non-SAR related information or reviewing aspects of projects that fall outside of the ESA legislative requirements. I would recommend you reach out to The Ministry of Natural Resources and Forestry (MNRF) as they remain the ministry responsible for reviewing and confirming features like Significant Wildlife Habitat, Provincially Significant Wetlands and fisheries data.

My apologies for the delay of the response.

Regards,

Shamus Snell
A/ Management Biologist

Species at Risk Branch
Ministry of the Environment, Conservation and Parks
Email: shamus.snell@ontario.ca

From: Erik Pohanka <e.pohanka@mcintoshperry.com>
Sent: July 9, 2020 12:24 PM
To: Species at Risk (MECP) <SAROntario@ontario.ca>
Subject: The Nation Municipality Route 800 SAR Info Request

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

To whom it may concern;

Please see the attached Information Request Letter regarding the Route 800 road realignment project on behalf of The Nation Municipality.

Please feel free to contact me if you have any questions or concerns.

Thank you,

Erik Pohanka, B.Sc.

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Platinum member

APPENDIX B: STUDY AREA PHOTOS



Photo 1: View of Butternut Creek looking downstream (northwest) from the Route 800 culvert. 26 May 2021.



Photo 2: View of Butternut Creek looking upstream (southeast) from the St. Albert Road culvert. 26 May 2021.



Photo 3: A portion of the eroding banks on the left side (looking upstream) of Butternut Creek, directly adjacent to the wheat field. 26 May 2021.



Photo 4: Potential Northern Pike spawning habitat along the low-lying right bank (looking upstream) of Butternut Creek. 26 May 2021.



Photo 5: Young-of-year (YOY) minnow (Cyprinidae) observed in Butternut Creek. 26 May 2021.



Photo 6: View of the Dry – Fresh Graminoid Meadow (MEGM3) in the northeast quadrant of the existing St. Albert Road/Route 800 intersection. 26 May 2021.



Photo 7: View of the Dry – Fresh White Ash Deciduous Woodland (WODM4-1) within the study area. 26 May 2021.



Photo 8: View of the Dry – Fresh Deciduous Woodland (WODM4) within the study area. 26 May 2021.



Photo 9: View of the agricultural field (AG) consisting of a wheat crop in the northeast portion of the study area. Barn Swallows (*Hirundo rustica*) were observed aerially foraging over this area. This field also provides potential SAR grassland bird breeding habitat, including Eastern Meadowlarks (*Sturnella magna*). 26 May 2021.



Photo 10: An active Eastern Phoebe (*Sayornis phoebe*) nest observed in the St. Albert Road culvert. 26 May 2021.



Photo 11: An active Eastern Phoebe (*Sayornis phoebe*) nest observed in the Route 800 culvert. 26 May 2021.



Photo 12: A Song Sparrow (*Melospiza melodia*) observed in the study area which is an example of a migratory bird protected under the Migratory Birds Convention Act, 1994. 26 May 2021.

APPENDIX C: LIST OF FLORA AND FAUNA OBSERVED IN THE STUDY AREA

List of Flora and Fauna Species Observed in the Study Area			
Common Name	Scientific Name	Common Name	Scientific Name
Woody Plants			
alternate-leaved dogwood	<i>Cornus alternifolia</i>	red maple	<i>Acer rubrum</i>
Amur maple	<i>Acer ginnala</i>	red-osier maple	<i>Cornus sericea</i>
basswood	<i>Tilia americana</i>	riverbank grape	<i>Vitis riparia</i>
bitternut hickory	<i>Carya cordiformis</i>	round-leaved dogwood	<i>Cornus rugosa</i>
black cherry	<i>Prunus serotina</i>	succulent hawthorn	<i>Crataegus succulenta</i>
bur oak	<i>Quercus macrocarpa</i>	Tatarian honeysuckle	<i>Lonicera tatarica</i>
Canada plum	<i>Prunus nigra</i>	thicket creeper	<i>Parthenocissus inserta</i>
choke cherry	<i>Prunus virginiana</i>	Virginia creeper	<i>Parthenocissus quinquefolia</i>
common buckthorn	<i>Rhamnus cathartica</i>	white ash	<i>Fraxinus americana</i>
European high-bush cranberry	<i>Viburnum opulus</i>	white elm	<i>Ulmus americana</i>
glossy buckthorn	<i>Frangula alnus</i>	white spruce	<i>Picea glauca</i>
green ash	<i>Fraxinus pennsylvanica</i>	wild red raspberry	<i>Rubus strigosus</i>
Manitoba maple	<i>Acer negundo</i>	winged euonymus	<i>Euonymus alatus</i>
nannyberry	<i>Viburnum lentago</i>		
Herbaceous Plants			
Alsike clover	<i>Trifolium hybridum</i>	ox-eye daisy	<i>Leucanthemum vulgare</i>
aster	<i>Symphyotrichum</i> spp.	Philadelphia fleabane	<i>Erigeron philadelphicus</i>
broad-leaved arrowhead	<i>Sagittaria latifolia</i>	pondweed	<i>Potamogeton</i> spp.
bull thistle	<i>Cirsium vulgare</i>	Queen Anne's lace	<i>Daucus carota</i>
Canada lettuce	<i>Lactuca canadensis</i>	red clover	<i>Trifolium pratense</i>
coltsfoot	<i>Tussilago farfara</i>	rough-fruited cinquefoil	<i>Potentilla recta</i>
common burdock	<i>Arctium minus</i>	smooth brome	<i>Bromus inermis</i>
common dandelion	<i>Taraxacum officinale</i>	spotted jewelweed	<i>Impatiens capensis</i>
common duckweed	<i>Lemna minor</i>	stinging nettle	<i>Urtica dioica</i>
common milkweed	<i>Asclepias syriaca</i>	sweet-clover	<i>Melilotus</i> spp.
common mugwort	<i>Artemisia vulgaris</i>	tall buttercup	<i>Ranunculus acris</i>
common mullein	<i>Verbascum thapsus</i>	thimbleweed	<i>Anemone cylindrica</i>
common tansy	<i>Tanacetum vulgare</i>	Timothy grass	<i>Phleum pratense</i>

cow vetch	<i>Vicia cracca</i>	violet	<i>Viola</i> spp.
curled dock	<i>Rumex crispus</i>	Virginia waterleaf	<i>Hydrophyllum virginianum</i>
field horsetail	<i>Equisetum arvense</i>	water smartweed	<i>Persicaria amphibia</i>
giant ragweed	<i>Ambrosia trifida</i>	watercress	<i>Nasturtium officinale</i>
goat's-beard	<i>Tragopogon dubius</i>	wheat	<i>Triticum</i> spp.
goldenrod	<i>Solidago</i> spp.	white goosefoot	<i>Chenopodium album</i>
ground-ivy	<i>Glechoma hederacea</i>	wild parsnip	<i>Pastinaca sativa</i>
hemp dogbane	<i>Apocynum cannabinum</i>	wild strawberry	<i>Fragaria virginiana</i>
heart-leaved foamflower	<i>Tiarella cordifolia</i>	wood avens	<i>Geum urbanum</i>
meadow-grass	<i>Poa</i> spp.	wood-nettle	<i>Laportea canadensis</i>
morthewort	<i>Leonurus cardiaca</i>	yellow-rocket	<i>Barbarea vulgaris</i>
orchard grass	<i>Dactylis glomerata</i>		
Amphibians			
Northern Leopard Frog	<i>Lithobates pipiens</i>		
Birds			
American Crow	<i>Corvus brachyrhynchos</i>	European Starling	<i>Sturnus vulgaris</i>
American Goldfinch	<i>Spinus tristis</i>	Killdeer	<i>Charadrius vociferus</i>
American Robin	<i>Turdus migratorius</i>	Mourning Dove	<i>Zenaida macroura</i>
Baltimore Oriole	<i>Icterus galbula</i>	Northern Cardinal	<i>Cardinalis cardinalis</i>
Barn Swallow	<i>Hirundo rustica</i>	Red-eyed Vireo	<i>Vireo olivaceus</i>
Belted Kingfisher	<i>Megaceryle alcyon</i>	Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Blue Jay	<i>Cyanocitta cristata</i>	Rock Pigeon	<i>Columba livia</i>
Brown-headed Cowbird	<i>Molothrus ater</i>	Song Sparrow	<i>Melospiza melodia</i>
Chestnut-sided Warbler	<i>Setophaga pensylvanica</i>	Spotted Sandpiper	<i>Actitis macularius</i>
Chipping Sparrow	<i>Spizella passerina</i>	Tree Swallow	<i>Tachycineta bicolor</i>
Common Grackle	<i>Quiscalus quiscula</i>	Turkey Vulture	<i>Cathartes aura</i>
Eastern Meadowlark	<i>Sturnella magna</i>	Warbling Vireo	<i>Vireo gilvus</i>
Eastern Phoebe	<i>Sayornis phoebe</i>	Yellow Warbler	<i>Setophaga petechia</i>
Mammals			
eastern chipmunk	<i>Tamias striatus</i>	least weasel	<i>Mustela nivalis</i>

APPENDIX D: CLEAN EQUIPMENT PROTOCOL FOR INDUSTRY

Clean Equipment Protocol for Industry

Inspecting and cleaning equipment for the purposes of invasive species prevention



Catalyst for research and response



Publication Information

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For more information on invasive plants in Ontario, visit www.ontario.ca/invasivespecies,
www.ontarioinvasiveplants.ca, www.invadingspecies.com or www.invasivespeciescentre.ca

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Introduction

Why Invasive Plants are a Problem

Invasive alien species are “a growing environmental and economic threat to Ontario. Alien species are plants, animals and microorganisms that have been accidentally or deliberately introduced into areas beyond their normal range. Invasive species are defined as harmful alien species whose introduction or spread threatens the environment, the economy, or society, including human health (Government of Canada 2004).” (Ontario Invasive Species Strategic Plan, 2012). The great majority of plant invasions occur in habitats that have been disturbed either naturally or by humans (Rejmanek 1989; Hobbs and Huenneke 1992; Hobbs 2000).

The ecological effects of invasive species are often irreversible and, once established, they are extremely difficult and costly to control or eradicate. According to Pimental et al. (1999), invasive species in the U.S. cause economic and environmental damages totalling over \$138 billion per year, with agricultural weed control and crop losses totalling approximately \$34 billion per year. Exact figures for the total economic and environmental damages are not available for Canada. In Ontario however, the costs of dealing with just one invasive species is astonishing; Zebra Mussels cost Ontario power producers who draw water from the lake \$6.4 million per year in increased control/operating costs and about \$1 million per year in research costs (Colautti et al. 2006).

Invasive species can spread to new areas when contaminated mud, gravel, water, soil and plant material are unknowingly moved by equipment used on different sites. This method of spread is called an unintentional introduction, and is one of the four major pathways for invasive species introduction into a new area of Ontario (Ontario Invasive Species Strategic Plan, 2012).



Buckthorn removal, Lynde Shores Conservation Area.

Photo by: Central Lake Ontario Conservation Authority

Invasive plant seed and propagules (plant material, i.e. rhizomes) have the ability to travel sight unseen in mud attached to or lodged in various parts and spaces between parts of vehicles, machinery and other mechanical equipment. A recent study at Montana State University found that most seeds (99% on paved roads and 96% on unpaved roads) stayed attached to the vehicle after traveling 160 miles (257 km) under dry conditions.

Invasive plant species are commonly transported on or in vehicles and construction equipment when they are moved to new locations. Those vehicles include four-wheel drives, excavators, tractors, loaders, water trucks and all-terrain vehicles. Failure to properly clean vehicles and machinery of soils, mud, and contaminated water that may contain invasive species seed and propagules can result in permanent, irreversible environmental impacts. These impacts can mean substantial cost to the landowner, land manager and/or the user. Businesses may also face liability issues for activities and operations that result in the introduction of invasive species.

Some of the invasive species in Ontario which have been known to spread through equipment transfer include:

- **Common Buckthorn** (*Rhamnus cathartica*)
- **Dog-strangling Vine** (*Cynanchum rossicum*)
- **Garlic Mustard** (*Alliaria petiolata*)
- **Giant Hogweed** (*Heracleum mantegazzianum*)
- **Glossy Buckthorn** (*Frangula alnus*)
- **Japanese Knotweed** (*Polygonum cuspidatum*)
- **Miscanthus or Chinese Silver Grass** (*Miscanthus sinensis*)
- **Phragmites or Common Reed** (*Phragmites australis* subsp. *australis*)
- **Reed Canary Grass** (*Phalaris arundinacea*)
- **Wild Parsnip** (*Pastinaca sativa*)
- **Wild Chervil** (*Anthriscus sylvestri*)



Dog-strangling vine
(*Cynanchum rossicum*)
Photo by: Hayley Anderson



Garlic Mustard
(*Alliaria petiolata*)
Photo by: Ken Towle



Phragmites
(*Phragmites australis* subsp. *Australis*)
Photo by: Michael Irvine

These plants impact biodiversity by out-competing native species for space, sunlight, and nutrients. They can also have impacts on road and driver safety by physically blocking intersection sightlines, and in the case of Phragmites and Miscanthus, may fuel intense grass fires if ignited, which can damage utility stations and hydro lines.

The harmful effects of invasive species include:

- Physical and structural damage to infrastructure
- Human health hazards (i.e. Giant Hogweed and Wild Parsnip exposure)
- Delays and increased cost in construction activities
- Environmental damage (i.e. erosion)
- Aesthetic degradation
- Loss of biodiversity
- Reduced property values
- Loss of productivity in woodlots and agriculture

Why Cleaning Vehicles and Equipment is Important

Passenger and recreational vehicles as well as heavy machinery are major vectors for spreading terrestrial invasive species into new areas.

It is much more costly to control invasive species after their establishment and spread than it is to prevent their spread. The spread of invasive species through unintentional introduction can be minimized significantly by the diligent cleaning of vehicles and equipment when leaving one site and moving to the next. In the case of large properties, cleaning before moving to a new site is recommended, even if it is within the same property.

This guide has been developed for the construction, agriculture, forestry and other land management industries, to provide equipment operators and practitioners with tools and techniques to identify and prevent the unintentional introduction of invasive species. It establishes a standard for cleaning vehicles and equipment and provides a guide where current codes of practice, industry standards or other environmental management plans are not already in place.

Passenger and recreational vehicles include:

- 2WD and 4WD cars
- 2WD and 4WD trucks
- All Terrain Vehicles (ATV's)
- Motorbikes
- Snowmobiles

Heavy machinery includes:

- Trucks
- Tractors
- Mowers
- Slashers
- Trailers
- Backhoes
- Graders
- Dozers
- Excavators
- Skidders
- Loaders
- Water Tankers and Trucks



Dog-strangling Vine plants attached to ATV.

Photo by: Francine Macdonald



Plant material attached to bobcat.

Photo by: TH9 Outdoor Services

Impacts of Invasive Species on Industry

Construction

In the UK, Japanese Knotweed (*Polygonum cuspidatum* or *Fallopia japonica*) is classified as a hazardous material. When construction occurs in established Japanese Knotweed stands workers sift the soil to remove root fragments and institute treatment plans to ensure that the Knotweed does not re-sprout, as it can damage housing foundations by growing through concrete and asphalt. The contractors must also thoroughly clean their equipment, and dispose of the contaminated soil at biohazard waste sites. While we do not have these requirements in Ontario, Japanese Knotweed is present here.

Invasive plant species can also increase site preparation and weed control costs, and reduce property values. For example, in Vermont the presence of the aquatic invasive plant Eurasian Watermilfoil (*Myriophyllum spicatum*) depressed shoreline residence property value by as much as 16.4% (Zhang and Boyle, 2010).

Forestry/Agriculture

Invasive plant species which become established in forests will out-compete native species and prevent forest re-generation after logging or natural disturbance. Dog-strangling Vine (*Cynanchum rossicum*) is of particular concern in conifer plantations. This species thrives in the filtered light and open soils of mature plantations, and suppresses seedling establishment of native hardwoods. If its invasion continues, very few juvenile trees will survive to fill the shrinking canopy of over-mature pines. Reforestation sites are also susceptible; the thick mats of vegetation and aggressive competition from Dog-strangling Vine decrease available planting space and increase costs as more mature vegetation needs to be planted in order to ensure the new vegetation can outcompete the invasive plant. As a result, expensive control programs are often required.

Land Management (Trail Use/Maintenance)

Recreational trail use and the maintenance of trails can facilitate the transport of invasive plant material and seeds, and create open and disturbed sites that are prime locations for the establishment of invasive species. Studies have proven that trails act as corridors which assist in the spread of invasive plant species. Humans, their pets, and vehicles such as ATV's can be vectors of invasion along trails because seeds and plant pieces can be carried on equipment and clothing. In addition, frequent trampling along trails alters soil properties, limits the growth of some native species, and creates conditions that may favour the growth of non-native species (Kuss et al. 1985; Marion et al. 1985; Yorks et al. 1997).

Roadsides/Utilities

Invasive species can increase the cost of roadside and utility maintenance by requiring additional maintenance and control efforts. The presence of invasive species can also provide a safety hazard. In the case of Phragmites and Miscanthus (invasive grass species), along with interrupting sight lines, the dead stalks which remain standing each autumn also provide combustible material. Fires in these stands burn intensely, and can damage utilities and hydro lines. Phragmites along roadsides is generally assumed to be spread through the transport and burial of rhizome fragments through ditching, ploughing, and other human activities that transport rhizomes on machinery. Studies have shown that vehicles and road-fill operations can transport invasive plant seeds into uninfested areas, and road construction and maintenance operations provide optimal disturbed sites for seed germination and seedling establishment (Schmidt 1989; Lonsdale & Lane 1994; Greenberg et al. 1997; Trombulak & Frissell 2000).

Steps to Prevent the Unintentional Introduction of Invasive Species from Equipment

Inspection and cleaning of all machinery and equipment should be performed in accordance with the procedures, checklists and diagrams provided in this protocol.

When visiting more than one site, always schedule work in the sites that are the least disturbed and free of known invasive species first, and visit sites with known invasive species infestations last. This will greatly reduce the risk of transferring plants to new locations.

When to Inspect

Inspection should be done before:

- Moving vehicles out of a local area of operation
- Moving machinery between properties or sites within the same property where invasive species may be present in one area, and not in another
- Using machinery along roadsides, in ditches, and along watercourses
- Vehicles using unformed dirt roads, trails or off road conditions
- Using machinery to transport soil and quarry materials
- Visiting remote areas where access by vehicles is limited

Inspection should be done after:

- Operating in areas known to have terrestrial invasive plants or are in high risk areas (i.e. recently disturbed areas near known invaded areas)
- Transporting material (i.e. soil) that is known to contain, or has the potential to contain, invasive species
- Operating in an area or transporting material that you are uncertain contain invasive species
- In the event of rain. If mud contains seeds, they can travel indefinitely until it rains or the road surface is wet, allowing for long distance transport. This may result in transporting seeds to areas where those species did not previously exist

How to Inspect

- Inspect the vehicle thoroughly inside and out for where dirt, plant material and seeds may be lodged or adhering to interior and exterior surfaces.
- Remove any guards, covers or plates that are easy to remove.
- Attention should be paid to the underside of the vehicle, radiators, spare tires, foot wells and bumper bars.

If clods of dirt, seed or other plant material are found, removal should take place immediately, using the techniques outlined below.

When to Clean

Vehicles and heavy equipment that stay on formed and sealed roads have a low risk of spreading invasive species. Cleaning is only required when inspection identifies visible dirt clods and plant material or when moving from one area to another.

Depending on the invasive species present, vehicles may need to be cleaned even when deep snow is present. Phragmites, for example, can still be spread, even in packed snow because the seed heads are usually above the surface of the snow. Other plants, such as Dog-strangling vine, will be contained beneath deep snow.

**Regular inspection of vehicles and machinery will identify if any soil or plant material has been collected on or in vehicles and machinery.*

Where to Clean

Clean the vehicle/equipment in an area where contamination and seed spread is not possible (or limited). The site should be:

- Ideally, mud free, gravel covered or a hard surface. If this option is not available, choose a well maintained (i.e. regularly mowed) grassy area.
- Gently sloping to assist in draining water and material away from the vehicle or equipment. Care should be taken to ensure that localized erosion will not be created, and that water runs back into the area where contamination occurred.
- At least 30m away from any watercourse, water body and natural vegetation.
- Large enough to allow for adequate movement of larger vehicles and equipment.

**Safely locate the vehicle and equipment away from any hazards. If mechanized, ensure engine is off and the vehicle or equipment is immobilized.*

How to Clean Inside

Clean the interior of the vehicle by sweeping, vacuuming or using a compressed air device. Particular attention should be paid to the floor, foot wells, pedals, seats and under the seats.

How to Clean Outside

Knock off all large clods of dirt. Use a pry bar or other device if necessary.

Identify areas that may require cleaning with compressed air rather than water such as radiators and grills. Clean these areas first prior to using water.

Clean the vehicle with a high pressure hose in combination with a stiff brush and/or pry bar to further assist the removal of dirt clods.

Start cleaning from the top of the vehicle and work down to the bottom.

Emphasis should be placed on the undersides, wheels, wheel arches, guards, chassis, engine bays, radiator, grills and other attachments.

When the cleaning is finished avoid driving through the waste water when removing the vehicle or equipment from the cleaning site.

For equipment such as water trucks that may be exposed to aquatic invasive species, trucks should be disinfected with bleach solution before conducting work in a new area. For further information please refer to the Invading Species Awareness Program's Technical Guidelines listed under Contacts and Resources.



Hosing down a vehicle in Queensland Australia

Photo by: TH9 Outdoor Services

Final Inspection Checklist

Conduct a final inspection to ensure the following general clean standard has been achieved:

- No clods of dirt should be visible after wash down.
- Radiators, grills and the interiors of vehicles should be free of accumulations of seed, soil, mud and plant material parts including seeds, roots, flowers, fruit and or stems.

Diagrams have been provided to assist in quickly identifying key areas to inspect and clean on a variety of vehicles associated with the targeted industries. These can be used in combination with vehicle checklists to ensure all areas of the vehicles have been inspected and cleaned.

Equipment Required

- A pump and high pressure hose OR High pressure water unit
- Minimum water pressure for vehicle cleaning should be at least 90 pounds per square inch. Water can be supplied as high volume/low pressure or low volume/high pressure (NOAA Fisheries Service).
- Air compressor and blower OR Vacuum
- Shovel
- Pry bar
- Stiff brush or broom



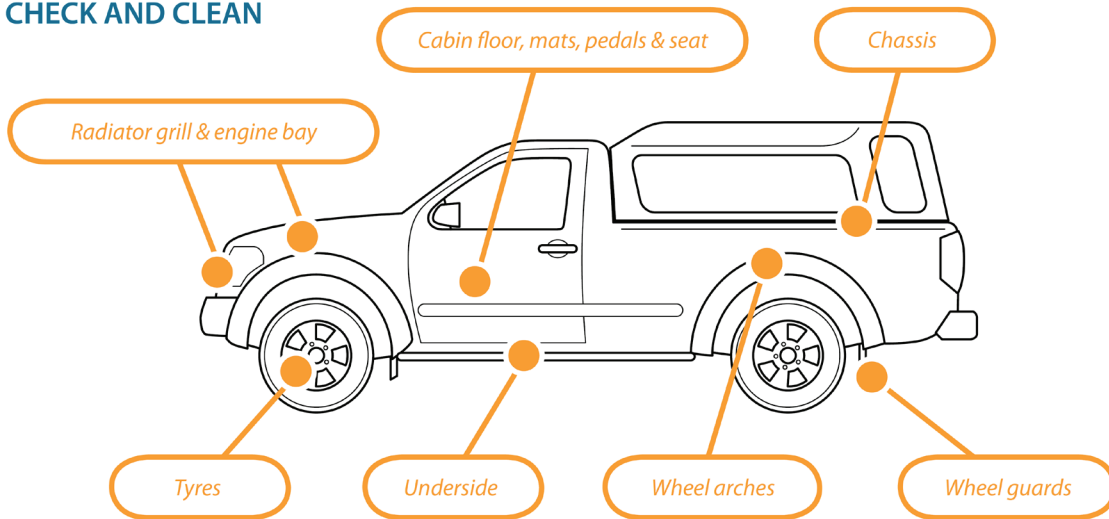
Cleaning station at construction site.

Photo by: Mark Heaton, OMNR

Inspection and Cleaning Diagrams and Checklists

2WD and 4WD Vehicles

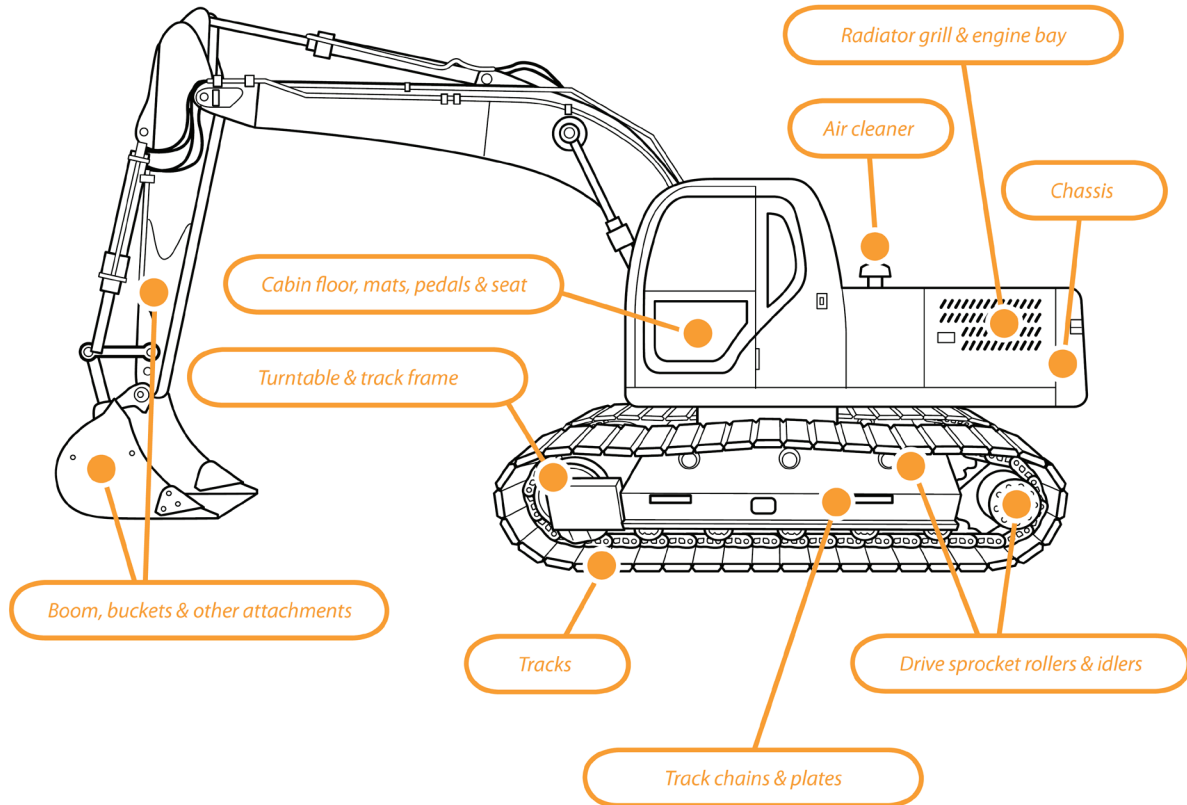
4WD VEHICLE WITH KEY SPOTS TO CHECK AND CLEAN



		✓
Cabin	Floor, mats, pedals, seats	
Engine	Radiators, engine bay, grill	
Body	Underside, chassis, crevices, ledges, bumper bars	
Wheels	All wheels (including spare), wheel arches, guards	
Tray	Floor, canopy (if included)	

Excavator

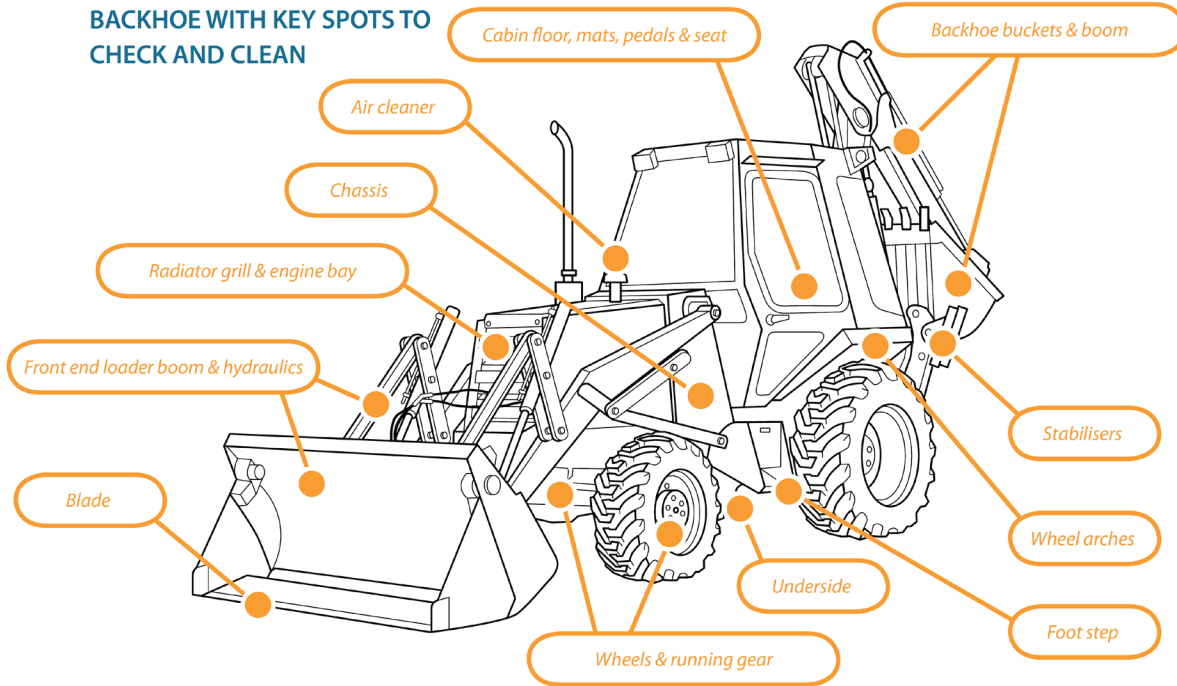
EXCAVATOR WITH KEY SPOTS TO CHECK AND CLEAN



		✓
Cabin	Floor, mats, pedals, seats	
Engine	Radiators, engine bay, grill, air cleaner	
Tracks	Tracks, track frame, drive sprocket rollers, idlers	
Body Plates	Plates of cabin	
Body	Ledges, channels	
Bucket		
Booms		
Turret Pivot		

Backhoe

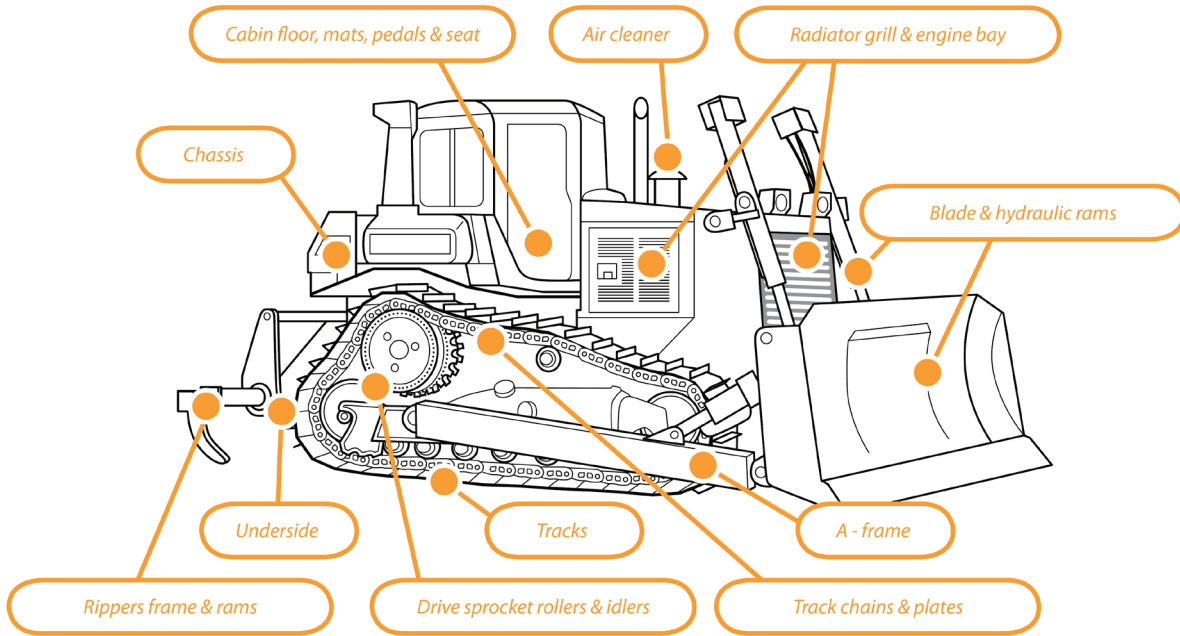
BACKHOE WITH KEY SPOTS TO CHECK AND CLEAN



		✓
Cabin	Floor, mats, pedals, seats, foot step	
Engine	Radiators, engine bay, grill, air cleaner	
Wheels	All wheels (including spare), wheel arches, guards	
Front end loader	Blade, hydraulics, booms	
Backhoe	Buckets, boom, hydraulics, stabilizers	

Bulldozer

BULLDOZER WITH KEY SPOTS TO CHECK AND CLEAN



		✓
Cabin	Floor, mats, pedals, seats	
Engine	Radiators, engine bay, grill, air cleaner	
Tracks	Tracks, track frame, drive sprocket rollers, idlers	
Body Plates	Belly plates and rear plates	
Body	Ledges, channels	
Blade	Pivot points, hydraulic rams, a-frame	
Ripper	Ripper frame, ripper points	

Contacts and Resources

Ontario Invasive Species Strategic Plan 2012. Government of Ontario. Online, accessed May 8, 2012.

http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@biodiversity/documents/document/stdprod_097634.pdf

Invasive Species Management for Infrastructure Managers and the Construction Industry 2008. Wade, M. Booy, O. and White, V. Online, accessed April 27, 2012

http://www.ciria.org/service/Web_Site/AM/ContentManagerNet/ContentDisplay.aspx?Section=Web_Site&ContentID=9001

T.I.P.S (Targeted Invasive Plant Solutions) Highway Operations. British Columbia Invasive Species Council. Online, accessed May 8, 2012

http://www.bcinvvasiveplants.com/iscbc/publications/TIPS/Highways_Operations_TIPS.pdf

Invading Species Awareness Program Workshop Manual: Aquatic Invasive Species: An Introduction to Identification, Collection and Reporting of Aquatic Invasive Species in Ontario Waters (includes information on decontaminating equipment).

<http://www.invadingspecies.com/download/publications/manuals/WorkshopManual.pdf>

Reporting Invasive Species

To report invasive species, or view maps of existing records, visit the Invading Species Awareness Program website www.invadingspecies.com/report/ or www.eddmaps.org/Ontario.

Or call the OFAH/MNR Invading Species Awareness Program Hotline at **1-800-563-7711**

Acknowledgements

We gratefully acknowledge NRM South (Tasmania, Australia) for allowing the use of their artwork and text from their “Keeping it Clean – A Tasmanian Field Hygiene Manual to Prevent the Spread of Freshwater Pests and Pathogens”.

We also sincerely thank the Clean Equipment Protocol Working Group and the Ontario Invasive Plant Council Committees and Board of Directors for their ongoing support and valuable input into this document, and the Canada-Ontario Invasive Species Centre and Ontario Ministry of Natural Resources for the support in creating this protocol.

Clean Equipment Protocol Working Group:

Diana Shermet, Central Lake Ontario Conservation Authority; Paula Berketo, Ontario Ministry of Transportation; Travis Cameron, Ontario Ministry of Natural Resources; Jennifer Hoare, Ontario Parks; Michael Irvine, Ontario Ministry of Natural Resources; Alison Kirkpatrick, OFAH/MNR Invading Species Awareness Program; Erika Weisz, Ontario Ministry of Natural Resources; Amanda Chad, Ontario Power Generation; Nancy Vidler, Lambton Shores Phragmites Community Group; Nigel Buffone, Du Pont Canada Company; Ewa Bednarczuk, Lower Trent Conservation Authority

We also gratefully acknowledge the input and direction from Francine MacDonald, James Rockwood, Anne-Marie Roussy, Stephen Smith, Caroline Mach, Patricia Lowe, John Bowen, Karen Hartley, and the Southern Ontario Community Forest Managers group.

More Information:

Ontario Invasive Plant Council: www.ontarioinvasiveplants.ca

Appendix A: Identification of Invasive Plants found in Ontario

- **Common Buckthorn** (*Rhamnus cathartica*) and **Glossy Buckthorn** (*Frangula alnus*)
- **Dog-strangling Vine** (*Cynanchum rossicum*)
- **Garlic Mustard** (*Alliaria petiolata*)
- **Japanese Knotweed** (*Polygonum cuspidatum*)
- **Phragmites or Common Reed** (*Phragmites australis subsp. australis*)
- **Giant Hogweed** (*Heracleum mantegazzianum*)

common & glossy buckthorn

(*Rhamnus cathartica* & *R. frangula*)



Plant type: Shrub/small tree

Arrangement: Common buckthorn are sub-opposite (almost opposite). Glossy buckthorn are alternate.

Leaf: The common buckthorn leaf is egg shaped, edge of the leaf is “pebbled” (small rounded teeth). Veins converging toward leaf top. The glossy buckthorn leaf is more slender (tear drop shaped) and smooth margined.

Bark: Smooth, young bark with prominent raised patches or lenticels; rough texture and peeling bark when mature.

Seed/Flowers: Flowers are green-yellowish, small and inconspicuous. Green berries becoming purplish/black in late summer, berry > 1 cm in diameter.

Buds/Twigs: Common buckthorn has thorn-like tip on many twigs. Glossy buckthorn buds have no bud scales and lack thorny tips to twigs.

Habitat: Various - forest, thickets, meadows, dry to moist soils.

Similar native species: Native dogwoods, which lack the thorny “tip”. Native dogwoods are truly opposite in arrangement of twigs; only alternate leaved (pagoda) dogwood has alternate branching.



dog-strangling vine

(*Cynanchum rossicum* & *C. nigrum*)



Plant type: Herb, twining vine

Arrangement: Opposite

Leaf: Lance shaped, smooth margin (edge)

Bark: n/a

Seed/Flowers: Bean shaped seed pod with seeds attached to downy 'umbrellas'. Flowers - pink (*C. rossicum*) or purple (*C. nigrum*) with five petals.

Buds/Twigs: n/a

Habitat: Dry to moist soils; more dominant in meadows and woodland edges.

Similar native species: Swamp milkweed (*Asclepias incarnata* spp.), is an upright plant, typically found in wetland habitats.

garlic mustard

(*Alliaria petiolata*)



Plant type: Herb

Arrangement: Alternate

Leaf: Saw tooth like edge, elongated heart shape. Garlic/onion smell when crushed. Leaves are kidney shaped with prominent veins.

Bark: n/a

Seed/Flowers: Cluster of small white flowers with four petals. Small black < 1 mm rounded seed found in elongated 'tube-like' seed pods (similar to a bean pod).

Buds/Twigs: n/a

Habitat: Various – dry to moist soils, in all habitat types, less often in meadows.

Similar native species: n/a

japanese knotweed

(*Polygonum cuspidatum*)



Plant type: Herb, 2 - 4 m in height.

Arrangement: Alternate

Leaf: Tear drop shaped, sharp pointed, dark green, flattened at base.

Bark: n/a

Seed/Flowers: Flowering stalk of many small greenish-white flowers.

Buds/Twigs: Large plant with a 'bamboo-like' stem. Stem light green maturing to tan colour.

Habitat: Moist to wet soils found in wetlands, water-courses and roadside ditches.

Similar native species: None.

common reed

(*Phragmites australis*)



Plant type: Grass

Arrangement: Alternate

Leaf: Broad leaf > 1 cm wide.

Bark: n/a

Seed/Flowers: Dense cascading 'broom-like' flower head. 'Cottony' in appearance when mature.

Buds/Twigs: Stems rough and ridged, ligule a densely hairy band. Mature plants > 3 m tall.

Habitat: Moist to wet soils. Found in wetlands, water-courses and road side ditches.

Similar native species: Species of mannagrass (*Glyceria* sp) including tall northern, eastern and rattlesnake grass. A native common reed exists but has a smooth stem and the ligule is not hairy. It is also quite rare.

giant hogweed

(*Heracleum mantegazzianum*)



Plant type: Herb. Mature plants can be over 3m tall.

Arrangement: Alternate

Leaf: Lobed leaf 1-2 m wide, lobes sharp-pointed.

Bark: n/a

Seed/Flowers: Small, white flowers in a large umbrella-shaped cluster, .75 m wide.

Buds/Twigs: Hairy stem with purple spots.

Habitat: Fresh to wet soils in forests, swamps, meadows, marshes.

Similar native species: Cow parsnip (*Heracleum maximum*) – has smaller flowers, no purple spots on stems. Angelica (*Angelica atropurpurea*) has a rounded-topped flower cluster and leaves divided into many leaflets.

Do not touch this plant because it is poisonous. If you do, wash your skin immediately in cool soapy water and do not expose the area to sunlight.

Seek professional advice before removing.

Identification of Invasive Plants found in Ontario Photos by:

Credit Valley Conservation, Greg Bales, Ken Towle, Patrick Hodge,
Ontario Federation of Anglers and Hunters, Francine Macdonald, Matt Smith

APPENDIX B – ARCHAEOLOGICAL ASSESSMENT REPORT

STAGE 1 AND 2
ARCHAEOLOGICAL ASSESSMENTS FOR
ROUTE 800 REALIGNMENT AT
BUTTERNUT CREEK MCEA
PART OF LOT 9, CONCESSION 8
GEOGRAPHIC TOWNSHIP OF CAMBRIDGE
NOW THE MUNICIPALITY OF THE NATION
UNITED COUNTIES OF PRESCOTT AND
RUSSELL



Past Recovery
Archaeological Services Inc.

**STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENTS
FOR ROUTE 800 REALIGNMENT AT
BUTTERNUT CREEK MCEA,
PART OF LOT 9, CONCESSION 8,
GEOGRAPHIC TOWNSHIP OF CAMBRIDGE,
NOW THE MUNICIPALITY OF THE NATION,
UNITED COUNTIES OF PRESCOTT AND RUSSELL**

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Project No.: PR21-022

Licensee: Stephanie Cleland, M.A., Licence P1201
Staff Archaeologist
Past Recovery Archaeological Services Inc.

P.I.F. No.: P1201-0129-2022

Date: October 17th, 2022

Original Report

ACKNOWLEDGMENTS

Ms. Lisa Marshall, P.Eng., Manager, Environmental Engineering, McIntosh Perry Consulting Engineers Ltd., provided project mapping and logistical assistance.

PROJECT PERSONNEL

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Historical Research	Gabryell Kurtzrock Belyea, M.A. (R1195)
Field Director	Gabryell Kurtzrock Belyea
Stage 2 Field Crew	Liam Bowman, B.A. Trevor Hockney, B.A. Morgan Ward, B.A.
Report Writing	Gabryell Kurtzrock Belyea
Report GIS	Gabryell Kurtzrock Belyea
Report Review	Jeff Earl, M.Soc.Sc.

EXECUTIVE SUMMARY

Past Recovery Archaeological Services Inc. was retained by McIntosh Perry Consulting Engineers Ltd., on behalf of the Nation Municipality, to undertake Stage 1 and Stage 2 archaeological assessments as part of planned improvements to Route 800. The subject property was located on part of Lot 9, Concession 8 of the geographic Township of Cambridge, now the Municipality of The Nation, United Counties of Prescott and Russell (see Maps 1 and 2). The area covered by the proposed road improvements was approximately 2.8 hectares (or 7 acres) in size.

The purpose of the Stage 1 investigation was to evaluate the archaeological potential of the study area and present recommendations for the mitigation of any significant known or potential archaeological resources. To this end, historical, environmental and archaeological research was conducted in order to make a determination of archaeological potential. The results of this study indicated that portions of the subject property possessed potential for pre-Contact and post-Contact archaeological resources.

The purpose of the Stage 2 assessment was to determine whether the property contained archaeological resources requiring further assessment, and if so to recommend an appropriate Stage 3 assessment strategy. The assessment was completed over the course of one day: April 20th, 2022 (see Map 7). Given that the study area was comprised of an active agricultural field, small, wooded areas, and road rights-of-way, the assessment was conducted by means of a combination of shovel test pit survey at five metre intervals and pedestrian survey at five metre intervals across all portions of the study area determined to exhibit archaeological potential. No archaeological resources were recovered as part of the Stage 2 assessment.

The results of the property survey documented in this report form the basis for the following recommendations:

- 1) As the Stage 2 property survey did not result in the identification of any archaeological sites requiring further assessment or mitigation of impacts, no further archaeological assessment of the study area as defined on Map 2 is required.

- 2) In the event that future planning results in the identification of additional areas of impact beyond the limits of the present Stage 2 study area, further archaeological assessment may be required. It should be noted that screening for impacts should include all aspects of the proposed development that may cause soil disturbances or other alterations, and that even temporary property needs should be considered. Any additional archaeological assessment should be undertaken by a licensed consultant archaeologist, in compliance with *Standards and Guidelines for Consultant Archaeologists* (MCM 2011).

The following recommendation has been included as per a request from the Algonquins of Ontario:

- 3) Since the potential always exists to miss important information in archaeological surveys, if any artifacts of Indigenous interest or human remains are encountered during the development of the subject property, please contact: Algonquins of Ontario Consultation Office, 31 Riverside Drive, Suite 101, Pembroke, ON, K8A 8R6; Tel: 613-735-3759; Fax: 613-735-6307; Email: algonquins@tanakiwin.com.

The following recommendation has been included at the request of the Huron-Wendat Nation (HWN):

- 4) Considering that even thorough archaeological assessments might miss some archaeological resources or relevant information, the HWN asks to be contacted

should any Indigenous artifacts or human remains be encountered during the development process. Please contact Nation Huronne-Wendat, Bureau du Nionwentsïo, 255 Place Chef Michel Laveau, Wendake, Qc, G0A 4V0; Tel: (418)-843-3767; e-mail Dominic Ste-Marie, conseiller en gestion du territoire, at dominic.ste-marie@wendake.ca, Marie-Sophie Gendron, analyste archéologue, at marie-sophie.gendron@wendake.ca and Thiefaine Terrier, analyste archéologue, at thiefaine.terrier@wendake.ca.

The reader is also referred to Section 7.0 below to ensure compliance with relevant provincial legislation and regulations as may relate to this project.

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1.0 INTRODUCTION

Past Recovery Archaeological Services Inc. (Past Recovery) was retained by McIntosh Perry Consulting Engineers Ltd., on behalf of The Nation municipality, to undertake Stage 1 and 2 archaeological assessments in support of proposed improvements to Route 800 as per requirements of a *Municipal Class Environmental Assessment*. The subject property was located on part of Lot 9, Concession 8 of the geographic Township of Cambridge, now the Municipality of The Nation, United Counties of Prescott and Russell (Maps 1 and 2).

The objectives of the Stage 1 archaeological assessment were as follows:

- To provide information concerning the geography, history, previous archaeological fieldwork and current land condition of the study area;
- To evaluate the potential for the subject property to contain significant archaeological resources; and,
- To recommend appropriate strategies for Stage 2 archaeological assessment in the event further assessment is warranted.

The objectives of the Stage 2 archaeological assessment were as follows:

- To document all archaeological resources on the property;
- To determine whether the property contains archaeological resources requiring further assessment; and,
- In the event that an archaeological site requiring further assessment is discovered, to recommend an appropriate Stage 3 assessment strategy.

2.0 PROJECT CONTEXT

This section of the report provides the context for the archaeological work undertaken, including a description of the study area, the related legislation or directives triggering the assessment, any additional development-related information, the confirmation of permission to access the study area for the purposes of the assessment, and Indigenous territorial acknowledgement.

2.1 Property Description

The subject property was located within part of Lot 9, Concession 8 of the geographic Township of Cambridge, now the Municipality of The Nation, United Counties of Prescott and Russell, and consisted of 2.8 hectares (7 acres) of land containing an active farm field and road rights-of-way (see Maps 1 and 2). The property was irregularly shaped and generally followed the contours of Butternut Creek between County Road 7 and Paul Latour Road (Route 800). The study area was mostly located in the southwestern corner of an active agricultural field on the eastern half of Lot 9, Concession 8. It also comprised parts of the rights-of-way associated with County Road 7 and Paul Latour Road (Route 800).

2.2 Development Context

McIntosh Perry Consulting Engineers Ltd. is preparing a Municipal Class Environmental Assessment on behalf of the proponent, The Nation Municipality, in advance of a proposed alteration to Route 800 to avoid crossing Butternut Creek. Archaeological assessment was required as part of the environmental assessment, and Past Recovery was retained to complete this work. As noted above, the Stage 1 study area consisted of a 2.8-hectare (7-acre) parcel. All Stage 2 work was confined to the lands to be included in the road realignment and adjustments to the existing road segments that will no longer be in use.

2.3 Access Permission

Permission to access the subject property and complete all aspects of the archaeological assessment, including photography and the collection of artifacts, was granted by the Nation Municipality and the current owner of the agricultural field.

2.4 Territorial Acknowledgement

The study area falls within the traditional territory of the Anishinaabeg and forms part of the Algonquins of Ontario (AOO) Settlement Area set out by the current Agreement-in-

Principle between the AOO and the federal and provincial governments, signed in 2016.¹ It also falls within the traditional territory of the Mohawks of Akwesasne, the 'primary area of interest' for the Huron-Wendat Nation and within the traditional harvesting territories of the Métis Nation of Ontario.

¹ The Algonquins of Ontario are composed of ten communities: The Algonquins of Pikwakanagan First Nation, Antoine, Kijicho Manito Madaouskarini (Bancroft), Bonnechere, Greater Golden Lake, Mattawa/North Bay, Ottawa, Shabot Obaadjiwan (Sharbot Lake), Snimikobi (Ardoch), Whitney and Area. Federally unrecognized Algonquin communities, including Ardoch First Nation, also live in the territory but do not form part of the AOO (see Lawrence 2012). The Agreement-In-Principle is between the Algonquins of Ontario and the Governments of Ontario and Canada. Algonquins have sought recognition and protection of their traditional territory dating back to 1772 and in 1983 the Algonquins of Pikwàkanagàn First Nation (previously Algonquins of Golden Lake) formally submitted a petition to the Government of Canada, and in 1985 to the Government of Ontario. The claim was accepted for negotiations in 1991 and 1992, an Agreement-In-Principle was signed in 2016, and negotiations are on-going. For further information see www.tanakiwin.com.

3.0 HISTORICAL CONTEXT

This section of the report is comprised of an overview of human settlement in the region using information derived from background historical research. The purpose of this research is to describe the known settlement history of the local area, with the intention of providing a context for the evaluation of known and potential archaeological sites, as well as a review of property-specific information presenting a record of settlement and land use history.

3.1 Regional Pre-Contact Cultural Overview

While our understanding of the pre-Contact sequence of human activity in the area is limited, it is possible to provide a general outline of the pre-Contact occupation in the region based on archaeological, historical, and environmental research conducted across what is now eastern Ontario as well as the oral histories of Indigenous communities who have long-standing relationships with the land in the region.² It is important to note that the regional boundaries observed today did not exist for most of the human occupation of the region and during the pre-Contact and early post-Contact periods the landscape would have been viewed quite differently.

Across the region, glaciers began to retreat around 15,000 years ago (Munson 2013:21). According to the archaeological record, the earliest human occupation of what is now Ontario began approximately 13,500 years ago with the arrival of small groups of hunter-gatherers referred to by archaeologists as Paleo-Indigenous (a.k.a. Palaeo-Indians, Paleo-Americans; Ellis 2013:35; Ellis and Deller 1990:39). These groups gradually moved northward as the glaciers and glacial lakes retreated. While very little is known about their lifestyle, it is likely that Paleo-Indigenous groups travelled widely, relying on the seasonal migration of caribou as well as small animals and wild plants for subsistence in a sub-arctic environment. They produced a variety of distinctive stone tools including fluted projectile points, scrapers, burins, and graters. Their sites are extraordinarily rare, and most Paleo-Indigenous sites are quite small (Ellis 2013:35-36). Paleo-Indigenous peoples tended to camp along shorelines, and because of the changing environment, today many of these areas are now dry land. Most archaeological evidence for the Paleo-Indigenous period has been found in what is now south-western and south-central Ontario at sites located on the former shorelines of glacial Lake Algonquin. Indigenous settlement of much of what is now eastern Ontario was late in comparison to other parts of the province as a result of the high water levels associated with the early stages of glacial Lake Iroquois and the St. Lawrence Marine Embayment of the post-glacial Champlain Sea (Hough 1958:204). In what is now eastern Ontario, the ridges and old

² Most of the common place names used today were not used by the many Indigenous peoples who lived in the region for thousands of years prior to the arrival of Europeans. Throughout this report pre- and early Contact period place names are prefaced with 'what is now' or 'what is now known as.' Ontario was not formed until 1867 A.D.

shorelines of Lake Iroquois, the Champlain Sea, and emergent St. Lawrence River channels would be the most likely areas to find evidence of Palaeo-Indian occupation.

During the succeeding Archaic period (c. 10,000 to c. 3,000 B.P.), the environment of what is now southern Ontario approached modern conditions and more land became available for occupation as water levels in the glacial lakes dropped (Ellis et al. 1990:69). High water levels were maintained in the Nipissing-Mattawa lowland and Ottawa River valleys, initially by large volumes of glacial meltwaters discharging eastwards from glacial Lake Agassiz and glacial Lake Barlow-Ojibway, with elevated levels maintained until approximately 6,000 BP when differential isostatic rebound caused the North Bay outlet to be lifted above the surface of the Nipissing Great Lakes (Lewis et al. 2008:134). Populations continued to follow a mobile hunter-gatherer subsistence strategy, although there appears to have been a greater reliance on fishing and gathered food (e.g. plants and nuts) and more diversity between regional groups. The tool kit also became increasingly diversified, reflecting an adaptation to environmental conditions similar to those of today. This included the presence of adzes, gouges, and other ground stone tools believed to have been used for heavy woodworking activities such as the construction of dug-out canoes, grinding stones for processing nuts and seeds, specialized fishing gear including net sinkers, and a general reduction in the size of projectile points. The middle and late portions of the Archaic period saw the development of trading networks spanning what are now known as the Great Lakes, and by 6,000 years ago copper was being mined in the Upper Great Lakes and traded into what is now southern Ontario. There is increasing evidence of ceremonialism and elaborate burial practices and a wide variety of non-utilitarian items such as gorgets, pipes, and 'birdstones' were being manufactured. By the end of this period populations had increased substantially over the preceding Paleo-Indigenous period.

Sometime between 7,500 and 6,500 B.P. a more extensive Indigenous settlement of the region began (Clermont 1999; Kennedy 1970:61; Ellis et al. 1990:93). Artifacts from Archaic sites in what is now eastern Ontario suggest a close relationship to what archaeologists refer to as the Laurentian Archaic stage peoples who occupied the Canadian biotic province transition zone between the deciduous forests to the south and the boreal forests to the north. The region included what is now northern New York State, the upper St. Lawrence Valley (now southern Ontario and Quebec), and the state of Vermont (Ritchie 1980; Clermont 2003). The 'tradition' associated with this period is characterized by a more or less systematic sharing of several technological features, including large, broad bladed, chipped stone and ground slate projectile points, and heavy ground stone tools. This stage is also known for the extensive use of cold-hammered copper tools including "*bevelled spear points, bracelets, pendants, axes, fishhooks and knives*" (Kennedy 1970:59). The sharing of this set of features is generally perceived as a marker of historical relatedness and inclusion in the same interaction network (Clermont et al. 2003:323).

Archaeologists use the appearance of ceramics in the archaeological record to mark the beginning of the Woodland period. Ceramic styles and decorations provide evidence of the continued differentiation between regional populations and are commonly used to distinguish between three periods: Early Woodland (2,900 to 2,300 B.P.), Middle Woodland (2,300 to 1,200 B.P.), and Late Woodland (1,200 to 400 B.P.). The introduction of ceramics to what is now known as southern Ontario does not appear to have been associated with significant changes to lifeways as hunting and gathering remained the primary subsistence strategy throughout the Early Woodland and well into the Middle Woodland. It does, however, appear that regional populations continued to grow in size, and bands continued to participate in extensive trade networks that, at their zenith c. 1,750 B.P., spanned much of the continent ('Turtle Island') and included the movement of conch shell, fossilized shark teeth, mica, copper, and silver.³ The recent discovery of a cache of charred quinoa seeds, dating to 3,000 B.P. at a site in Brantford, Ontario, indicates that crops were also part of this extensive exchange network, which in this case travelled from what is now the Kentucky-Tennessee region of the United States. There is no indication, however, that these seeds were locally grown (Crawford et al. 2019). In south-central Ontario, the first peoples to adopt ceramics are identified as belonging to the Meadowood Complex, characterized by distinctive biface preforms, side-notched points, and Vinette 1 ceramics which are typically crude, thick, cone-shaped vessels made with coils of clay shaped by cord-wrapped paddles. Meadowood material has been found on sites across southern Ontario extending into southern Quebec and New York State (Spence et al. 1990).

In the Middle Woodland period increasingly distinctive trends or 'traditions' continued to evolve in different parts of what is now Ontario (Spence et al. 1990). Although regional patterns are poorly understood and there may be distinctive traditions associated with different watersheds, the appearance of better-made (thinner-walled and containing finer grit temper) ceramic vessels decorated with dentate or pseudo-scallop impressions have been used to distinguish the Point Peninsula Complex. These ceramics are identified as 'Vinette II' and are typically found in association with evidence of distinct bone and stone tool industries. Sites exhibiting these traits are known from throughout what is now known as south-central and eastern Ontario, northern New York, and northwestern Vermont, and are often found overlying earlier occupations. Some groups appear to have practiced elaborate burial ceremonialism that involved the construction of large earthen mortuary mounds and the inclusion of numerous and often exotic materials in burials, construed as evidence of influences from what is now northern Ontario and the Hopewell area to the south (in the Ohio River valley). Archaeological evidence suggests that during this time period groups utilized a variety of resources within a home territory. Through the late fall and winter, small groups would occupy an inland 'family' hunting area. In the spring, these dispersed families would congregate at specific lakeshore sites to fish,

³ The name 'Turtle Island' comes from various Indigenous oral histories referring to what is now commonly known as North America. Many Algonquian and Iroquoian-speaking groups continue to use the term today. <https://www.thecanadianencyclopedia.ca/en/article/turtle-island>.

hunt in the surrounding forest, and socialize. This gathering would last through to the late summer when large quantities of food would be stored up for the approaching winter (Spence et al. 1990).

Towards the end of the Middle Woodland period (1,200 B.P.), groups in what is now known as southern Ontario had adopted horticulture. Available archaeological evidence, which comes primarily from the vicinity of the Grand and Credit Rivers, suggests that this development was not initially widespread (Fox 1990). The start of maize horticulture instead appears to be linked to the emergence of the Princess Point Complex which is characterized by decorated ceramics combining cord roughening, impressed lines, and punctate designs; triangular projectile points; T-based drills; steatite and ceramic pipes; and ground stone chisels and adzes (Fox 1990). The distinctive artifacts and horticultural practices have led to the suggestion that these populations were ancestral to the Iroquoian-speaking peoples who later inhabited southern Ontario (Warrick 2000:427).

Archaeologists have distinguished the Late Woodland period by the widespread adoption of maize horticulture by Indigenous populations to the south and west of the western end of what is now Lake Ontario. Michi Saagiig oral histories recall that corn came to what is now Ontario with the arrival of ancestral Wendat (Migizi 2018:34). Initially only a minor addition to the diet, the cultivation of corn, beans, squash, sunflowers, and tobacco radically altered subsistence strategies and gained economic importance in the region. This change is associated with a time of dynamic cultural development that saw increased sedentism, with larger and more dense settlements. The locations of large settlements were focused on areas of easily tillable farmland. In some areas, semi-permanent villages appeared for the first time, which were occupied year-round for a number of years until local firewood and soil fertility had been exhausted. Inhabitants lived in communal dwellings known as longhouses (although more temporary habitations such as small hamlets, agricultural cabin sites, and hunting and fishing camps are also known). Many of these villages were surrounded by defensive palisades, evidence of growing hostilities between neighbouring groups. Associated with these sites is a burial pattern of individual graves occurring within the village. While burial practices between Iroquoian groups varied, amongst the ancestral Huron-Wendat, the people of one or more villages often exhumed the remains of their dead for reburial in a large communal burial pit or ossuary outside of the village (Wright 1966; Williamson 2014). Throughout much of eastern Ontario, however, the shield-like terrain limited the adoption of extensive horticulture and Indigenous groups continued to move frequently across this territory hunting, fishing, and gathering (Pilon 1999).

Throughout the pre-Contact period there is archaeological evidence and Indigenous oral histories indicating diverse nations existed and interacted within what is now southern Ontario (see Kapryka 2017). Between 1,200 and 700 B.P., small village sites (c. 0.4 ha) started to appear in different areas of southern Ontario. The villages often consisted of four or five longhouses up to 15 m in length. The houses contained central hearths and pits for storing maize, and the people produced distinctive pottery with decorative

incised rims. Common to this period were well-made and thin-walled pottery, ceramic pipes, gaming discs, and a variety of stone, bone, shell, and copper artifacts (Williamson 1990). Over time, the villages increased in size and at approximately 700 B.P to 600 B.P longhouses were as much as 33 m in length, settlements measured between 1.0 and 1.2 ha and populations swelled to between 500 and 600 people. These villages were well planned, suggesting emerging clan organization, and most seem to have been occupied for perhaps 30 years (Dodd et al. 1990). Village sites dating to between 600 to 450 B.P. were variable, with some scholars suggesting certain characteristics can be used to differentiate groups that would become the Huron-Wendat, Petun, and Neutral Nations (Birch 2015; Ramsden 1990). Mississauga Anishinaabeg oral histories indicate that throughout this period the region continued to be their homeland (Migizi 2018).

Oral accounts from Knowledge Keepers Georges Sioui, Huron-Wendat, and Gitiga Migizi, Mississauga Anishinaabe, speak to the strong connectedness between their nations prior to the arrival of Europeans (Migizi and Kapyrka 2015:133; Sioui 1999:63). Throughout the region the Mississaugas, Odawa, Huron-Wendat, Petun, and Neutral Nations maintained important political and economic relationships. The arrival and spread of European fur traders, however, significantly impacted Indigenous lifeways and the relationships among Indigenous groups.

Several groups are thought to have occupied the study region during the centuries prior to the arrival of Europeans. While there appears to have been a hiatus in the occupation of the St. Lawrence Valley through the early stages of the Late Woodland, by the end of this period a considerable population belonging to what archaeologists refer to as the St. Lawrence Iroquois had become established in the region. Settlement clusters have been identified near the Spencerville/Prescott area and lying just north of Lake St. Francis (sometimes identified as the 'Cornwall cluster;' see Adams 2003:43), with a large number of sites reported for what is now Jefferson County in New York State and further east into Quebec. The material culture and settlement patterns of the fourteenth and fifteenth century St. Lawrence Iroquoian sites are directly related to the Iroquoian-speaking groups that Jacques Cartier and his crew encountered in 1535 at Stadacona (Quebec City) and Hochelaga (Montreal Island) (Jamieson 1990:386). By the late sixteenth century, however, all of the St. Lawrence Iroquoian settlements appear to have been abandoned. Long characterized by archaeologists as a 'mysterious disappearance,' recent scholarship instead highlights several lines of evidence that suggest a series of planned migrations by St. Lawrence Iroquoian groups to other Indigenous populations, including the Huron-Wendat, during a period of coalescence and social realignment (Micon et al. 2021; Lesage and Williamson 2020).⁴ These population movements are also reflected in the oral histories of the Michi Saagig (Mississauga Anishinaabeg), which recall St. Lawrence

⁴ This period also saw the coalescence of ancestral Huron-Wendat villages associated with a northward territorial expansion and a concomitant abandonment of the north shore of Lake Ontario, changes that have been suggested to have been driven, in large part, by an increase in conflict with the Haudenosaunee over control of trade routes and access to European trade goods.

Iroquois moving westwards into their territory around 1000 A.D. (Gidigaa Migizi 2019:121).

Agricultural villages of ancestral Huron-Wendat have been recorded along the north shore of Lake Ontario and up the Trent River dating to c. 550 B.P. By c. 450 B.P., the easternmost settlements of the ancestral Huron-Wendat were located between Balsam Lake and Lake Simcoe in the region that would become historic Huronia. This population movement is not fully understood, and undoubtedly involved complex interactions between different cultural groups including the Anishinaabeg and, as noted above, may also have included St. Lawrence Iroquoians. As such, there are conflicting interpretations of the archaeological and historical records related to this period (see Gaudreau and Lesage 2016; Gidigaa Migizi 2019; Gidigaa and Kapyrka 2015; Lainey 2006; Richard 2016; Pendergast 1972).

Finally, while the Iroquois or Haudenosaunee⁵ homeland was initially south of Ontario in New York state, their oral histories suggest their hunting grounds extended along the north shore of Lake Ontario and the St. Lawrence River into southeastern Ontario and Quebec (Hill 2017). Archaeological data indicates some Haudenosaunee were living year-round in Ontario by the early seventeenth century (Konrad 1981).

The Indigenous population shifts and relationships of the late sixteenth and early seventeenth centuries through the period of initial contact with Europeans were complex and are not fully understood. They were certainly in part a result of the disruption of traditional trade and exchange patterns among all Indigenous peoples brought about by the arrival of the French, Dutch and British along the Atlantic seaboard the subsequent emergence of the lucrative St. Lawrence River trade route.

3.2 Regional Post-Contact Cultural Overview

The first Europeans to travel into eastern Ontario arrived in the early seventeenth century; predominantly French, they included explorers, fur traders and missionaries. While exploring eastern Ontario and the Ottawa River watershed between c. 1610 and 1613,⁶ Samuel de Champlain and others documented encounters with different Indigenous groups speaking Anishinaabemowin, including the Matouweskarini along the Madawaska River, the Kichesipirini at Morrison Island on the Ottawa River, the Otaguottouemin along the river northwest of Morrison Island, the Weskarini in the Petite

⁵ Sometime between A.D. 1142 and A.D. 1451 the Mohawk, Oneida, Onondaga, Cayuga, and Seneca united to form the Haudenosaunee Confederacy, also known as the League of Five Nations, and called the Iroquois by the French. When the Tuscarora Nation joined the confederacy in 1722, it became the League of Six Nations.

⁶ From this section onwards all dates are presented as A.D.

Nation River basin,⁷ and the Onontchataronon⁸ living in the South Nation River basin as far west as the Gananoque River basin (Hanewich 2009; Hessel 1993; Sherman 2015:29). These extended family communities subsisted by hunting, fishing, and gathering, and undertook some horticulture (see also Pendergast 1999; Trigger 1987). The Anishinaabeg living in the Upper Ottawa Valley and northward towards the headwaters of the Ottawa River included the Nipissing, Timiskaming, Abitibi (Wahgoshig), and others; however, as the French moved inland, they referred to all these groups who spoke different dialects of Anishinaabemowin as Algonquin (Morrison 2005:18).

At the time of Champlain's travels, the Algonquin were already acting as brokers in the fur trade and exacting tolls from those using the Ottawa River trade route which connected the Upper Great Lakes to the west via Lake Nipissing and Georgian Bay, and the St. Maurice and Saguenay via the Rivières des Outaouais (the portion of the Ottawa River extending eastward into Quebec from Lake Timiskaming). These northern exchange routes circumvented the St. Lawrence River and lower Great Lakes waterways and, therefore, potential conflict with the Haudenosaunee (Joan Holmes & Associates Inc. 1993:2-3). As access to the more southerly route and the extent of settlement in the region fluctuated with the state of hostilities (Joan Holmes & Associates Inc. 1993:3), and given that the fur trade in New France was based in Montreal, the Ottawa River navigation routes were of especial strategic importance in the movement of goods inland and the return of furs down to Montreal. In the wake of Champlain's travels, the Ottawa River became the principal route to the interior for the French. The recovery of European trade goods (e.g., iron axes, copper kettle pieces, glass beads, etc.) from sites throughout the Ottawa River drainage basin provides some evidence of the extent of interaction between Indigenous groups and the French during this period (Kennedy 1970).

With Contact, major population disruptions were brought about by the introduction of European diseases against which Indigenous populations had little resistance; severe smallpox epidemics in 1623-24 and again between 1634 and 1640 resulted in drastic population decline among all Indigenous peoples living in the Great Lakes region (Konrad 1981). The expansion of hunting for trade with Europeans also accelerated decline in the beaver population, such that by the middle of the seventeenth century the centre of the fur trade had shifted northward from what became the northeastern states into southern Ontario. The French, allied with the Huron-Wendat, the Petun, and the Anishinaabeg, refused advances by the Haudenosaunee to trade with them directly. Seeking to expand their territory and disrupt the French fur trade, the Haudenosaunee launched raids into the region and established a series of winter hunting bases and

⁷ The Petite Nation River is in Quebec, with its mouth on the north side of the Ottawa River between Ottawa and Hawkesbury. It is sometimes confused with the South Nation River in eastern Ontario which empties into the south side of the Ottawa River opposite the Petite Nation River. Consequently, the Weskarini territory is sometimes associated with the South Nation River, but this appears to be an error (*cf.* Hessel 1993).

⁸ This is a Haudenosaunee term and is, therefore, thought to refer to an Algonquin community that adopted displaced Iroquoians from territory along the St. Lawrence River near Montreal (Fox and Pilon 2016).

trading settlements near the mouths of the major rivers flowing into the north shore of Lake Ontario and the St. Lawrence River.⁹ The first recorded Haudenosaunee settlements were two Cayuga villages established at the northeastern end of Lake Ontario (Konrad 1981). Between 1640 and 1650, the success of the Haudenosaunee Confederacy in warfare led to the dispersal of the Anishinaabeg and Huron-Wendat who had been occupying much of southern Ontario.

Fort Frontenac was established by the French at the present site of Kingston in 1673, and another fort was constructed at La Presentation (Ogdensburg, New York) in 1700. These forts served to solidify control of the fur trade and to enhance French ties with local Indigenous populations. To this end, the French also encouraged the establishment of Indigenous villages near their settlements (Adams 1986). The full extent of Indigenous settlement in eastern Ontario through to the end of the seventeenth century, however, is uncertain. The Odawa appear to have been using the Ottawa River for trade from c. 1654 onward and some Algonquin remained within the area under French influence, possibly having withdrawn to the headwaters of various tributaries in the watershed. In 1677 the Sulpician Mission of the Mountain was established near Montreal where the Ottawa River empties into the St. Lawrence River. While it was mostly a Mohawk community that became known as Kahnawake, some Algonquin who had converted to Christianity settled at the mission for part of the year and were known as the Oka Algonquin (Joan Holmes & Associates Inc. 1993).

As a result of increased tensions between the Haudenosaunee and the French, and declining population from disease and warfare, the Cayuga villages were abandoned in 1680 (Edwards 1984:17). Around this time, Anishinaabeg began to mount an organized counter-offensive against the Haudenosaunee who were pushed back to their traditional lands further south, leading to the return of the Michi Saagig Nishnabeg, or Mississauga, to southern and south-eastern Ontario from their winter hunting grounds in the north. This change saw Anishinaabeg gain wider access to European trade goods and allowed them to use their strategic position to act as intermediaries in trade between the British and Indigenous communities to the north (Edwards 1984:10,17; Ripmeester 1995; Surtees 1982; Curve Lake First Nation n.d.).

Following almost a century of warfare, the Great Peace was signed in Montreal in 1701 between New France and 39 Indigenous Nations, including the Anishinaabeg, Huron-Wendat and Haudenosaunee. This led to a period of relative peace and stability. During the first half of the eighteenth century, the Haudenosaunee occupation appears to have been largely restricted to south of the St. Lawrence River, while Mississauga and Ojibwa were living in southern and central Ontario, generally beyond the Ottawa River watershed (Joan Holmes & Associates Inc. 1993:3). Algonquin were residing along the

⁹ These settlements included: Quinaouatoua near present day Hamilton, Teiaiaagon on the Humber River, Ganatswekwyagon on the Rouge River, Ganaraske on the Ganaraska River, Kentsio on Rice Lake, Kente on the Bay of Quinte, and Ganneious, near Napanee (Adams 1986).

Ottawa River and its tributaries, as well as outside the Ottawa River watershed at Trois-Rivières; Nipissing were located around Lake Nipissing and at Lake Nipigon. Reports from c. 1752 suggest that some non-resident Algonquin and Nipissing were trading at the mission at Lake of Two Mountains during the summer but returning to their hunting grounds “*far up the Ottawa River*” for the winter, and there is some indication that they may have permitted Haudenosaunee residents of the mission to hunt in their territory (Joan Holmes & Associates Inc. 1993:3; Heidenreich and Noël 1987:Plate 40).

In 1754, hostilities over trade and the territorial ambitions of the French and British led to the Seven Years’ War, in which many Anishinaabeg fought on behalf of the French. With the French surrender in 1760, Britain gained control over New France, though in recognition of Indigenous title to the land the British government issued the Royal Proclamation of 1763. This created a boundary line between the British colonies on the Atlantic coast and the ‘Indian Reserve’ west of the Appalachian Mountains. This line then extended from where the 45th parallel of latitude crossed the St. Lawrence River near present day Cornwall northwestward to the southeast shore of Lake Nipissing and then northeastward to Lac St. Jean. The proclamation specified that “*Indians should not be molested on their hunting grounds*” (Joan Holmes & Associates Inc. 1993:4) and outlawed the private purchase of Indigenous land, instead requiring all future land purchases to be made by Crown officials “*at some public Meeting or Assembly of the said Indians*” occupying the land in question (cited in Surtees 1982: 9). In 1764, the post at Carillon on the Ottawa River was identified as the point beyond which traders could only pass with a specific licence to trade in “*Indian Territory.*” Petitions in 1772 and again in 1791 described Algonquin and Nipissing territory as the lands on both sides of the Ottawa River from Long Sault to Lake Nipissing. Settlers continued to trespass into this territory, however, cutting trees and driving away game vital to Indigenous lifeways (Joan Holmes & Associates Inc. 1993:5). Akwesasne, within the Haudenosaunee hunting territory, became a permanent settlement towards the middle of the eighteenth century.¹⁰

At first, the end of the French Regime brought little change to eastern Ontario. Between 1763 and 1776 some British traders traveled to the Kingston area, but the British presence remained sporadic until 1783 when Fort Frontenac was officially re-occupied. With the conclusion of the American Revolutionary War (1775 to 1783), however, the British sought additional lands on which to settle United Empire Loyalists fleeing the United States, disbanded soldiers, and the Mohawk who had fought with the British under Thayendanega (Joseph Brant) and Chief Deserontyon and were, therefore, displaced from their lands in New York State. To this end, the British government undertook hasty negotiations with Indigenous groups to acquire rights to lands; however, these negotiations did not include Algonquin and Nipissing who were continuously ignored, despite much of the area being their traditional territory (Lanark County Neighbours for Truth and Reconciliation 2019). Initially the focus for settlement was the north shore of Lake Ontario and the St. Lawrence River, resulting in a series of ‘purchases’ and treaties

¹⁰ www.firstbatuibs.info/akwesasne.html

beginning with the Crawford Purchases of 1783. As noted, these treaties did not include all of the Indigenous groups who lived and hunted in the region and the recording of the purchases – including the boundaries – and their execution were problematic; they also did not extinguish Indigenous rights and title to the land (Joan Holmes & Associates Inc. 1993:5; Royal Commission on Aboriginal Peoples 1996). The *Crown Grant to the Mohawks of the Bay of Quinte* was issued in 1784 in recognition of the Six Nations’ support during the American Revolutionary War. It included lands on the Bay of Quinte, originally part of the Crawford Purchases, on which Chief Deserontyon and other Haudenosaunee settled.¹¹

Major Samuel Holland, Surveyor General for Canada, began laying out the land within the Crawford Purchases in 1784 with such haste that the newly established townships were assigned numbers instead of names. Euro-Canadian settlement along the north shore of the St. Lawrence River and the eastern end of Lake Ontario began in earnest about this time. By the late 1780s the waterfront townships were full and more land was required to meet both an increase in the size of grants to all Loyalists and grant obligations to the children of Loyalists who were now entitled to 200 acres in their own right upon reaching the age of 21 (H. Belden & Co. 1880:16). In 1792 John Graves Simcoe, Lieutenant Governor of the Province of Upper Canada, offered free land grants to anyone who would swear loyalty to the King, a policy aimed at attracting more American settlers. As government policy also dictated the setting aside of one seventh of all land for the Protestant Clergy and another seventh as Crown reserves, pressure mounted to open up more of the interior. As a result, between 1790 and 1800 most of the remainder of the Crawford Purchases was divided into townships (H. Belden & Co. 1880:16).

A number of other purchases during the late eighteenth century between representatives of the Crown and certain Anishinaabe covered lands immediately west of the Crawford Purchases, from the north shore of Lake Ontario northward to Lake Simcoe and Georgian Bay/Lake Huron. These included the John Collins Purchase of 1785, the Johnson-Butler Purchase¹² of 1787-88, and the 1798 Penetanguishene Purchase (Treaty 5) aimed at acquiring a harbour on Lake Huron for British vessels.¹³ The lands purportedly covered by these purchases were often poorly defined and were thus included in the later Williams Treaties of 1923 (see below).

The *Constitution Act* of 1791 created Upper and Lower Canada (later Ontario and Quebec) and established the Ottawa River as the boundary between the two provinces. This effectively divided the Algonquin and Nipissing territories, both of which straddled the river. The Algonquin and Nipissing sent a letter to the Governor General of the Province

¹¹ <https://www.ontario.ca/page/map-ontario-treaties-and-reserves>

¹² Sometimes referred to as the ‘Gunshot Treaty’ as it reportedly covered the land as far back from the lake shore as a person could hear a gunshot (<https://www.ontario.ca/page/map-ontario-treaties-and-reserves>).

¹³ <https://www.ontario.ca/page/map-ontario-treaties-and-reserves>

of Canada in 1798, requesting that settlers be restricted to the banks of the Ottawa River and detailing the difficulties caused by encroaching settlement (Joan Holmes & Associates Inc. 1993:5; see also Lanark County Neighbours for Truth and Reconciliation 2019). In this letter the Chiefs noted the belt of wampum and map of their lands that was given to Governor Carleton some years earlier, pleading for no more of the encroachment that was driving away game and pushing them into infertile lands; however, there was no response. In the early 1800s, a few Algonquin and Nipissing settled on the shores of Golden Lake, known to them as 'Peguakonagang;' they called themselves 'Ininwezi,' which they translated as 'we people here alone' (Johnson 1928; MacKay 2016).¹⁴ The Golden Lake band, as they initially came to be known, resided in this area for at least part of the year, with various band members maintaining traplines, hunting territories, and sugar bushes.

The War of 1812 between the United States and Great Britain (along with its colonies in North America and its Indigenous allies) brought another period of conflict to the region. In 1815, at the conclusion of the war, the British government issued a proclamation in Edinburgh to further encourage settlement in British North America. The offer included free passage and 100 acres of land for each head of family, with each male child to receive his own 100-acre parcel upon reaching the age of 21 (H. Belden & Co. 1880:16). At the same time, the government was seeking additional land on which to resettle disbanded soldiers from the War of 1812. Demobilized forces could thereby act as a 'force-in-being' to oppose any possible future incursions from the United States. Veterans were encouraged to take up residence within a series of newly created 'military settlements' including those at Perth (1816) and Richmond (1818). The pressure to find more land was exacerbated by the sheer number of settlers moving into the region as a result of these initiatives, which began to push settlement beyond the acquired territory into what had formally been protected as 'Indian Land.'¹⁵

Additional 'purchases' were signed in the early nineteenth century between the Crown and certain Anishinaabe communities including the Lake Simcoe Purchase (Treaty 16) signed in 1815 and covering lands between Lake Simcoe and Georgian Bay, the Nottawasaga Purchase (Treaty 18) of 1818 to the south and west of the Lake Simcoe Purchase, and the Rice Lake Purchase or Treaty 20 of 1818 which covered a large area around Rice Lake.¹⁶

Further east, with the settlement of the region underway, Lieutenant Governor Gore ordered Captain Ferguson, the Resident Agent of Indian Affairs at Kingston, to arrange the purchase of additional lands from the chiefs of the Ojibwa and Mississauga or Michi

¹⁴ The Algonquin of River Desert identified The Golden Lake Band using the name "Nozebi'wininiwag," translated as "Pike-Water People" (Speck in Johnson 1928:174).

¹⁵ Between 1815 and 1850 over an estimated 800,000 Euro-Canadian settlers moved into the region (<https://www.lanarkcountyneighbours.ca/the-petitions-of-chief-shawinipinessi.html>).

¹⁶ <https://www.ontario.ca/page/map-ontario-treaties-and-reserves>

Saagiig Nishnaabeg. The resulting Rideau Purchase (Treaty 27 and 27¼) extended from the rear of the earlier Crawford Purchases to the Ottawa River and was signed by the Michi Saagiig Nishnaabeg in 1819 and confirmed in 1822. This ‘purchase’, like the earlier Crawford Purchases, was also problematic and excluded the Algonquin whose traditional territory it covered (Canada 1891:62; Surtees 1994:115). As this purchase included lands within the Ottawa River watershed, the Algonquin and Nipissing protested in 1836 when they became aware of its terms (Joan Holmes & Associates Inc. 1993:6).

As Euro-Canadian settlement spread, Indigenous groups were increasingly pushed out of southern and eastern Ontario, generally moving further to the north and west, although some families remained in their traditional lands, at least seasonally. Records relating to the Hudson’s Bay Company, the diaries of provincial land surveyors, the reports of geologists sent in by the Geological Survey of Canada, census returns,¹⁷ store account books and settler’s diaries all provide indications of the continued Indigenous settlement in the region, as does Indigenous oral history. In addition to their interactions with the Algonquin who remained in the area, the nineteenth century settlers found evidence of the former extent of Indigenous occupation, particularly as they began to clear the land. In 1819, Andrew Bell wrote from Perth:

All the country hereabouts has evidently been once inhabited by the Indians, and for a vast number of years too. The remains of fires, with the bones and horns of deers (sic) round them, have often been found under the black mound... A large pot made of burnt clay and highly ornamented was lately found near the banks of the Mississippi, under a large maple tree, probably two or three hundred years old. Stone axes have been found in different parts of the settlement.

(cited in Brown 1984:8)

While some Algonquin and Nipissing continued to spend part of the summer at Lake of Two Mountains through this period, most of the year appears to have been spent on their traditional hunting grounds, and by the 1830s there were specific claims for land by individuals such as Mackwa on the Bonnechere River and Constant Pennecy on the Rideau waterway. In 1842, Chief Pierre Shawinipinessi,¹⁸ an Algonquin leader, petitioned the Crown for a land tract of 2,000 acres between the townships of Oso, Bedford and South Sherbrooke to enable his people to sustain themselves (Huitema 2001;

¹⁷ While Indigenous peoples were clearly still residing in the area and making use of the land, they often do not appear in the 1851 to 1871 census records. Huitema (2001:129) notes that Algonquin were sometimes listed in these records as ‘Frenchmen’ or ‘halfbreeds’ because they had utilized the mission at Lake of Two Mountains as their summer gathering place and, therefore, were thought of as being French.

¹⁸ There are numerous variations in the spelling of Chief Shawinipinessi’s name; he is also known by the name of Peter Stephens or Stevens).

Ripmeester 1995:164-166; Sherman 2008:32-33).¹⁹ A licence of occupation for the 'Bedford Algonquin' was granted in 1844, with Michi Saagiig Nishnaabeg from Alnwick reportedly also living at Bedford (Joan Holmes & Associates Inc. 1993:7-8). Illegal logging operations, however, interfered with life on the reserve, and despite protests from Chief Shawinipinessi and legislation passed in 1838 and then later in 1850 to protect Indigenous lands,²⁰ it was allowed to continue, depleting the local food resources. In response to an 1861 petition to address the trespassing of settlers, the existence of the Bedford tract was denied (LAC microfilm reel C-13419). At this time some of the community moved to nearby lands while others joined the Algonquin at Kitigan Zibi, and at Pikwàkanagàn where the 'Golden Lake Reserve' was created in 1873 (Hanewich 2009; Joan Holmes & Associates Inc. 1993:9). Around 1836 some consideration was given to facilitating Algonquin and Nipissing settlement in the Grand Calumet Portage and Allumette Island area, but this was not pursued (Joan Holmes & Associates Inc. 1993).

Other treaties signed in the mid-nineteenth century included the St. Regis Purchase (Treaty 57) signed in 1847 between the Crown and the Mohawk and covering a narrow parcel of land, known as the 'Nutfield Tract' extending north of the St. Lawrence River at Cornwall towards the Ottawa River, and the Robinson-Huron Treaty (Treaty 61) of 1850 between the Crown and certain Anishinaabeg for lands east of Georgian Bay and the northern shore of Lake Huron eastward to the Ottawa River.²¹

Through the early twentieth century, off-reserve Algonquin and Nipissing were told to move to established reserves at Golden Lake (Pikwàkanagàn), Maniwaki (Desert River) and at Gibson on Georgian Bay (which had been established for the re-settlement of both Algonquin and Mohawk from Lake of Two Mountains), but many remained in their traditional hunting territories. There is also evidence to suggest that Akwesasne Mohawk trapped and hunted north of their reserve as far as Smiths Falls and Rideau Ferry between c. 1924 and 1948 (Joan Holmes & Associates Inc. 1993:10-11; Sherman 2008:33).

The Williams Treaties of 1923 were signed between the Crown and seven Anishinaabe First Nations to address lands that had not been surrendered via a formal treaty process (see above).²² These lands covered a large area from the north shore of Lake Ontario to Lake Nipissing and overlapped with a number of other treaties and 'purchases.' The Williams Treaties First Nations include the Chippewas of Beausoleil, Georgina Island and

¹⁹ July 17, 1842 petition 115 addressed to Sir Charles Bagot, Governor General, Library and Archives Canada RG10, V186 part 2, as transcribed in Joan Holmes & Associates Inc. (1993) *Report on the Algonquins of Golden Lake Claim* Vol. 10-12:101.

²⁰ Chapter XV. An Act for the protection of the Lands of the Crown in this Province, from Trespass and Injury. Thirteenth Parliament, 2nd Victoria, A.D. 1839. An Act for the Protection of the Indians in Upper Canada from Imposition and the Property Occupied or Enjoyed by Them from Trespass and Injury; passed by the government of Upper Canada on August 10, 1850. Available from <https://bnald.lib.unb.ca/node/5342>; United Canadas (1841-1857) 13 & 14 Victoria – Chapter 74:1409.

²¹ <https://www.ontario.ca/page/map-ontario-treaties-and-reserves>

²² <https://www.ontario.ca/page/map-ontario-treaties-and-reserves>

Rama, and the Mississaugas of Alderville, Curve Lake, Hiawatha and Scugog Island. To address further issues with a number of the pre-confederation purchases and treaties, the Williams Treaties First Nations ratified the Williams Treaties Settlement Agreement with Canada and Ontario in June, 2018. This agreement recognized harvesting rights in Treaties 5, 16, 18, 20, 27 and 27^{1/4}.²³

As noted above, lands within traditional Algonquin territory were included in various nineteenth century purchases without Algonquin consultation or consent. Algonquin claims to these lands include a series of petitions to the Crown going back to 1772 that asserted Algonquin rights to land and resources. An official land claim was made in the 1980s and, in 2016, an Agreement-in-Principle was signed by Ontario, Canada and the Algonquins of Ontario, a step towards a treaty recognizing Algonquin rights across much of eastern Ontario.²⁴

Cambridge Township and Casselman

The township of Cambridge and village of Casselman are located in the County of Russell. The township has been historically described as generally level, with considerable areas of low-lying land, which was generally swampy, and for the most part covered in dense softwood forests (Belden 1881). The County of Russell was not one of the original nineteen created by Lieutenant Governor of Upper Canada John Graves Simcoe in 1792, but was set apart in 1798. The County was named after Peter Russell, who had served as a military secretary to Sir Henry Clinton during the Revolutionary War and was later made Inspector General of Upper Canada by Simcoe. In 1822 Russell County was united with Prescott for Parliamentary representation. The Township of Cambridge was named after a Christian name of one of the English royal family (Weaver 1913). The settlement of Cambridge was gradual for numerous reasons, primarily because of large tracts of land being held by non-residents. Half of the township was held by four ex-officers who had served during the War of 1812, namely Colonel Rankin, Colonel Brewerton, and two Majors Jessup who were granted 5,000 acres each (Belden 1881).

While much of the land had been granted to British military officers and the township named after an anglophone, the majority of the inhabitants were historically French Canadian (Belden 1881). At the start of the eighteenth century French Canadians were largely settled around seigneuries along the rivers of Lower Canada, but by 1831 many had emigrated further inland and into Upper Canada. Over ten years more than 4,000 French Canadian immigrants settled in the counties of Soulanges, Vaudreuil, Glengarry, Prescott, Russell, and Carleton (Le Droit 1934). Cambridge Township, however,

²³ www.williamstreatiesfirstnations.ca

²⁴ <https://www.ontario.ca/page/map-ontario-treaties-and-reserves>

remained relatively uninhabited, and could only boast one freeholder and one squatter in 1837 (Belden 1881).

The majority of the early history of Cambridge centred on Martin Casselman, a pioneer, lumberman, agriculturist, municipal legislator, and founder of the village of Casselman. He originally explored the area in 1830 in search of a good location for a mill (Belden 1881). He was unable, however, to establish his business until 1843 when he purchased 1,000 acres from absentee land owner Major Edward Jessup (Adams 2005). Casselman erected his mill the following year along the South Nation River about 40 miles by river from where it drained into the Ottawa River, the main route for the lumber trade at the time. While this mill attracted pioneer lumbermen to the area, the population of the township did not become particularly dense (Belden 1881). By 1842 there were only 108 inhabitants, too few and too poor to build the roads which would have facilitated faster growth (Smith 1851).

The major transportation artery through the area besides the South Nation River was the Grand Trunk Railway which ran from Montreal to Brockville and was completed in 1855 (Harkness 1946). One of Martin Casselman's last acts was to facilitate and fund the establishment of the railway to the village in 1880-1881 (Adams 2005). The Casselman family was also politically influential, representing Cambridge continuously in the district and county councils (Belden 1881). In 1891 the Casselman mill burned down and as not rebuilt. The village itself suffered further devastating fires in 1897 and 1919. While these fires caused some displacement to the lumber workers, they did lead to previously uncultivated lands becoming fertile enough for agriculture which brought a new wave of settlement into the area (Adams 2005).

3.3 History of the Nation Huronne-Wendat

The following history was provided by Huron-Wendat Nation.

As an ancient people, traditionally, the Huron-Wendat, a great Iroquoian civilization of farmers and fishermen-hunter-gatherers and also the masters of trade and diplomacy, represented several thousand individuals. They lived in a territory stretching from the Gaspé Peninsula in the Gulf of Saint Lawrence and up along the Saint Lawrence Valley on both sides of the Saint Lawrence River all the way to the Great Lakes. Huronia, included in Wendake South, represents a part of the ancestral territory of the Huron-Wendat Nation in Ontario. It extends from Lake Nipissing in the North to Lake Ontario in the South and Île Perrot in the East to around Owen Sound in the West. This territory is today marked by several hundred archaeological sites, listed to date, testifying to this strong occupation of the territory by the Nation. It is an invaluable heritage for the Huron-Wendat Nation and the largest archaeological heritage related to a First Nation in Canada.

According to our own traditions and customs, the Huron-Wendat are intimately linked to the Saint Lawrence River and its estuary, which is the main route of its activities and way of life. The Huron-Wendat formed alliances and traded goods with other First Nations among the networks that stretched across the continent.

Today, the population of the Huron-Wendat Nation is composed of more than 4000 members distributed on-reserve and off-reserve.

The Huron-Wendat Nation band council (CNHW) is headquartered in Wendake, the oldest First Nations community in Canada, located on the outskirts of Quebec City (20 km north of the city) on the banks of the Saint Charles River. There is only one Huron-Wendat community, whose ancestral territory is called the Nionwentsio, which translates to "our beautiful land" in the Wendat language.

The Huron-Wendat Nation is also the only authority that have the authority and rights to protect and take care of her ancestral sites in Wendake South.

3.4 Property History

Lot 9, Concession 8

The 200 acres which comprises Lot 9, Concession 8 was granted to John Rankin by the Crown in 1828 (Russell County Land Registry Office or RCLRO). An 1834 patent plan does appear to depict what may be a dwelling within the boundaries of the study area; however given the age of the map it is difficult to be certain (Map 3). William Rankin sold all 200 acres to George B. Lyon in 1854, and later that year it was acquired by Lemuel Cushing (RCLRO instruments 6405 and 6813). It remained in the Cushing family until 1881 (see below), though there is some confusion in the land abstract index as George B. Lyon Fellows et al. are recorded as selling the 200 acres to Martin Casselman, the founder of the village of Casselman, in 1858 (RCLRO instrument 7008). Martin Casselman, however, lived on the same lot where he had erected the mill - Lot 11, Concession 6. Levi Casselman, aged 35, is listed in the 1861 agricultural census as living on Lot 9, Concession 8, where he had a 200 acre farm and a one-storey log house which he shared with his wife, sister, and four children. The farm had 80 acres under cultivation, with 44 ½ acres in crop and 35 acres as pasture; the remaining 120 acres were still wooded or wild (LAC microfilm reel C-1071). Casselman is not, however, depicted as the landowner on the 1862 Walling map, where Lot 9 is blank (see Map 3). The 1871 census again lists Levi as the owner of the lot, this time with a 300 acre farm and five barns (LAC microfilm reel C-10012). Conversely, Levi Casselman does not appear in any of the rural directories and is not listed in relation to this lot on any census taken after 1871.

Following the death of Lemuel Cushing in 1876, his will listed Catherine, James B., Thomas, and Lemuel jr. as benefactors, though Catherine appears to have taken control of the property (RCLRO instruments 40 and 41). She later, in 1881, sold the 200 acres to Odile Matte (RCLRO instrument 1229). Unfortunately the 1881 Belden map of Cambridge Township was a version that only included the residences of paid subscribers, and unsurprisingly no dwelling or landowner is illustrated on Lot 9 (see Map 3). Matte was listed in both the 1884 and 1885 rural directories as occupying land on Lot 9, though in 1881 he had sold the northern 100 acres to Cyprien Charron (Fuller 1884; The Union

Publishing Company 1885; RCLRO instrument 1362). The 1901 census describes Odile Matte as having been born in 1845 in Quebec, but by that date living with his wife Octavia, his sister, and his four children in a house on the remaining 100 acres. The last time he appeared in the directories was in 1904 (The Union Publishing Company 1904).

Charron was listed on Lot 9 in the 1884 and 1885 rural directories but not in any census returns (Fuller 1884; The Union Publishing Company 1885). In 1894 he sold the northeastern quarter or 50 acres to Henri Charron, likely his son (RCLRO instrument 4443). The 1901 census confirms that Henri owned a 50 acre parcel containing a house which he shared with his wife and son. He is described as a 30-year-old French Canadian born in Ontario, and later appeared in the 1916 rural directory (Henry Vernon and Son 1916). Cyprien Charron sold his remaining 50 acres to Joseph Laplante in 1898 (RCLRO instrument 4547). The 1901 census describes Laplante as a 31-year-old French Canadian farmer living with his wife and three children (LAC microfilm reel T-6494). Both Joseph Laplante and Anthime Matte (who must have inherited his father's 100 acres) are listed as farmers on Lot 9, Concession 8 in the 1904 rural directory; Anthime Matte is also listed in the 1916 edition (The Union Publishing Company 1904; Henry Vernon & Son 1916). In 1924 Henri Charron sold his land to Joseph Saffich (RCLRO instrument 4277).

Joseph Laplante and Anthime Matte came to own their land, however they are both listed as farmers on Lot 9, Concession 8 on the 1904 Farmers Directory. Anthime Matte is also listed on the 1916 Farmers Directory. Route 800 appears to have been built by 1881 as it is depicted on the Belden map; Butternut creek is also shown though a bridge is not explicitly illustrated (see Map 3). A 1908 one-inch-to-one-mile topographic map of the area depicts several buildings on Lot 9, though none within the study area (Map 4). A small woodlot is shown south of Route 800 surrounding Butternut Creek, with the remainder of the study area consisting of an open field. County Road 7 veered much further to the west until crossing the creek than it does at present, curving around an existing farm. Little had changed by 1939, apart from a residence having been constructed just to the east of the study area along Paul Latour Road/Route 800.

A pair of aerial photographs continues to show little change through the second half of the twentieth century, though County Road 7 was in the process of being realigned to the east of the existing farm in 1964 (see Map 4). Nothing appears to have been built within the study area, though a small woodlot at the intersection of Route 800 and County Road 7 visible in 1964 had been removed by 1994.

4.0 ARCHAEOLOGICAL CONTEXT

This section describes the archaeological context of the study area, including known archaeological research, known cultural heritage resources (including archaeological sites), and environmental conditions. In combination with the historical context outlined above, this provides the necessary background information to evaluate the archaeological potential of the property.

4.1 Previous Archaeological Research

In order to determine whether any previous archaeological fieldwork has been conducted within or in the immediate vicinity of the present study area, a search of the titles of reports in the *Public Register of Archaeological Reports* maintained by the Ministry of Citizenship and Multiculturalism (MCM) was undertaken. To augment these results, a search of the Past Recovery corporate library was also conducted.²⁵

No known archaeological assessments have been undertaken in the immediate vicinity of the study area, though several assessments have been completed within the Village of Casselman.

4.2 Previously Recorded Archaeological Sites

The primary source for information regarding known archaeological sites in Ontario is the *Archaeological Sites Database* maintained by the Ontario by the Ministry of Citizenship and Multiculturalism (MCM). The database largely consists of archaeological sites discovered by professional archaeologists conducting archaeological assessments required by legislated processes under land use development planning (largely since the late 1980s). A search of the *Sites Database* indicated that there are no known archaeological sites within 1 km of the study area. It is worth noting, however, that a number of Archaic period registered sites have been found along the shores of the South Nation River, to which Butternut Creek is connected. One of these site, Wimbàbikàn or BhFs-6, is located on the east bank of the river within the Town of Casselman, approximately 3.8 km north-northwest of the study area (Intermesh Enterprises 2011a and 2011b).

²⁵ In compiling the results, it should be noted that archaeological fieldwork conducted for research purposes should be distinguished from systematic property surveys conducted during archaeological assessments associated with land use development planning (generally after the introduction of the *Ontario Heritage Act* in 1974 and the *Environmental Assessment Act* in 1975), in that only those studies undertaken to current standards can be considered to have adequately assessed properties for the presence of archaeological sites with cultural heritage value or interest. In addition, it should be noted that the vast majority of the research work undertaken in the area has been focussed on the identification of pre-Contact Indigenous sites, while current MCM requirements minimally require the evaluation of the material remains of occupations and or land uses pre-dating 1900.

4.3 Cultural Heritage Resources

The recognition or designation of cultural heritage resources (here referring only to built heritage features and cultural heritage landscapes) may provide valuable insight into aspects of local heritage, whether identified at the local, provincial, national, or international level. As some of these cultural heritage resources may be associated with significant archaeological features or deposits, the background research conducted for this assessment included the compilation of a list of cultural heritage resources that have previously been identified within or immediately adjacent to the current study area. The following sources were consulted:

- Federal Heritage Buildings Review Office online Directory of Heritage Designations (<http://www.pc.gc.ca/eng/progs/beefp-fhbro/index.aspx>);
- Canada's Historic Places website (<https://www.historicplaces.ca/en/rep-reg/search-recherche.aspx>);
- Ontario Heritage Properties Database (<https://www.heritagetrust.on.ca/en/oha/advanced-search>);
- An archived listing of Ministry of Citizenship and Multiculturalism's Heritage Conservation Districts (https://web.archive.org/web/20220325223537/http://www.mtc.gov.on.ca/en/heritage/heritage_conserving_list.shtml); and,
- Ontario Heritage Trust website (<https://www.heritagetrust.on.ca/en/index.php/pages/tools/plaque-database>).

A search of the on-line databases identified no designated built heritage properties within or adjacent to the study area. Of interest, the original Grand Trunk Railway right-of-way passed through the area approximately 1.7 km to the east of the study area.

4.4 Heritage Plaques and Monuments

The recognition of a place, person, or event through the erection of a plaque or monument may also provide valuable insight into aspects of local history, given that these markers typically indicate some level of heritage recognition. As with cultural heritage resources (built heritage features and/or cultural heritage landscapes), some of these places, persons, or events may be associated with significant archaeological features or deposits. Accordingly, this study included the compilation of a list of heritage plaques and/or markers in the vicinity of the study area. The following sources were consulted:

- The Ontario Heritage Trust Online Plaque Guide (<https://www.heritagetrust.on.ca/en/index.php/pages/tools/plaque-database>);
- A listing of plaques transcribed at www.readtheplaque.com;
- Parks Canada Directory of Federal Heritage Designations (https://www.pc.gc.ca/apps/dfhd/default_eng.aspx); and,

- A listing of historical plaques of Ontario maintained by Sarah J. McCabe (<https://ontarioplaques.omeka.net/>).

No plaques or monuments were located within or in the immediate vicinity of the current study area.

4.5 Cemeteries

The presence of historical cemeteries in proximity to a parcel undergoing archaeological assessment can pose archaeological concerns in two respects. First, cemeteries may be associated with related structures or activities that may have become part of the archaeological record, and thus may be considered features indicating archaeological potential. Second, the boundaries of historical cemeteries may have been altered over time, as all or portions may have fallen out of use and been forgotten, leaving potential for the presence of unmarked graves. For these reasons, the background research conducted for this assessment included a search of available sources of information regarding historical cemeteries. For this study, the following sources were consulted:

- An archived listing of all registered cemeteries in the province of Ontario maintained by the Consumer Protection Branch of the Ministry of Consumer Services (last updated 06/07/2011);
- Field of Stones website (<http://freepages.history.rootsweb.ancestry.com/~clifford/>);
- Ontario Cemetery Locator website maintained by the Ontario Genealogical Society (<https://vitacollections.ca/ogscollections/2818487/data?g=d>);
- Ontario Headstones Photo Project website (<https://canadianheadstones.ca/wp/cemetery-lookup/>); and,
- Available historical mapping and aerial photography.

No known cemeteries were located within or adjacent to the study area. The closest cemetery was the St. Albert Cemetery, situated 5.6 kilometres southwest of the study area on Lot 19, Concession 10. It should be noted, however, that there is always the possibility of there being unrecorded burial plots on rural properties.

4.6 Mineral Resources

The presence of scarce mineral resources on or near to a property may indicate potential for archaeological resources associated with both pre-Contact and post-Contact exploration and exploitation. For this reason, the background research conducted for the assessment includes a search of available sources of information on the locations of outcrops of rare and highly valued minerals, such as quartz, chert, ochre, copper, and soapstone, as well as minerals sought out by post-Contact prospectors and miners for more industrial-scale exploitation (i.e. gold, copper, iron, mica, etc.). Useful tools in this

search are provided by databases maintained by the Ontario Geological Survey and the Ministry of Northern Development and Mines, including:

- *Abandoned Mines Information System* which contains a list of all known abandoned and inactive mine sites and associated features in the province;
- *Mining Claims* which contains a list of all active claims, alienations, and dispositions;
- *Mineral Deposits Inventory* which contains a list of known mineral occurrences of economic value in the province;
- *Bedrock Geology Data Set*, which shows the distribution of bedrock units and illustrates geologic rock types, major faults, iron formations, kimberlite intrusions, and dike swarms.

A review of the above-mentioned databases uncovered no evidence of mineral resources located within the study area.

4.7 Local Environment

The assessment of present and past environmental conditions in the region containing the study area is a necessary component in determining the potential for past occupation as well as providing a context for the analysis of archaeological resources discovered during an assessment. Factors such as local water sources, soil types, vegetation associations and topography all contribute to the suitability of the land for human exploitation and/or settlement. For the purposes of this assessment, information from local physiographic, geological and soils research has been compiled to create a picture of the environmental context for both past and present land uses.

The physiography and distribution of surficial material in this area are largely the result of glacial activity that took place in the Late Wisconsinan. This period, which lasted from approximately 23,000 to 10,000 years before present, was marked by the repeated advance and retreat of the massive Laurentide Ice Sheet (Barnett 1992 in Rowell 1997:12). As the ice advanced, debris from the underlying sediments and bedrock accumulated within and beneath the ice. The debris, a mixture of stones, sand, silt, and clay, was deposited over large areas as till plains, drumlins, and moraines. During deglaciation, as the Late Wisconsinan ice margin receded to the north, waters from the Atlantic Ocean flooded the isostatically-depressed upper St. Lawrence and Ottawa valleys and formed the Champlain Sea. Landforms and deposits north of the Ottawa River suggest that the maximum elevation reached by the Champlain Sea was between approximately 180-190 metres above the present sea level, which would have covered the region containing the current study area (Rowell 1997:12). Extensive deposits of fine-grained sediments, representative of deep-water environments, were laid down during this time. Continued isostatic rebound led to the retreat of the glaciomarine waters, leaving behind boulder gravel spits, bars, and beaches at elevations between 120 and 60 metres (Rowell 1997:12). During the regression of the Champlain Sea, the ancestral Ottawa River and its north

bank tributaries created extensive deposits of deltaic sands and formed numerous sand bars. Owing to poor drainage characteristics associated with the underlying clays, extensive bogs subsequently developed, in low-lying areas, accumulating peat and other organic deposits.

The study area is situated within the Winchester Clay Plain physiographic region which is typified by deposits associated with the Champlain Sea and is relatively flat, though a number of drumlin-shaped hills have been identified across its surface (Chapman and Putnam 1984). In a few cases there are areas of shallow soil over bedrock and occasional bars, beaches, and boulder pavements. Surficial geological mapping, completed at a 1:50,000 scale, indicates that much of the study area is composed entirely of glaciomarine offshore deposits of clay, silt and sand (Map 5; Rowell 2010).

Provincial topographic mapping shows the study area to sit at an elevation between 62 and 65 metres amsl (see Maps 1 and 5). Soil survey mapping, completed at a 1:50,000 scale, indicates that the study area is comprised of two soil types: North Gower clay loam and an eroded channel (see Map 5). The North Gower soil series developed on clay deposits of either lacustrine or marine origin, with varves or thin sedimentary layers present in the parent material. These soils are generally found in areas with a smooth topography that is characteristic of large clay flats. Water moves slowly through clay textured materials, and therefore the soil is wet for a large part of the year. Eroded channel soils have been identified along the course of Butternut Creek which runs along the southwestern edge of the study area. This soil type is used to refer to small, gully-like channels and stream valley slopes on which the soil is bare and exposed for most of the year (Wicklund et al. 1961).

The area belongs to the Upper St. Lawrence Division of the Great Lakes-St. Lawrence Forest Region of Canada. This region is characterized by a mixture of coniferous and deciduous tree species, dominated by sugar maple and beech, with red maple, yellow birch, basswood, white ash, largetooth aspen, and road and bur oaks. Local occurrences of white oak, red ash, grey birch, rock elm, blue-beech, and bitternut hickory are also known. Butternut, eastern cottonwood, and slippery elm have a sporadic distribution in river valleys, and some small pure stands of black and silver maple have been reported on fertile, fine-textured lowland soils. Poorly-drained depressions frequently carry a hardwood swamp type in which black ash is prominent (Rowe 1972:94).

The study area is bordered by Butternut Creek which is drained by the Middle South Nation River sub-watershed, which flows northwest along fault lines to where it joins with the South Nation River. The South Nation River flows in a north-easterly direction from the headwaters just before Brockville to Plantagenet before discharging into the Ottawa River.²⁶

²⁶ <https://www.nation.on.ca/>

5.0 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

This section of the report includes an evaluation of the archaeological potential within the study area, in which the results of the background research described above are synthesized to determine the likelihood of the property to contain significant archaeological resources.

5.1 Optional Property Inspection

An optional site inspection was not undertaken as part of the Stage 1 assessment.

5.2 Evaluation of Archaeological Potential

The evaluation of the potential of a particular parcel of land to contain significant archaeological resources is based on the identification of local features that have demonstrated associations with known archaeological sites. For instance, archaeological sites associated with pre-Contact settlements and land uses are typically found in close physical association with environmental features such as sources of potable water, transportation routes (navigable waterways and trails), accessible shorelines, areas of elevated topography (i.e. knolls, ridges, eskers, escarpments, and drumlins), areas of sandy and well-drained soils, distinctive land formations (i.e. waterfalls, rock outcrops, caverns, mounds, and promontories and their bases), as well as resource-rich areas (e.g. migratory routes, spawning areas, scarce raw materials, etc.). Similarly, post-Contact archaeological sites are often found in association with many of these same environmental features, though they are also commonly connected with known areas of early Euro-Canadian settlement, early historical transportation routes (e.g. roads, trails, railways, etc.), and areas of early Euro-Canadian industry (i.e. the fur trade, logging and mining). For this reason, assessments of the potential of a particular parcel of land to contain post-Contact archaeological sites rely heavily on historical and archival research, including reviews of available land registry records, census returns and assessment rolls, historical maps, and aerial photographs. The locations of previously discovered archaeological sites can also be used to shed light on the chances that a particular location contains an archaeological record of past human activities.

Archaeological assessment standards established in the *Standards and Guidelines for Consultant Archaeologists* (MCM 2011) specify which factors, at a minimum, must be considered when evaluating archaeological potential. Licensed consultant archaeologists are required to incorporate these factors into potential determinations and account for all features on the property that can indicate the potential for significant archaeological sites. If this evaluation indicates that any part of a subject property exhibits potential for archaeological resources, the completion of a Stage 2 archaeological assessment is commonly required prior to the issuance of approvals for activities that would involve soil disturbances or other alterations.

The *Standards and Guidelines for Consultant Archaeologists* (MCM 2011) also establish minimum distances from features of archaeological potential that must be identified as exhibiting potential for sites. For instance, this includes all lands within 300 metres of primary and secondary water sources, past water sources (i.e. glacial lake shorelines), registered archaeological sites, areas of early Euro-Canadian settlement, or locations identified as potentially containing significant archaeological resources by local histories or informants. It also includes all lands within 100 metres of early historic transportation routes (e.g. roads, trails, and portage routes). Further, any portion of a property containing elevated topography, pockets of well-drained sandy soils, distinctive land formations, resource-rich/harvesting areas, and/or previously identified cultural heritage resources (i.e. built heritage properties and/or cultural heritage landscapes that may be associated with significant archaeological resources) must also be identified as exhibiting archaeological potential.

5.3 Analysis and Conclusions

The background research undertaken for this assessment indicates that the subject property exhibits potential for the presence of significant archaeological resources associated with pre-Contact settlement and/or land uses. Specifically:

- The study area lies within 100 metres of Butternut Creek, a source of potable water and potential food resources; the banks of the creek might have served as suitable locations for temporary camps of pre-Contact hunter-gatherer populations; and,
- The study area lies within 100 metres of Butternut Creek which is part of the South Nation River drainage system, and may therefore potentially have been a transportation route used by pre-Contact hunter-gatherer populations.

The study area also exhibits characteristics that indicate potential for the presence of archaeological resources associated with post-Contact settlement and/or land uses. Specifically:

- The study area lies within 100 metres of Butternut Creek, a source of potable water and potential food resources; and,
- The study area lies within 100 metres of Route 800 and/or County Road 7, both historical transportation corridors depicted on nineteenth century mapping.

The evaluation of archaeological potential also included a review of available sources of information (i.e. high resolution aerial photographs and satellite imagery) to determine if part or all of the study area had been subject to deep and intensive soil disturbance (i.e. quarrying, road construction, major landscaping involving grading below topsoil, former building footprints, sewage and infrastructure development, etc.) in the recent past, as these activities would have severely damaged the integrity of or removed any archaeological resources that might have been present. The two roadbeds that run through the study area and accompanying ditching to either side can be determined to

have been deeply disturbed. The remaining property examined as part of the Stage 1 study has been found to retain archaeological potential. The archaeological potential associated with the overall study area has been illustrated on Map 6.

5.4 Stage 1 Recommendations

The results of the background research discussed above indicated that the study area exhibits potential for the presence of significant archaeological resources. Accordingly, it is recommended that:

- 1) The portions of the study area that have been determined to exhibit archaeological potential should be subject to Stage 2 archaeological assessment prior to the initiation of below-grade soil disturbances or other alterations (see Map 6).
- 2) Any future Stage 2 archaeological assessment should be undertaken by a licensed consultant archaeologist, in compliance with *Standards and Guidelines for Consultant Archaeologists* (MCM 2011). There is currently a mixture of an active field and other non-agricultural lands within the study area; all portions identified as exhibiting archaeological potential should therefore be assessed by means of a pedestrian survey or shovel test pit survey conducted at 5 metre intervals, as appropriate.

6.0 STAGE 2 ARCHAEOLOGICAL ASSESSMENT

This section of the report describes the methodology used and results of the Stage 2 property survey conducted to determine whether the subject property contains significant archaeological resources.

6.1 Field Methods

The archaeological fieldwork for the Stage 2 property survey was completed over the course of one day, on April 20th, 2022, by a crew consisting of a licensed field director and three experienced field technicians. All fieldwork was conducted according to criteria outlined in *Standards and Guidelines for Consultant Archaeologists* (MCM 2011). Weather conditions were generally consistent over the course of the fieldwork, with partly cloudy skies, and a temperature of 2°C. At all times during the assessment lighting, temperature, and soil conditions were conducive to the identification, documentation, and recovery of archaeological resources.

In order to ensure full coverage during the Stage 2 property survey, the Past Recovery field crew used 'Mapit Pro' GIS software on a tablet loaded with detailed satellite imagery overlain with the study area. This digital mapping interface, along with a high accuracy, GIS-mapping-grade Global Navigation Satellite System (GNSS) receiver, allowed the field crew to accurately delimit the study area in relation to their 'real time' position. The GNSS unit employed for this purpose was a Trimble Catalyst DA1 antennae connected to a Samsung tablet running Trimble Mobile Manager software and receiving Trimble RTX corrections. While in use, the receiver reported accuracies within the range of plus or minus 2 m.

The study area consisted of a freshly ploughed agricultural field, part of a woodlot, manicured lawns, roads, a creek, slopes greater than 20 degrees and low-lying and wet areas (Images 1 to 3). Accordingly, the Stage 2 testing was conducted by a combination of a pedestrian survey at 5 m intervals and test pit survey at 5 m intervals (Map 7). Areas excluded from testing included two water-saturated areas around culverts located north of Route 800 and west of County Road 7 respectively (Images 4 and 5), and sloped areas within the right-of-way to the east of County Road 7 and to the west of the agricultural field, and to the north and south of Route 800 (Image 6; see Image 3). Table 1 below indicates the sizes of these areas, as well as the sizes of the areas subjected to each survey method.

Pedestrian survey at 5 m intervals was undertaken within the actively cultivated field forming the majority of the study area. The field was ploughed and allowed to weather through at least one heavy rainfall prior to the pedestrian survey. Direction was provided to the farmer undertaking the ploughing to plough deep enough to ensure total topsoil exposure, but not deeper than previous ploughing. At the time of the assessment, surface

Table 1. Estimates of Survey Coverage during the Stage 2 Property Survey.

Survey Type	Area (ha)	Percentage of Study Area
Shovel test pit survey at 5 m intervals	0.09	3%
Pedestrian survey at 5 m intervals	2.27	80%
Disturbed to subsoil (not tested)	0.21	7%
Low and wet with permanently saturated soils (not tested)	0.12	4%
Steep slope, greater than 20 degrees (not tested)	0.2	6%

visibility conditions exceeded the minimum requirements established by MCM, where 80% of the ploughed ground surface must be visible (Image 7). The pedestrian survey was conducted by means of the Past Recovery field crew systematically walking the ploughed fields at 5 m intervals and inspecting the exposed surface for the presence of archaeological resources.

The test pit survey was conducted using shovels and trowels, with back-dirt screened through a 6 mm (1/4 inch) hardware mesh and carefully examined for artifacts. All test pits were dug to sterile subsoil and were at least 30 cm in diameter. The sides and bottoms of test pits were visually inspected for evidence of buried topsoil layers or other meaningful cultural deposits, subsurface features, and evidence of deep and intensive disturbance or fill layers. Once excavation and any required recording had been completed, all test pits were backfilled. Descriptions and measurements of the soil stratigraphy in specific test pits were maintained in a digitized field log, with soil layers assigned lot numbers in the order of appearance. Representative test pits were also digitally photographed.

Field activities were recorded through field notes, digital photographs, and field maps. A catalogue of the material generated during the Stage 2 property survey is included below in Table 2. The complete photographic catalogue is included as Appendix 1, and the locations and orientations of all photographs referenced in this section of the report are shown on Map 7. As per *Terms and Conditions for Archaeological Licences* in Ontario, curation of all photographs and field notes generated during the Stage 2 archaeological assessment is being provided by Past Recovery pending the identification of a suitable repository.

Table 2. Inventory of the Stage 2 Documentary Record.

Type of Document	Description	Number of Records	Location
Field notes	Notes on the Stage 2 fieldwork	7 pages	Past Recovery office – file PR21-022
Maps	Field maps	1 page	Past Recovery office – file PR21-022
Photographs	Digital photographs documenting the Stage 2 fieldwork	20 photographs	On Past Recovery computer network – file PR21-022

6.2 Fieldwork Results

The majority of the study area was composed of the active agricultural field, which was ploughed and pedestrian surveyed at 5 m intervals (Image 8; see Image 1). The field plough zone consisted dark brown loam clay, and was relatively clean. No archaeological resources were identified during the pedestrian survey. The terrain south of Route 800 within the right-of-way consisted of a woodlot, a manicured lawn and the shallow bank of Butternut Creek which was subject to shovel test pit survey (Images 9 and 10). The test pits excavated in the woodlot and manicured lawn consisted of 20 cm of dark brown clay loam topsoil above grey clay subsoil (Image 11). Test pits completed in proximity to Butternut Creek where slightly shallower and consisted of 10 cm of dark brown sandy loam topsoil over grey sand subsoil (Image 12). No archaeological resources were identified during the shovel test pit survey.

6.3 Record of Finds

No archaeological resources of cultural heritage value or interest were found during the Stage 2 survey.

6.4 Analysis and Conclusions

The Stage 2 archaeological assessment involved a pedestrian survey at 5 m intervals, and a test-pit survey at 5 m intervals across all portions of the study area determined to exhibit archaeological potential; the remainder was not tested having been determined to be permanently wet, sloped or disturbed (see Map 7). As mentioned above, no archaeological resources were found over the course of this assessment.

6.5 Stage 2 Recommendations

The results of the archaeological assessment documented in this report form the basis for the following recommendations:

- 1) As the Stage 2 property survey did not result in the identification of any archaeological sites requiring further assessment or mitigation of impacts, no further archaeological assessment of the study area as defined on Map 2 is required.
- 2) In the event that future planning results in the identification of additional areas of impact beyond the limits of the present Stage 2 study area, further archaeological assessment may be required. It should be noted that screening for impacts should include all aspects of the proposed development that may cause soil disturbances or other alterations, and that even temporary property needs should be considered. Any additional archaeological assessment should be undertaken by a licensed consultant archaeologist, in compliance with *Standards and Guidelines for Consultant Archaeologists* (MCM 2011).

The following recommendation has been included as per a request from the Algonquins of Ontario:

- 3) Since the potential always exists to miss important information in archaeological surveys, if any artifacts of Indigenous interest or human remains are encountered during the development of the subject property, please contact: Algonquins of Ontario Consultation Office, 31 Riverside Drive, Suite 101, Pembroke, ON, K8A 8R6; Tel: 613-735-3759; Fax: 613-735-6307; Email: algonquins@tanakiwin.com.

The following recommendation has been included at the request of the Huron-Wendat Nation (HWN):

- 4) Considering that even thorough archaeological assessments might miss some archaeological resources or relevant information, the HWN asks to be contacted should any Indigenous artifacts or human remains be encountered during the development process. Please contact Nation Huronne-Wendat, Bureau du Nionwentsio, 255 Place Chef Michel Laveau, Wendake, Qc, G0A 4V0; Tel: (418)-843-3767; e-mail Dominic Ste-Marie, conseiller en gestion du territoire, at dominic.ste-marie@wendake.ca, Marie-Sophie Gendron, analyste archéologue, at marie-sophie.gendron@wendake.ca and Thiefaine Terrier, analyste archéologue, at thiefaine.terrier@wendake.ca.

The reader is also referred to Section 7.0 below to ensure compliance with relevant provincial legislation and regulations as may relate to this project.

7.0 ADVICE ON COMPLIANCE WITH LEGISLATION

In order to ensure compliance with relevant Provincial legislation as it may relate to this project, the reader is advised of the following:

- 1) This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Citizenship and Multiculturalism, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- 2) It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- 3) Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.
- 4) The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.
- 5) Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.

8.0 LIMITATIONS AND CLOSURE

Past Recovery Archaeological Services Inc. has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the archaeological profession currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty, expressed or implied, is made.

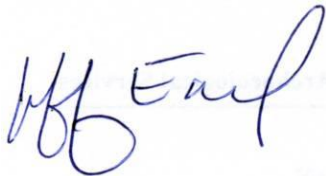
This report has been prepared for the specific site, design objective, developments and purpose prescribed in the client proposal and subsequent agreed upon changes to the contract. The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the client in the design of the specific project.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sample and testing program may fail to detect all or certain archaeological resources. The sampling strategies in this study comply with those identified in the Ministry of Citizenship and Multiculturalism' *Standards and Guidelines for Consultant Archaeologists* (2011).

The documentation related to this archaeological assessment will be curated by Past Recovery Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to an approved and suitable repository can be made to the satisfaction of the project owner(s), the Ontario Ministry of Citizenship and Multiculturalism and any other legitimate interest group.

We trust that this report meets your current needs. If you have any questions or if we may be of further assistance, please do not hesitate to contact the undersigned.



Jeff Earl, M.Soc.Sc.
Principal
Past Recovery Archaeological Services Inc.

9.0 REFERENCES

Adams Heritage

- 2005 *An Archaeological Assessment (Stages 1 & 2) of the Proposed Chaput, Levac, Lefebvre and Simard Subdivision, Part Lots 11 & 12, Concession 6 and Lots 1-19 (North Side of Caroline Street), Geographic Township of Cambridge, Village of Casselman, County of Russell.* Report on file, Ontario Ministry of Citizenship and Multiculturalism, Toronto.
- 1986 Iroquois Settlement at Fort Frontenac in the Seventeenth and Early Eighteenth Centuries. *Ontario Archaeology* 47:5-20.

Algonquins of Ontario (AOO)

- 2020 *Expectations and Process for Proponents when Engaging in Archaeology.* Unpublished document provided by the Cultural Heritage Program Coordinator with the Algonquins of Ontario Consultation Office. Updated as of June 24, 2020.
- 2017 *Relic Shorelines in Algonquin Traditional Territory in Ontario.* Report on file, Algonquins of Ontario Consultation Office, Pembroke, ON.
- n.d. *History of the Algonquins.* <http://www.tanakiwin.com/wpsystem/uploads/2013/10/a-History-of-the-Algonquins.pdf>

Birch, Jennifer

- 2015 Current Research on the Historical Development of Northern Iroquoian Societies. *Journal of Archaeological Research*, Vol.22, No. 4.

Birch, Jennifer and Ronald F. Williamson

- 2013 *The Mantle Site: An Archaeological History of an Ancestral Wendat Community.* AltaMira, Lanham, MD.

Brown, Howard Morton

- 1984 *Lanark Legacy-Nineteenth Century Glimpses of an Ontario County.* The Corporation of the County of Lanark, Perth, ON.

Canada

- 1891 *Indian Treaties and Surrenders from 1690 to 1890 - in Two Volumes.* Volume 1. Brown Chamberlain, Ottawa.

Chapman, L.J. and D.F. Putnam

- 1984 *The Physiography of Southern Ontario.* Third edition. Ontario Geological Survey, Special Volume 2. Ministry of Natural Resources, Toronto.

Clermont, Norman

1999 The Archaic Occupation of the Ottawa Valley. In *La préhistoire de l'Outaouais / Ottawa Valley Prehistory*, edited by Jean-Luc Pilon, pp. 43-54. L'Écomusée de Hull and Outaouais Historical Society, Gatineau, QC.

Clermont, Norman, C. Chapdelaine and J. Cinq-Mars, editors

2003 *Île aux Allumettes, L'Archaïque supérieur dans l'Outaouais*. Paléo-Québec 30. Recherches amérindiennes au Québec, Montréal, and Musée Canadien des civilisations, Gatineau, QC.

Crawford, Gary, Jessica L. Lytle, Ronald F. Williamson, and Robert Wojtowicz

2019 An Early Woodland Domesticated Chenopod (*Chenopodium Berlandieri* Subsp. *Jonesianum*) Cache from the Tutella Heights Site, Ontario, Canada. *American Antiquity* 84(11):43-157.

Curve Lake First Nation

n.d. *Southern and Central Ontario – Michi Saagiig Historical Context*. Official background released by Curve Lake First Nation.

Edwards, F.B.

1984 *The Smiling Wilderness: An Illustrated History of Lennox and Addington County*. Camden House Publishing Limited, Camden East, ON.

Ellis, Christopher J.

2013 Before Pottery: Paleoindian and Archaic Hunter-Gatherers. In *Before Ontario: The Archaeology of a Province*, edited by Marit Munson and Susan Jamieson, pp. 35-47. McGill-Queen's University Press, Montreal.

Ellis, Christopher J. and Brian Deller

1990 Paleo-Indians. In *The Archaeology of Southern Ontario to A.D. 1650*, edited by Christopher J. Ellis and Neal Ferris, pp. 37-64. Occasional Publications of the London Chapter of the Ontario Archaeological Society, Publication Number 5. Ontario Archaeological Society, London, ON.

Ellis, Christopher, Ian Kenyon and Michael Spence

1990 The Archaic. In *The Archaeology of Southern Ontario to A.D. 1650*, edited by Christopher J. Ellis and Neal Ferris, pp. 65-124. Occasional Publications of the London Chapter of the Ontario Archaeological Society, Publication Number 5. Ontario Archaeological Society, London, ON.

Fox, William

1990 The Middle Woodland to Late Woodland Transition. In *The Archaeology of Southern Ontario to A.D. 1650*, edited by Chris Ellis and Neal Ferris, pp. 171-188. Occasional Publications of the London Chapter of the Ontario Archaeological Society, Publication Number 5. Ontario Archaeological Society, London, ON.

Fox, W.A., and C. Garrad

2004 Hurons in an Algonquian Land. *Ontario Archaeology* 77(78):121-134.

Fox, W.A. and Jean-Luc Pilon

2016 Evidence for Sixteenth-Century Exchange: The Ottawa and Upper Saint Lawrence Waterways. In *Contact in the 16th Century: Networks among Fishers, Foragers and Farmers*, edited by Brad Loewen and Claude Chapdelaine, pp. 199-215, Mercury Series Archaeology Paper 176. Gatineau, QC: Canadian Museum of History, Gatineau, QC and University of Ottawa Press, Ottawa.

Fuller, O.L.

1884 *Counties of Carleton, Lanark, Prescott, Russell and Ottawa Directory Containing a Farmers' Directory, an Advertisers' and Subscribers' Directory of the City of Ottawa, a Complete Business and Professional Directory of the Other Cities, Towns and Villages, and a Miscellaneous Directory, Corrected to July 1st, 1884*. O.L. Fuller, Montreal.

Gates St. Pierre, C.

2015 The Middle Woodland Ancestors of the St. Lawrence Iroquoians. In *A Passion for the Past: Papers in Honour of James F. Pendergast*, edited by James V. Wright and Jean-Luc Pilon, pp. 395-418. Mercury Series Archaeology Paper 164. Canadian Museum of History, Gatineau, QC.

Gaudreau M. and L. Lesage

2016 Understanding Ethnicity and Cultural Affiliation: Huron-Wendat and Anthropological Perspectives. *Ontario Archaeology* 96:6-16.

Gitiga Migizi

2019 *Michi Saagiig Nishnaabeg: This is Our Territory*. Arp Books, Winnipeg.

Gitiga Migizi and Julie Kapyrka

2015 Before, During, and After: Mississauga Presence in the Kawarthas. In *Peterborough Archaeology*, edited by Dirk Verhulst, pp.127-136. Peterborough Chapter of the Ontario Archaeological Society, Peterborough.

H. Belden & Co.

1881 Prescott and Russell Supplement. *Illustrated Historical Atlas of Dominion of Canada*. Richardson, Bond & Wright Ltd., Toronto, ON.

H. Belden & Co. *continued*

1880 Lanark Supplement. *Illustrated Historical Atlas of Dominion of Canada*. Richardson, Bond & Wright Ltd., Owen Sound, ON.

Hanewich, Kim

2009 *History of the Algonquin, Omàmiwinini: The Invisible People*. Unpublished manuscript produced for Omàmiwinini Pimàdjowin – The Algonquin Way of Life Cultural Centre. Accessed on-line at <http://www.thealgonquinway.ca/pdf/Omamininini-Invisible-People/pdf>

Harkness, John Graham

1946 *Stormont, Dundas and Glengarry: a History, 1784-1945*. Mundy-Goodefellow Printing Co. Limited, Oshawa, ON.

Hart, J.P. and W. Engelbrecht

2012 Northern Iroquoian Ethnic Evolution: A Social Network Analysis. *Journal of Archaeological Method and Theory* 19:322-349.

Heidenreich, Conrad E., and Françoise Noël

1993 France Secures the Interior, 1740-1755. In *Historical Atlas of Canada: From the Beginning to 1800* (Volume 1), edited by R. Cole Harris, pp. 102-103. University of Toronto Press, Toronto.

Henry Vernon & Son

1916 *Vernon's Farmers' and Business Directory for the Counties of Carleton, Dundas, Glengarry, Lanark, Prescott, Renfrew, Russell and Stormont*. Henry Vernon & Son, Hamilton, ON.

Hessel, P.

1993 *The Algonkin Nation: The Algonkins of the Ottawa Valley, A Historical Outline*. Kichesippi Books, Arnprior, ON.

Hill, Susan M.

2017 *The Clay We are Made of: Haudenosaunee Land Tenure on the Grand River*. Winnipeg: University of Manitoba Press, Winnipeg.

Hough, Jack Luin

1958 *Geology of the Great Lakes*. University of Illinois Press, Urbana, Ill.

Huitema, Marijke E.

2001 *Land of Which the Savages Stood in No Particular Need: Dispossessing the Algonquins of South-Eastern Ontario of Their Lands, 1760-1930*. Unpublished Master of Arts thesis submitted to the Department of Geography, Queen's University, Kingston.

Intermesh Enterprises

- 2011a *Stage I and II Archaeology Assessment, Nationview Village Site, Client :6476937 Canada Inc, 810 Rue Principale, Town of Casselman, Ontario.* Report on file, Ontario Ministry of Citizenship and Multiculturalism, Toronto.
- 2011b *Stage IV Archaeological Assessment, Site BhFs-6 -- Wimbàbikàn, Client 6476937 Canada Inc, 810 Rue Principale, Town of Casselman, Ontario.* Report on file, Ontario Ministry of Citizenship and Multiculturalism, Toronto.

Jamieson, James Bruce

- 1990 *The Archaeology of the St. Lawrence Iroquoians.* In *The Archaeology of Southern Ontario to A.D. 1650*, edited by Chris Ellis and Neal Ferris, pp. 385-404. Occasional Publications of the London Chapter of the Ontario Archaeological Society, Publication Number 5. Ontario Archaeological Society, London, ON.

Joan Holmes & Associates, Inc.

- 1993 *Algonquins of Golden Lake Claim.* Eight volumes. Unpublished report prepared for the Ontario Native Affairs Secretariat, Toronto.

Johnson, Frederick

- 1928 *The Algonquin at Golden Lake, Ontario.* *Indian Notes* 5(2):173-178.

Kapyrka, Julie

- 2017 *Remembering Original Relationships: Mississauga and Wendat.* *Association of Professional Archaeologists Newsletter New Series* (1):3-12.

Kennedy, Clyde

- 1970 *The Upper Ottawa Valley: A Glimpse of History.* Renfrew County Council, Pembroke, ON.
- 1962 *Archaic Hunters in the Ottawa Valley.* *Ontario History* Vol. 54(2):122-128.

Konrad, V.A

- 1981 *An Iroquois Frontier: the North Shore of Lake Ontario during the Late Seventeenth Century.* *Journal of Historical Geography* 7(2):129-144.

Lainey, J.C.

- 2006 *Reflections on Historical Links between the Huron-Wendat and the St. Lawrence Iroquoians.* In *The St. Lawrence Iroquoians: Corn People*, edited by R. Tremblay, pp. 128-129. Pointe-à-Callière and Éditions de l'Homme, Montreal.

Laliberté, M.

- 2000 *Synthèse des recherches archéologiques dans le Parc du Lac Leamy 1993-1999.* Écomusée de Hull, Gatineau, QC.

Lanark County Neighbours for Truth and Reconciliation

2019 *Colonial Expansion into Lanark & Frontenac Counties: The Petitions of Chief Pierre Shawinipinessi*. Accessed online at <https://www.lanarkcountyneighbours.ca/the-petitions-of-chief-shawinipinessi.html>

Lawrence, Bonita.

2012 *Fractured Homeland: Federal Recognition and Algonquin Identity in Ontario*. UBC Press, Vancouver.

Le Droit

1934 *Bref Historique des Canadiens-Français D'Ontario*. Le Droit, Ottawa, ON.

Lewis, C. F. Michael, Paul F. Karrow, Stefan M. Blasco, Francine M. G. McCarthy, John W. King, Theodore C. Jr. Moore, and David K. Rea

2008 Evolution of Lakes in the Huron Basin: Deglaciation to Present. **Aquatic Ecosystem Health & Management** 11(2):127-136.

MacKay, Roderick

2016 *Spirits of the Little Bonnechere: A History of Exploration, Logging and Settlement - 1800 to 1920*. Second Edition. The Friends of Algonquin Park, Whitney, ON.

Ministry of Citizenship and Multiculturalism (MCM)

2011 *Standards and Guidelines for Consulting Archaeologists*. Ministry of Citizenship and Multiculturalism, Toronto.

Morrison, James

2005 Algonquin History in the Ottawa River Watershed. In *A Background Study for Nomination of the Ottawa River Under the Canadian Heritage Rivers System*, edited by Ottawa River Heritage Designation Committee, pp. 17-36. Canadian Heritage River System. Ottawa River Heritage Designation Committee, Ottawa.

Munson, Marit K.

2013 A Land Before Ontario. In *Before Ontario: The Archaeology of a Province*, edited by Marit Munson and Susan Jamieson, pp. 21-23. McGill-Queen's University Press, Montreal.

Pendergast, James

1999 The Ottawa River Algonquin Bands in a St. Lawrence Iroquoian Context. *Canadian Journal of Archaeology* Vol. 23:63-136.

1972 The Lite Site: An Early Southern Division Huron Site near Belleville, Ontario. *Ontario Archaeology* No. 17:24-61.

Pilon, Jean-Luc, editor

1999 *La préhistoire de l'Outaouais / Ottawa Valley Prehistory*. L'Écomusée de Hull and Outaouais Historical Society, Gatineau, QC.

Richard, J.-F.

2016 Territorial Precedence in Eighteenth- and Nineteenth-Century Huron-Wendat Oral Tradition. *Ontario Archaeology* 96:26-34.

Ripmeester, Michael

1995 'It is Scarcely to be Believed...': The Mississauga Indians and the Grape Island Mission, 1826-1836. *The Canadian Geographer* Vol. 39(2):157-168.

Ritchie, William A.

1969 *The Archaeology of New York State*. Revised edition. The Natural History Press, Garden City, NY.

Rowe, John Stanley

1972 *Forest Regions of Canada*. Canadian Forestry Service Publication No. 1300. Department of the Environment, Ottawa.

Rowell, D. J.

1997 *Aggregate Resources Inventory of the United Counties of Prescott and Russell, Southern Ontario*. Ontario Geological Survey Aggregate Resources Inventory Paper 169. Ontario Geological Survey, Sudbury, ON.

Royal Commission on Aboriginal Peoples, Ottawa

1996 *Bridging the Cultural Divide: A Report on Aboriginal People and Criminal Justice in Canada*. Royal Commission on Aboriginal Peoples, Ottawa.

Rowell, D. J.

2010 *Aggregate Resources Inventory of the United Counties of Prescott and Russell, Southern Ontario*. Ontario Geological Survey, Aggregate Resources Inventory, Paper 186.

Sherman, Paula

2015 The Omàmiwinini. In *At Home in Tay Valley – Celebrating our 200th Anniversary*, edited by K. Rogers, pp. 27-36. Burnstown Publishing House, Burnstown, ON.

2008 *Dishonor of the Crown: The Ontario Resource Regime in the Valley of the Kiji Sibi*. Arbeiter Ring Publishing, Winnipeg.

Smith, W.H.

1851 *Canada: Past, Present and Future, Being a Historical, Geographical and Statistical Account of Canada West*. Volumes I & II. Thomas Maclear, Toronto, ON.

Spence, M., R. Pihl, and C. Murphy

1990 Cultural Complexes of the Early and Middle Woodland Periods. In *The Archaeology of Southern Ontario to A.D. 1650*, edited by Christopher J. Ellis and Neal Ferris, pp. 125-169. Occasional Publications of the London Chapter of the Ontario Archaeological Society, Publication Number 5. Ontario Archaeological Society, London, ON.

Surtees, Robert J.

1994 Land Cessions, 1763-1830. In *Aboriginal Ontario: Historical Perspectives on the First Nations*, edited by Edward S. Rogers and Donald B. Smith, pp. 92-121. Ontario Historical Studies Series. Dundurn Press, Toronto.

1982 *Indian Land Cessions in Ontario, 1763-1862: The Evolution of a System*. Unpublished Ph.D. dissertation, Department of History, Carleton University, Ottawa.

Sutton, Richard Edward

1990 *Hidden Amidst the Hills: Middle and Late Iroquoian Occupations in the Middle Trent Valley*. Occasional Papers in Northeastern Archaeology No. 3. Copetown Press, St. John's, NF.

The Union Publishing Company

1904 *The Union Publishing Co's Farmers and Business Directory for the Counties of Carleton, Dundas, Glengarry, Grenville, Lanark, Leeds, Prescott, Grenville, Russell and Stormont*. Volume XII. The Union Publishing Co. of Ingersoll, Ingersoll, ON.

1885 *The Union Publishing Co.'s Farmers' and Business Directory, for the Counties of Carleton, Dundas, Glengarry, Grenville, Lanark, Prescott, Russell, and Stormont, 1885-6*. Volume 1. Union Publishing Company, Ingersoll, ON.

Tremblay, Roland, editor.

2006 *The St. Lawrence Iroquoians: Corn People*. Pointe-à-Callière, Montreal Museum of Archaeology and History, Montreal.

Trigger, Bruce G.

1987 *The Children of Aataentsic: A History of the Huron People to 1660*. Two volumes. McGill-Queen's University Press, Montreal.

Warrick, Gary Arthur

2000 The Precontact Iroquoian Occupation of Southern Ontario. *Journal of World Prehistory* 14(1):415-466.

Watson, Gordon

1999 The Paleo-Indian Period in the Ottawa Valley. In *La préhistoire de l'Outaouais / Ottawa Valley Prehistory*, edited by Jean-Luc Pilon, pp. 27-42. L'Écomusée de Hull and Outaouais Historical Society, Gatineau, QC.

Watson, Gordon *continued*

1990 Palaeo-Indian and Archaic Occupations of the Rideau Lakes. *Ontario Archaeology* 50:5-26.

Weaver, Emily P.

1913 *The Story of the Counties of Ontario*. Bell and Cockburn, Toronto, ON.

Wicklund R. E., D. W. Hoffman and M. H. Miller

1961 *The Soils of Russell County*. Ontario Report No. 33 of the Ontario Soil Survey, Research Branch, Canada Department of Agriculture, the Ontario Department of Agriculture and Food. and Ontario Agricultural College, University of Guelph, Guelph, Ontario.

Wright, James V.

1966 *The Ontario Iroquois Tradition*. National Museum of Canada, Bulletin No. 210. Anthropological Series No. 75, Ottawa.

PRIMARY DOCUMENTS:

Library and Archives Canada (LAC):

National Map Collection (NMC):

NMC 21920 *Map of the Counties of Stormont, Dundas, Glengarry, Prescott & Russell Canada West: from actual surveys under the direction of H.F. Walling (1862)*

Microfilm Reel:

C-1071	1861 census of Cambridge Township
C-10012	1871 census of Cambridge Township
T-6494	1901 census of Cambridge Township

National Air Photo Library (NAPL):

<i>Year</i>	<i>Roll#</i>	<i>Photo</i>	<i>Scale</i>
1964	A18566	182	35,000
1994	A28051	015	35,000

Ontario Council of University Libraries - Historical Topographic Map Digitization Project (accessed online at: <https://ocul.on.ca/topomaps/>):

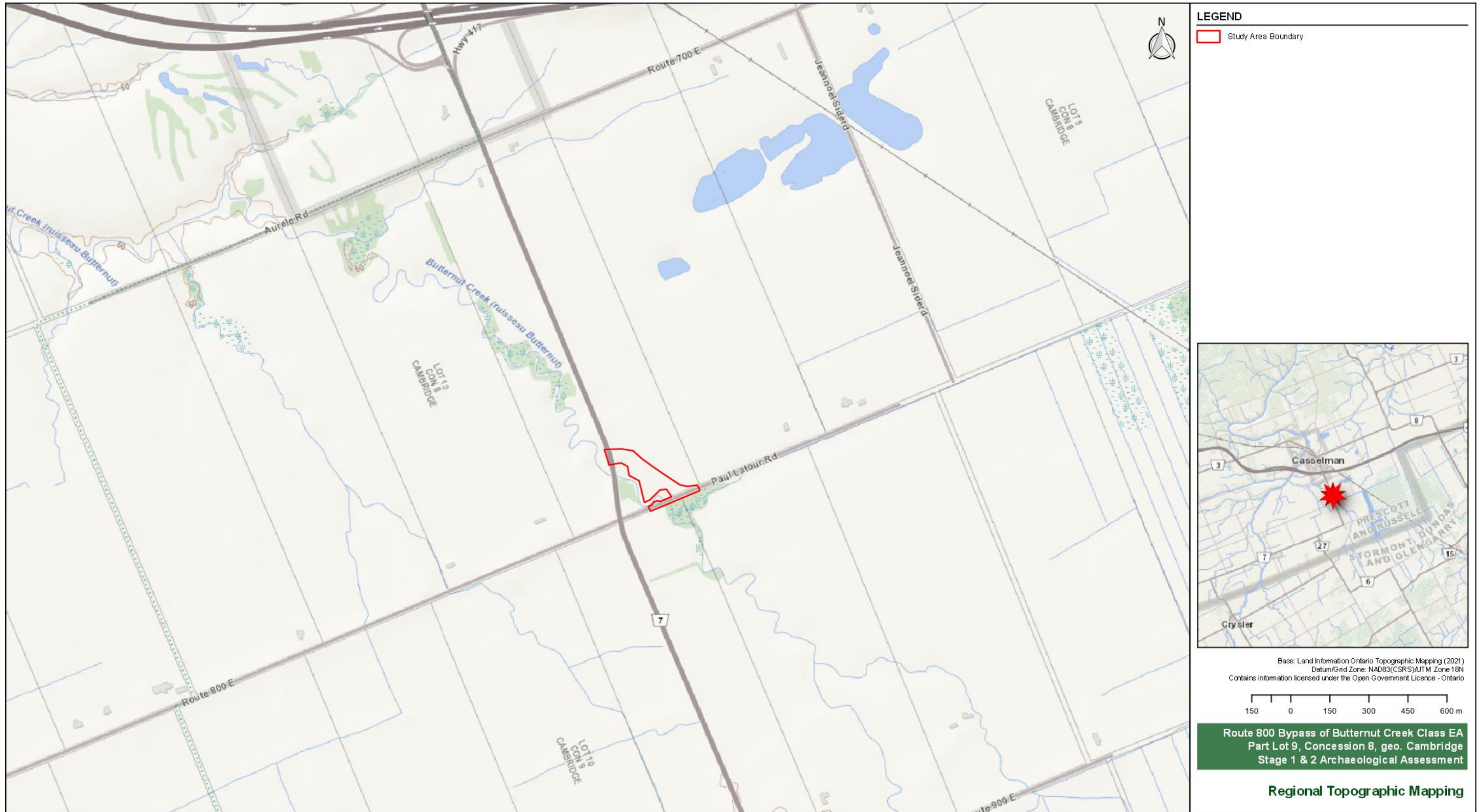
National Topographic System (NTS) Map Sheets

31F01	Russell Sheet	1908	1:63,360
31F01	Russell Sheet	1939	1:63,360

Russell County Land Registry Office (RCLRO)

Land Registry Abstract Index: Lot 9, Concession 8, Township of Cambridge

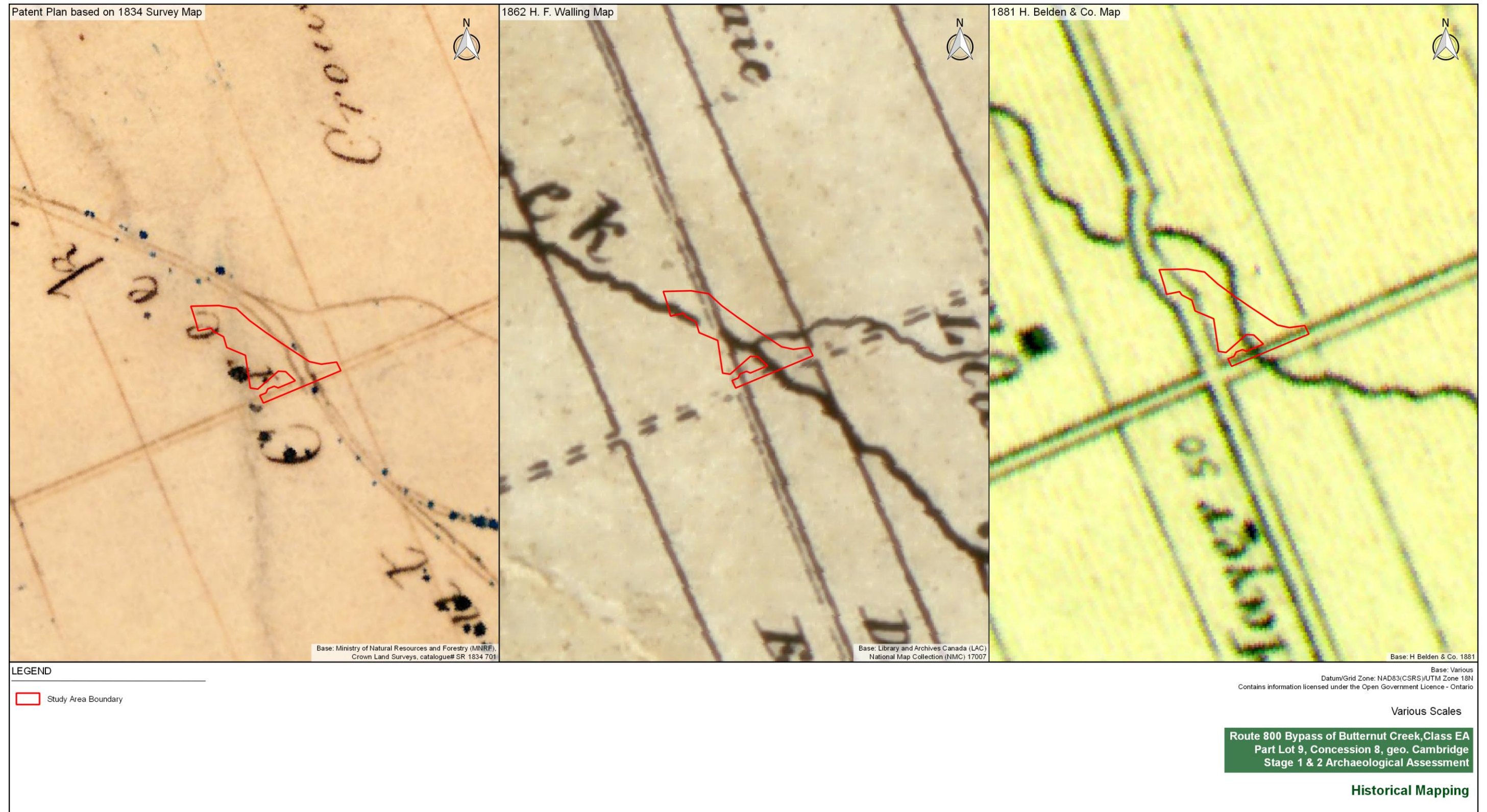
10.0 MAPS



Map 1. Regional topographic mapping showing the location of the study area.



Map 2. Recent (2014) orthographic imagery showing the location and limits of the study area.



Map 3. Segments of historical maps showing the approximate location and limits of the study area.



Map 4. Historical topographic mapping and aerial photography showing the location and limits of the study area.



Map 5. Local environmental conditions, including surficial geology, elevation, and soil survey mapping, showing the location and limits of the study area.



Map 6. Recent (2014) orthographic imagery showing areas of archaeological potential in the study area.



Map 7. Recent (2014) orthographic imagery showing the Stage 2 survey methodology and the approximate locations and orientations of fieldwork photographs referenced in this report.

11.0 IMAGES



Image 1. View of the agricultural field which comprises the majority of the study area and field crew undertaking pedestrian field survey at 5 m intervals, facing southeast. (PR21-022D004)



Image 2. View of Paul Latour Road (Route 800) and the woodlot which comprises the southern edge of the right-of-way within the study area, facing east. (PR21-022D007)



Image 3. View of the bridge which crosses Butternut Creek and associated disturbed slopes south of Paul Latour Road (Route 800), facing west. (PR21-022D014)



Image 4. View of the saturated culvert south of the active agricultural field, facing east. (PR21-022D005)



Image 5. View of the saturated culvert west of County Road 7, facing north. (PR21-022D018)



Image 6. View of the slope north of Paul Latour Road (Route 800) associated with the bridge crossing Butternut Creek (also visible), facing west. (PR21-022D017)



Image 7. View of conditions within the ploughed agricultural field, facing south.
(PR21-022D003)



Image 8. View of field crew undertaking pedestrian survey at 5 m intervals at the south end of the agricultural field, facing north. (PR21-022D020)



Image 9. View of field crew undertaking shovel test pit survey at 5 m intervals in the woodlot south of Paul Latour Road (Route 800), facing northwest. (PR21-022D008)

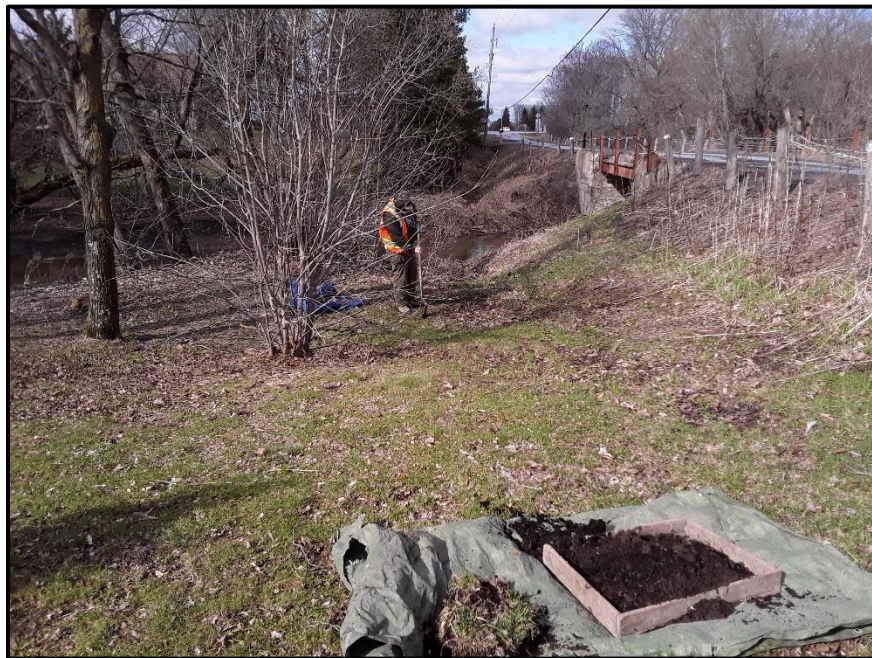


Image 10. View of field crew undertaking shovel test pit survey at 5 m intervals along the edge of Butternut Creek, facing west. (PR21-022D013)



Image 11. View of a sample test pit completed within the manicured lawn south of Paul Latour Road (Route 800), facing west. (PR21-022D011)



Image 12. View of a sample test pit completed along the edge of Butternut Creek, facing west. (PR21-022D016)

APPENDIX 1: Photographic Catalogue

Camera: Panasonic Lumix DMC-TS3

Catalogue No.	Description	Dir.
PR21-022D001	View of field conditions just north of Route 800	NW
PR21-022D002	View of field crew conducting pedestrian survey at 5 m intervals towards the center of the study area	W
PR21-022D003	View of field conditions towards the center of the study area	N
PR21-022D004	View of field crew conducting pedestrian survey at 5 m intervals towards the north end of the study area	SE
PR21-022D005	View of water-logged culvert just south of the ploughed field	E
PR21-022D006	View of water-logged culvert just south of the ploughed field	W
PR21-022D007	View of dense brush south of Route 800	E
PR21-022D008	View of field crew test pitting brush south of Route 800	N
PR21-022D009	View of saturated soils southeast of the Route 800	NE
PR21-022D010	Sample TP001 dug in wooded area south of Route 800	W
PR21-022D011	Sample TP002 dug in manicured lawns south of Route 800	W
PR21-022D012	View of field crew conducting shovel test pit survey at 5 m intervals in manicured lawns	W
PR21-022D013	View of field crew conducting shovel test pit survey along the shore of Butternut Creek	W
PR21-022D014	View of sloped area south of Route 800 and west of Butternut Creek	W
PR21-022D015	Sample TP003 dug along shore of Butternut Creek	W
PR21-022D016	Sample TP003 dug along shore of Butternut Creek	W
PR21-022D017	View of slope north of Route 800 and west of the ploughed field	W
PR21-022D018	View of saturated culvert west of County Road 7	N
PR21-022D019	View of saturated culvert west of County Road 7	N
PR21-022D020	View of field crew conducting pedestrian survey at 5 m intervals	N

APPENDIX 2: Glossary of Archaeological Terms

Archaeology:

The study of human past, both prehistoric and historic, by excavation of cultural material.

Archaeological Sites:

The physical remains of any building, structure, cultural feature, object, human event or activity which, because of the passage of time, are on or below the surface of the land or water.

Archaic:

A term used by archaeologists to designate a distinctive cultural period dating between 8000 and 1000 B.C. in eastern North America. The period is divided into Early (8000 to 6000 B.C.), Middle (6000 to 2500 B.C.) and Late (2500 to 1000 B.C.). It is characterized by hunting, gathering and fishing.

Artifact:

An object manufactured, modified or used by humans.

B.P.:

Before Present. Often used for archaeological dates instead of B.C. or A.D. Present is taken to be 1951, the date from which radiocarbon assays are calculated.

Backdirt:

The soil excavated from an archaeological site. It is usually removed by shovel or trowel and then screened to ensure maximum recovery of artifacts.

Chert:

A type of silica rich stone often used for making chipped stone tools. A number of chert sources are known from southern Ontario. These sources include outcrops and nodules.

Contact Period:

The period of initial contact between Native and European populations. In Ontario, this generally corresponds to the seventeenth and eighteen centuries depending on the specific area. See also Protohistoric.

Cultural Resource / Heritage Resource:

Any resource (archaeological, historical, architectural, artifactual, archival) that pertains to the development of our cultural past.

Cultural Heritage Landscapes:

Cultural heritage landscapes are groups of features made by people. The arrangement of features illustrate noteworthy relationships between people and their surrounding environment. They can provide information necessary to preserve, interpret or reinforce the understanding of important historical settings and changes to past patterns of land use. Cultural landscapes include neighbourhoods, townscapes and farmscapes.

Diagnostic:

An artifact, decorative technique or feature that is distinctive of a particular culture or time period.

Disturbed:

In an archaeological context, this term is used when the cultural deposit of a certain time period has been intruded upon by a later occupation.

Excavation:

The uncovering or extraction of cultural remains by digging.

Feature:

This term is used to designate modifications to the physical environment by human activity. Archaeological features include the remains of buildings or walls, storage pits, hearths, post moulds and artifact concentrations.

Flake:

A thin piece of stone (usually chert, chalcedony, etc.) detached during the manufacture of a chipped stone tool. A flake can also be modified into another artifact form such as a scraper.

Fluted:

A lanceolate shaped projectile point with a central channel extending from the base approximately one third of the way up the blade. One of the most diagnostic Palaeo-Indian artifacts.

Historic:

Period of written history. In Ontario, the historic period begins with European settlement.

Lithic:

Stone. Lithic artifacts would include projectile points, scrapers, ground stone adzes, gun flints, etc.

Lot:

The smallest provenience designation used to locate an artifact or feature.

Midden:

An archaeological term for a garbage dump.

Mitigation:

To reduce the severity of development impact on an archaeological or other heritage resource through preservation or excavation. The process for minimizing the adverse impacts of an undertaking on identified cultural heritage resources within an affected area of a development project.

Multicomponent:

An archaeological site which has seen repeated occupation over a period of time. Ideally, each occupation layer is separated by a sterile soil deposit that accumulated during a period when the site was not occupied. In other cases, later occupations will be directly on top of earlier ones or will even intrude upon them.

Operation:

The primary division of an archaeological site serving as part of the provenience system. The operation usually represents a culturally or geographically significant unit within the site area.

Palaeo-Indian:

The earliest human occupation of Ontario designated by archaeologists. The period dates between 9000 and 8000 B.C. and is characterized by small mobile groups of hunter-gatherers.

Prehistoric:

Before written history. In Ontario, this term is used for the period of Native occupation up until the first contact with European groups.

Profile:

The profile is the soil stratigraphy that shows up in the cross-section of an archaeological excavation. Profiles are important in understanding the relationship between different occupations of a site.

Projectile Point:

A point used to tip a projectile such as an arrow, spear or harpoon. Projectile points may be made of stone (either chipped or ground), bone, ivory, antler or metal.

Provenience:

Place of origin. In archaeology this refers to the location where an artifact or feature was found. This may be a general location or a very specific horizontal and vertical point.

Salvage:

To rescue an archaeological site or heritage resource from development impact through excavation or recording.

Stratigraphy:

The sequence of layers in an archaeological site. The stratigraphy usually includes natural soil deposits and cultural deposits.

Sub-operation:

A division of an operation unit in the provenience system.

Survey:

To examine the extent and nature of a potential site area. Survey may include surface examination of ploughed or eroded areas and sub-surface testing.

Test Pit:

A small pit, usually excavated by hand, used to determine the stratigraphy and presence of cultural material. Test pits are often used to survey a property and are usually spaced on a grid system.

Woodland:

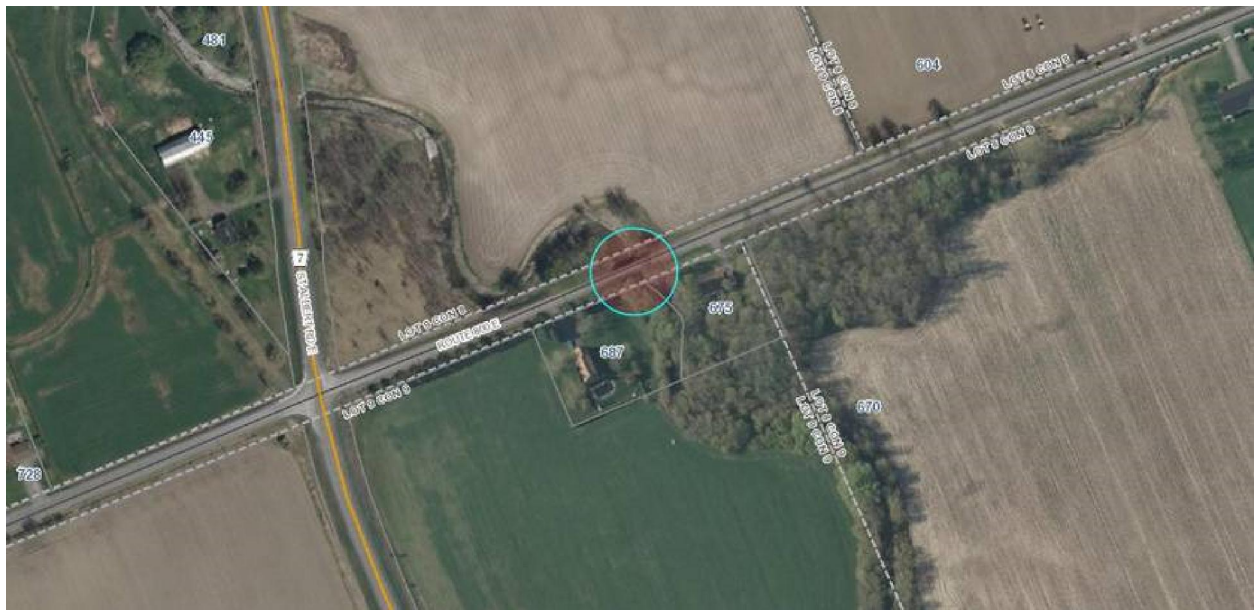
The most recent major division in the prehistoric sequence of Ontario. The Woodland period dates from 1000 B.C. to A.D. 1550. The period is characterized by the introduction of ceramics and the beginning of agriculture in southern Ontario. The period is further divided into Early (1000 B.C. to A.D. 0), Middle (A.D. 0 to A.D. 900) and Late (A.D. 900 to A.D.1550).

APPENDIX C – CULTURAL HERITAGE EVALUATION REPORT

DRAFT

CULTURAL HERITAGE EVALUATION & HERITAGE IMPACT ASSESSMENT

Bridge Structure C001, Route 800 East, The Nation Municipality



Submitted to McIntosh Perry and The Nation Municipality - 27 November 2013

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3.0 Environmental Assessment & Heritage Impact Assessment.....	3
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1.0 Executive Summary

This is a cultural heritage evaluation and heritage impact assessment (CHE/HIA) of bridge structure C001, located on Route 800 East, at Butternut Creek, in The Nation Municipality. It was prepared by Laurie Smith of Laurie Smith Heritage Consulting for The Nation Municipality in October and November 2013. The bridge structure is a single-span, reinforced-concrete slab on steel girders, supported on poured concrete abutments. It was built in 1951 by the former Township of Cambridge.

The Nation Municipality is proposing to replace the bridge structure. The requirement for a CHE/HIA was triggered by the Municipal Heritage Bridges Cultural, Heritage and Archaeological Resources Assessment Checklist (March 2013, Municipal Engineers Association).

Research was conducted at local, provincial and national libraries and archives and included a site visit and local consultation at the municipal and county level. An evaluation against the criteria in Ont. Regs. 9/06 and 10/06 indicates that, based on the information available, the bridge structure does not have cultural heritage value. There will therefore be no potential impacts on cultural heritage value as a result of the proposed replacement of the bridge structure and no mitigation of negative impacts is required.

2.0 Introduction

The Nation Municipality retained Laurie Smith of Laurie Smith Heritage Consulting to undertake a Cultural Heritage Evaluation and Heritage Impact Assessment of bridge structure C001 (Figure 1). C001 is located on Route 800 East, .2 km east of the intersection with St. Albert Road (County Road 7), in The Nation Municipality (Figure 2). The Nation is located in the United Counties of Prescott and Russell, in eastern Ontario (Figure 3).

Route 800 East is a single lane, asphalted road that accommodates two-way traffic and terminates in a dead end about one km east of the bridge (Figure 4). C001 supports the road as it crosses Butternut Creek, a small tributary of the South Nation River.

C001 was built in 1951 by the former Township of Cambridge. It is a single-span, reinforced concrete slab on steel girders, supported on poured concrete abutments (Figure 5). The surface area is 5.5 metres wide by 8 metres long. Bridge railings are comprised of steel posts set into the concrete abutment or attached to the steel girders, and linked by steel cables. Railings along the approach to the bridge are comprised of timber posts linked by steel cables.

The municipality is proposing to replace the existing bridge structure, likely with a steel arch culvert backfilled with gravel. Following the Municipal Class EA, the municipality completed the municipal Heritage Bridges Cultural, Heritage and Archaeological Resources Assessment Checklist (March 2013) prepared by the Municipal Engineers Association. Because the bridge was built prior to 1956, it triggered the requirement for a CHE/HIA under the Checklist.

The purpose of the CHE/HIA is to research the history and architecture of the bridge structure and examine its current context, in order to determine whether it has significant cultural heritage value. Evaluation of heritage value is carried out using the criteria in Ontario Regulations 9/06 and 10/06 under the Ontario Heritage Act. The CHE/HIA considers how the proposed bridge replacement might impact any heritage value and makes recommendations for steps that will mitigate any negative impacts and enhance any heritage value.

This report deals with the built and landscape aspects of cultural heritage. It does not include archaeology or First Nations heritage.

3.0 Environmental Assessment & Heritage Impact Assessment

The *Ontario Environmental Assessment Act* (“EAA”) provides for the protection, conservation and wise management in Ontario of the environment. It defines environment in a broad way that includes natural, social, cultural, economic and built environments, and provides the basis for including cultural heritage in the environmental assessment process. Environmental assessments under the EAA will consider cultural heritage properties (both designated and potential), assess the potential impacts of the proposed development, and propose mitigation. The EAA does not limit the type of cultural heritage properties to those recognized by a provincial or municipal authority, so federally or internationally recognized cultural heritage properties can also be considered for potential impact.

The *Municipal Class Environmental Assessment* (“MCEA”, 2000, amended 2007) outlines a process to enable municipalities to comply with EAA requirements while expediting the environmental assessment of smaller recurring projects. It applies to municipal infrastructure projects such as roads, watermains and sewers. Schedule B projects include generally include improvements and minor expansions to existing facilities.

The *Provincial Policy Statement* (“PPS”) provides policy direction on matters of provincial interest related to land use planning and development. The PPS provides that significant built heritage resources and significant cultural heritage landscapes shall be conserved, by identifying, protecting, using and/or managing those resources in such a way that their heritage values, attributes and integrity are retained. Heritage attributes are the principal features, characteristics, context and appearance that contribute to the cultural heritage significance of a protected heritage property. The PPS contemplates the use of a

Heritage Impact Assessment to evaluate the impacts of proposed development and propose mitigation strategies.¹

The *Ontario Heritage Act* (“OHA”) permits municipalities to designate properties that are of cultural heritage value or interest, based on criteria set out in *Ont. Reg. 9/06*.² Municipalities may designate heritage conservation districts and adopt a district plan for managing change.³ The Act provides processes for consent to alterations to designated properties and for alterations, demolitions, removals or new construction within a heritage conservation district.⁴

As a lower-tier municipality, The Nation Municipality uses the official plan for the United Counties of Prescott and Russell. The *United Counties of Prescott and Russell Official Plan (May 2006)* includes general provisions for heritage conservation of significant heritage buildings, heritage districts, cultural heritage landscapes, archaeological sites and areas of archaeological potential. Section 7.6.3 of the official plan provides for the conservation and mitigation of impacts to significant cultural heritage resources when undertaking public works and contemplates the use of heritage impact assessments to determine adverse impacts and propose mitigation.

4.0 Methodology and Qualifications

This Heritage Impact Assessment was prepared by Laurie Smith of Laurie Smith Heritage Consulting for CH2M HILL. Laurie is trained as a historian and has worked as a heritage consultant for more than 13 years. She is a member of the Canadian Association of Heritage Professionals and has completed hundreds of reports evaluating heritage properties and communicating their heritage value at the federal, provincial and municipal levels. Laurie has prepared heritage impact assessments or statements for the cities of Ottawa and Kingston.

The Ministry of Tourism, Culture and Sport (MTCS) provides guidelines for the content of an HIA, suggesting that it should generally include: (1) historical research, site analysis and evaluation; (2) identification of the significance and heritage attributes of the property; (3) description of the proposed development/site alteration; (4) measurement of impacts; (5) consideration of alternatives, mitigation and conservation methods; (6) implementation and monitoring schedules; (7) summary statement and conservation recommendations. This report incorporates all of these components.

Research was carried out in October 2013, and included:

- historical research at archives and libraries, including Library and Archives Canada, Archives Ontario, Russell Land Registry Office #50, Casselman Public Library, and St. Isidore Municipal Library.
- a site visit and photodocumentation of bridge structure C001 (10 October 2013);
- consultations with Guylain Lafèche, MCIP, RPP, municipal planner for The Nation Municipality; Louis Prevost, Director of planning for the United Counties of Prescott and Russell; Mary McCuaig, CAO and Clerk for The Nation Municipality; and Marc Legault, Public Works, The Nation Municipality

¹ PPS, ss. 2.6 & 6.0.

² OHA, s. 29.

³ OHA, ss. 41 and 41.1.

⁴ OHA, ss. 33 and 42.

- a review of relevant policy documents, including MCEA, PPS, OHA and the *United Counties of Prescott and Russell Official Plan (May 2006)*

A complete list of sources is provided at the end of this report.

Recommendations in this report follow the *Standards and Guidelines for the Conservation of Historic Places in Canada* (Parks Canada, 2003, rev 2010), a nationally accepted standard for heritage conservation.

5.0 Description of the Project

Because of the current condition of the structure, The Nation Municipality is proposing to replace bridge structure C001 with a new structure, likely a steel arch culvert backfilled with gravel. Detail design of the project has not yet been carried out.

6.0 Historical Research and Site Analysis

This section provides background information on the history, architecture and context of the property, in order to provide a basis for evaluating its cultural heritage value. It considers the property in the context of comparable properties in order to determine significance.

History

The Nation Municipality is located within the United Counties of Prescott and Russell in eastern Ontario. It was formed in 1998 by the amalgamation of the townships of Cambridge, South Plantagenet and Caledonia, and the Village of St. Isidore.⁵ The municipality is predominantly rural, with a population of 11,000. The village of Casselman is located in the geographical centre of the municipality, but exists as a separate municipality. The geography of the area is fairly flat, criss-crossed by a network of small streams and creeks draining into the Castor and South Nation Rivers. The logo of The Nation Municipality highlights both the abundance and importance of rivers and bridges to the municipality, by including a representation of each.⁶

C001 is located in the former Township of Cambridge. The area was first settled by Martin Casselman in 1844, who established his mill at High Falls, the current site of the village of Casselman. Local industries included logging and milling, potash making (using tree ashes), and maple sugaring. Small villages were established at Mayerville (between the 9th and 10th concessions) in 1860 and St. Albert in 1874 (Figure 6). After much of the forest was burned in the late 19th century, farming became more widespread. With the advent of dairy farming, cheese and butter production began and by the early 20th century they were key local industries. The Canada Atlantic Railway built a line through the township in 1882, providing an important means of transportation (Figure 7).

The Township of Cambridge was first organized in 1857 and from 1886 forward was administered by a reeve, assistant-reeve, three councilors and a clerk. In 1951, the township had a population of 2329 and was administered from the town hall located in Casselman. Albert Ouimet was appointed clerk-treasurer in 1951 and held the position until his death in 1979. His widow Madeleine Ouimet succeeded him, serving until at least 1986. In 1998 the township amalgamated with neighbouring townships to form The Nation Municipality

⁵ "About Us" in Municipalité de La/The Nation Municipality, at http://www.nationmun.ca/en/about_us.html

⁶ "About Us" in Municipalité de La/The Nation Municipality, at http://www.nationmun.ca/en/about_us.html

Maps of the area show a concession road crossing Butternut Creek as early as 1878 (Figure 6, Figure 7, Figure 8), suggesting that some sort of bridge may have existed prior to the current one. Municipal bridge inspection files dating to 1977 record the current bridge structure as having been installed in 1951.⁷ This date of construction is consistent with the materials and design of the current bridge.

C001 is located on the boundary between Lot 9, Concession 8 and Lot 9, Concession 9, Township of Cambridge. The adjoining land in Lot 9, Concession 8 was patented from the Crown to John Rankin in 1828. After passing through several owners, the south half (100 acres) was acquired by Odile Matte in 1881 and was owned by members of the Matte family until at least 1969. The adjoining land in Lot 9, Concession 9, Township of Cambridge, was patented from the Crown to Sarah Adams in 1846. The east half (100 acres) was acquired by Levi Casselman shortly afterward and owned by the Casselman family until 1908, when it was sold to Gideon Sanche. Theodule Lafleche bought the 100- acre parcel in 1924, and his descendants continue to own the property.

With a construction date of 1951, the current bridge was built well after the initial settlement and key phases of development of this community. There is no evidence to link the construction of the bridge with any significant individuals, events, or themes in the history of the community.

Architecture

C001 was built in 1951 by the former Township of Cambridge. It is a single-span, reinforced concrete slab on steel girders, supported on poured concrete abutments (Figure 9). The surface area is 5.5 metres wide by 8 metres long. The structure consists of a series of parallel girders in steel, fastened to the abutments. Cross bracing has been inserted between the girders. A concrete slab deck has been laid on top of the girders. Bridge railings are comprised of steel posts set into the concrete abutment or attached to the steel girders, and linked by steel cables. Railings along the approach to the bridge are comprised of timber posts linked by steel cables. The bridge structure is a very simple design, driven by cost and functionality, and comprised of standard components assembled in a straightforward way.

Concrete bridges were first introduced in Ontario in the early 20th century. By the 1930s, concrete had become the primary material for Ontario road bridges, a position it has never relinquished. Although bridge construction in Ontario essentially ceased during the Second World War and for a few years afterwards, it skyrocketed in the 1950s and 1960s in response to increased road traffic and demand for greater capacity. This resulted in the construction and retrofitting of thousands of bridges across the province. Arched structures were almost entirely phased out in Ontario after 1945 as stronger steel and concrete were developed to support heavier loads without the need for arches.⁸

The Nation Municipality is bisected by numerous rivers and creeks. There are 45 bridges or culverts within the municipality (28 bridges and 17 culverts) ranging in age from one year to 94 years old, with an average age of 41.3 years. Of the 28 bridges in the inventory, 12 are older than C001 (built between 1919 and 1950).⁹ The inventory includes several older bridges that are noteworthy for their materials, design or age – C001 is not among this group. Of special note is the Touchette Bridge (C005), which was built by the Township of Cambridge in 1950, one year before C001:

⁷ Township of Cambridge, file for Structure #1, Butternut Creek Route 800, Lot 9, subfile 6115, Ghislain E. Seguin & Associates Ltd., bridge inspection report for 1977.

⁸ "History of Bridge Building in Ontario," in Heritage Resources Centre, *Heritage Bridges Identification and Assessment Guide, Ontario, 1945-1965*.

⁹ Keystone Bridge Management Corp., *2013 Bridge and Large Culvert Structural Inspections: The Nation Municipality*, October 2013.

- SP010 “Wilson Bridge” (Figure 10), a pony-truss bridge built in 1919 (Lots 8 & 9, Con. 12, at Scotch River)
- SP020 “Chartrand Bridge” (Figure 11), a half-through-truss bridge built in 1930 (Lot 20, Con. 11 at South Nation River)
- C005 “Touchette Bridge” (Figure 11), a through-truss bridge built in 1950 (Lot 15, Con. 7 at The Nation River)
- CA004 and CA004A (Figure 12), concrete T-beam bridges built in 1935 (Lot 24, Con. 6 at Caledonia Creek)
- CA009 (Figure 12), a concrete T-beam bridge built in 1935 (Lot 9, Cons. 7 & 8 at Paxton Creek)

C001 is one of seven bridges in the municipality that were built as concrete slabs on steel girders with concrete abutments, a much simpler design. The others are:

- C006, built in 1935 (Route 660 at Butternut Creek)
- SP002, built in 1947 (Lot 10, Concessions 19 & 20 at West Scotch River)
- SP008, built in 1955 (Lot 19, Concessions 15 & 16 at Scotch River)
- SP003 (Figure 13), built in 1960 (Lots 10 & 11 at West Scotch River)
- C004, built in 1967 (Lot 18, Concession 7 at Little Castor River)
- SP016, built in 1977 (Lot 11, Concession 11 at Scotch River)

SP003 is similar in design and appearance to C001; the others have additional design features such as concrete or steel railings, longer spans, more complex girder systems or tapered abutments. C001 cannot be considered among the best examples of this type of bridge in the municipality.

Context

C001 is located on Route 800 East, .2 km east of the intersection of that road with St. Albert Road (County Road 7). It supports the road as it crosses Butternut Creek, a small tributary of the South Nation River. Route 800 East is a single lane, asphalted road that accommodates two-way traffic and terminates in a dead end about one km east of the bridge. There are residential homes on the south side of the road, on either side of the creek – both post-date the bridge structure. Beyond the end of the road is the Moose Creek Bog, a large wetland area located in the United Counties of Stormont, Dundas and Glengarry. The bog is bisected by the Canadian National rail line, originally established as the Canada Atlantic Railway in 1882, later operated as the Grand Trunk Railway and still in use by CN.

Because of its location on a dead-end road, the narrow channel of Butternut Creek, the surrounding foliage and the general topography of the immediate area, C001 is not highly visible within the municipality. The design of the bridge, with very little structure above the road surface makes it difficult to see even for those passing over it (Figure 4). The functional and mundane nature of the components used for railings, approaches, road surfaces, abutments and span mean that even if it were possible to catch a glimpse of it, the bridge is not visually memorable. Butternut Creek, like the many other creeks in the municipality, is a picturesque, meandering waterway, but the very functional design and standard materials of C001 do not contribute to the picturesque nature of the creek setting (Figure 14).

7.0 Local Consultation

Guylain Laflèche, MCIP, RPP, municipal planner for The Nation Municipality, reported that the municipality does not have its own Official Plan, but uses the Official Plan of its upper-tier municipality, the United Counties of Prescott and Russell. The Nation Municipality does not have a heritage committee, nor does it have any local policies addressed at preserving heritage structures.¹⁰

Louis Prévost, Director of Planning for the United Counties of Prescott and Russell reported that although there are heritage provisions in the Official Plan, the United Counties of Prescott and Russell do not have a heritage committee. There are no heritage designations for bridges in the United Counties and there are no existing heritage designations in the area of The Nation Municipality. There does not seem to be much interest in heritage preservation in the area.¹¹

Neither M. Laflèche nor M. Prévost were aware of any local heritage interest in bridge structure C001.

8.0 Evaluation of Cultural Heritage Value

This section evaluates the property against the criteria mandated in Ontario Regulations 9/06 and 10/06 under the *Ontario Heritage Act*.

The evaluation indicates that, based on the available information, the bridge does not have cultural heritage value when measured against Ont. Regs. 9/06 and 10/06.

ONT. REG. 9/06 CRITERION	RESPONSE (YES/NO)	RATIONALE
1. The property has design or physical value because:		
i. it is a rare, unique, representative or early example of a style, type, expression, material or construction method	NO	The bridge is not a rare, unique, representative or early example of a style, type, expression, material or construction method. There are better examples of bridges of this time period and type within the inventory of The Nation Municipality
ii. it displays a high degree of craftsmanship or artistic merit	NO	The bridge does not display craftsmanship or artistic merit.
iii. it demonstrates a high degree of technical or scientific achievement	NO	The bridge does not demonstrate technical or scientific achievement.
2. The property has historical value or associative value because:		
i. it has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community	NO	The bridge is associated with the former Township of Cambridge, but the association is neither direct nor significant.

¹⁰ Email from Guylain Laflèche, 24 September 2013.

¹¹ Telephone conversation with Louis Prévost, 18 October 2013.

ONT. REG. 9/06 CRITERION	RESPONSE (YES/NO)	RATIONALE
ii. it yields, or has the potential to yield, information that contributes to an understanding of a community or culture	NO	The bridge does not yield or have the potential to yield information that contributes to an understanding of a community or culture.
iii. it demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community	NO	The bridge was built for the former Township of Cambridge, but no individual architect, artist, builder, designer or theorist has been identified for the bridge.
3. The property has contextual value because:		
i. it is important in defining, maintaining or supporting the character of an area	NO	The bridge is not important in defining, maintaining or supporting the character of its area.
ii. it is physically, functionally, visually or historically linked to its surroundings	NO	The bridge is not linked to its surroundings in a heritage sense.
iii. it is a landmark	NO	The bridge does not function as a landmark within the community.

ONT REG. 10/06 CRITERION	YES/NO	RATIONALE
The property has cultural heritage value or interest of provincial significance because:		
1. it represents or demonstrates a theme or pattern in Ontario's history.	NO	The bridge does not demonstrate or represent a theme or pattern in Ontario's history.
2. it yields, or has the potential to yield, information that contributes to an understanding of Ontario's history.	NO	The bridge does not yield or have the potential to yield, information that contributes to an understanding of Ontario's history.
3. it demonstrates an uncommon, rare or unique aspect of Ontario's cultural heritage.	NO	The bridge does not demonstrate an uncommon, rare or unique aspect of Ontario's cultural heritage.
4. it is of aesthetic, visual or contextual importance to the province.	NO	The bridge is not of aesthetic, visual or contextual importance to the province.
5. it demonstrates a high degree of excellence or creative, technical or scientific achievement at a provincial level in a given period.	NO	The bridge does not demonstrate a high degree of excellence or creative, technical or scientific achievement at a provincial level in a given period.
6. it has a strong or special association with the entire province or with a community that is found in more than one part of the province. The association	NO	The bridge does not have a strong or special association with the entire province or with a community that is found in more than one part of

ONT REG. 10/06 CRITERION	YES/NO	RATIONALE
exists for historic, social, or cultural reasons or because of traditional use.		the province.
7. it has a strong or special association with the life or work of a person, group or organization of importance to the province or with an event of importance to the province.	NO	The bridge does not have a strong or special association with the life or work of a person, group or organization of importance to the province or with an event of importance to the province.
8. the property is located in unorganized territory and the Minister determines that there is a provincial interest in the protection of the property.	NO	The bridge is not located in unorganized territory.

9.0 Conclusion

An evaluation against the criteria in Ont. Regs. 9/06 and 10/06 indicates that, based on the information available, bridge structure C001 does not have cultural heritage value. It is therefore not necessary to prepare a statement of cultural heritage value or conservation goals and objectives for the project. There are no potential impacts on cultural heritage value and no mitigation of negative impacts is required.

10.0 Sources

Telephone and Email contact

Guylain Lafèche, Municipal Planner, The Nation Municipality, 613-764-5444, x 229, glafleche@nationmun.ca (telephone conversation and email, 24 September 2013).

Marc Legault, Director of Public Works, The Nation Municipality, 613-524-2932, marclegault@nationmun.ca (emails 24 September, 10 October, 23 October 2013; in-person conversation 24 October 2013).

Mary McCuaig, CAO/Clerk, The Nation Municipality, 613-764-5444, x222, mmcuaig@nationmun.ca (telephone conversation 15 October 2013; emails 10 October, 23 October, 25 October 2013).

Louis Prévost, County of Prescott-Russell (telephone conversation, 18 October 2013).

Archival Sources

Library and Archives Canada (LAC), [no author, n.d., pre-1919] "Township of Cambridge," NMC 53693.

LAC, Ontario Department of Highways, "Road Map of the county of Prescott & Russell, 1954," NMC 52581, NMC 97473.

LAC, Ontario Department of Highways, "1969 Road Map of the Counties of Prescott & Russell, Stormont, Dundas & Glengarry," NMC 97474.

LAC, Ontario Ministry of Transportation and Communications, "United Counties of Prescott and Russell, West Portion, 1979," NMC 42693.

Russell Land Registry Office #50 (Embrun), abstract pages for Township of Cambridge, Concession 8, Lot 9 and Concession 9, Lot 9 (microfilm copies).

Published Sources (print)

Brault, Lucien, *Histoire des Comtés Unis de Prescott et de Russell* (L'Original: Conseil des Comtés Unis, 1965)

Cayer, Roger, *Saint-Albert: 125 ans de vie* (St. Albert: Kaice-tec Reproduction Ltée, 1999)

Cuming, David J. Cuming, *Discovering Heritage Bridges on Ontario's Roads*, (Toronto: Boston Mills Press, 1983)

Cumming, Ross (ed.), *Illustrated Historical Atlas of the Counties of Stormont, Dundas & Glengarry, 1879, Prescott and Russell, 1881 by H. Belden & Co., and H.F. Walling's Map of the Counties of Stormont, Dundas, Glengarry, Prescott and Russell (Canada West), 1862*, (Owen Sound: Richardson, Bond & Wright Limited, 1972)

Ministry of Transportation (Ontario) and Heritage Resources Centre, University of Waterloo, *Heritage Bridges Identification and Assessment Guide, Ontario, 1945-1965* (MTO/HRC, 2005)

Ministry of Transportation (Ontario), *Ontario Heritage Bridge Guidelines for Provincially Owned Bridges* (MTO, 2008)

Sylvestre, Paul-François, *Casselman* (Ottawa: Le Centre franco-ontarien de ressources pédagogiques, 1984)

[sans auteur] *Un peuple autour d'une croix: centenaire de la paroisse Sainte-Euphémie de Casselman, 1886-1986*.

Unpublished documents (print)

Keystone Bridge Management Corp., *2013 Bridge & Large Culvert Inspections: The Nation Municipality*, October 2013 (provided by Marc Legault, The Nation Municipality)

Keystone Bridge Management Corp., inspection report for C001, 27 July 2011 (provided by McIntosh Perry for The Nation Municipality)

11.0 Figures



Figure 1 – North (left) and south (right) portals of bridge structure C001. (LSHC 2013) 040, 049

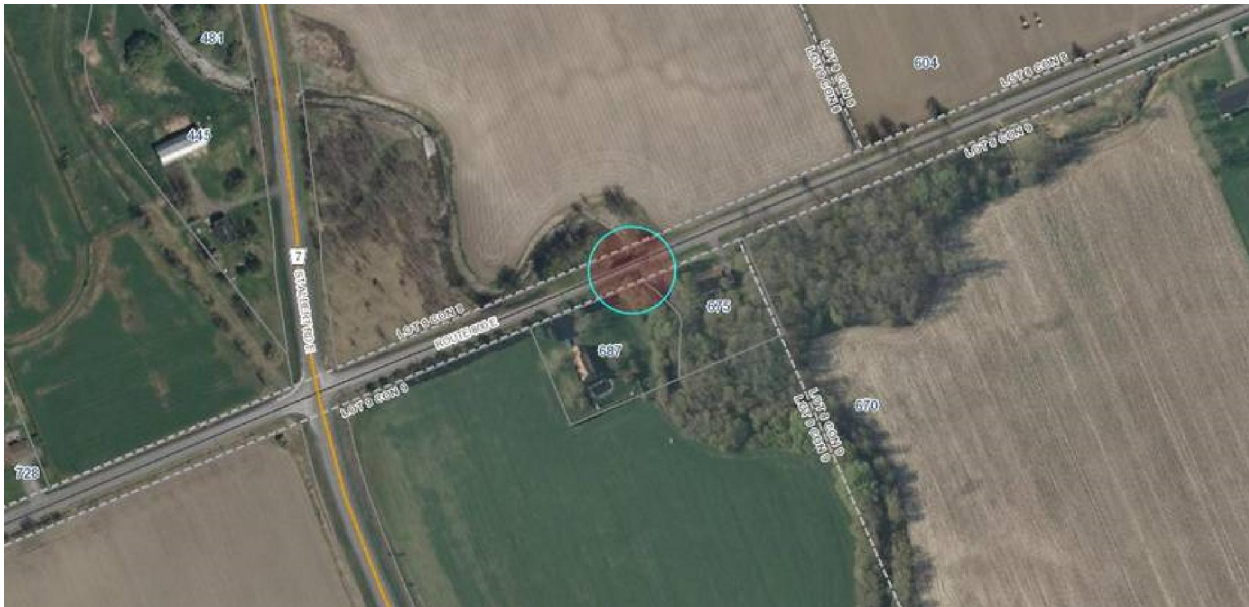


Figure 2 – Aerial photo showing location of Bridge C001 on Route 800 East. (The Nation Municipality, 2013)



Figure 3 – Map of the United Counties of Prescott and Russell, with red arrow showing the C001 within The Nation Municipality. (Eastern Ontario CFDC Network Inc.)



Figure 4 – The road bed of C001, looking east (left) and west (right) along Route 800 East. (LSHC 2013) 057



Figure 5 – The steel girders sit on concrete abutments, and the reinforced concrete deck is laid over the girders. (LSHC 2013) 042

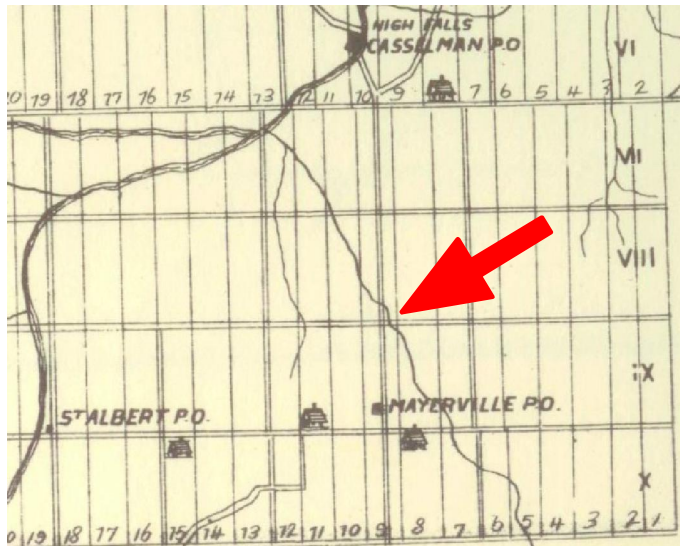


Figure 6 – Excerpt from 1878 map of the Cambridge Township, with red arrow showing the current location of the bridge structure C001 (H. Belden & Co., *Historical Atlas of Prescott & Russell, Stormont, Dundas & Glengarry Counties, Ontario, 1862, 1879, 1881*; arrow added by LSHC)

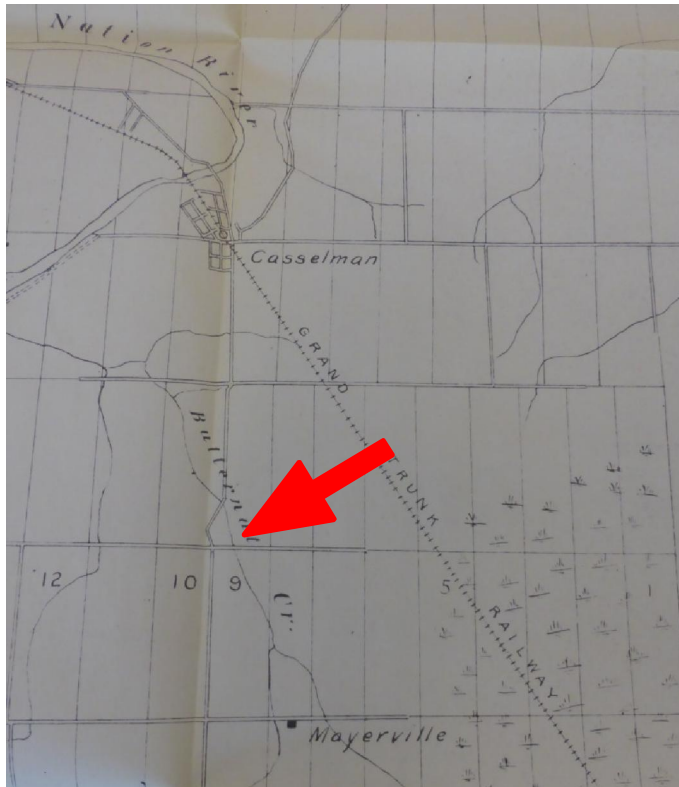


Figure 7 – Excerpt from 1915 map of the Township of Cambridge, with red arrow showing current location of Bridge C001. (LAC F/430/Cambridge/1915, Township of Cambridge, Office of Public Roads and Highways; arrow added by LSHC)



Figure 8 – Excerpt from 1954 map of Prescott-Russell, with red arrow showing the location of Bridge C001. (LAC, NMC52581, DHO, microfiche copy; arrow added by LSHC)



Figure 9 – South portal of Bridge C001. (LSHC 2013) 876



Figure 10 – SP010 “Wilson Bridge”, is a pony-truss bridge built in 1919 over the Scotch River. (Keystone, 2013)



Figure 11 – SP020 “Chartrand Bridge” (1930, left) and C005 “Touchette Bridge” (1950, right) are through-truss bridges over the South Nation River in The Nation Municipality. (Keystone, 2013)



Figure 12 – CA004A (left) and CA009 (right) are concrete T-beam bridges built in 1935 over Caledonia and Paxton creeks, respectively. (Keystone, 2013)



Figure 13 – SP003, built 1960 over the West Scotch River, is a concrete slab on steel girder, similar to C001.



Figure 14 – North portal of Bridge C001. (LSHC 2013) 859

APPENDIX D – CONSULTATION MATERIALS

Title	First Name	Last Name	Position	Organization	Address	City	Prov	Postal Code	Telephone	Email
Provincial Agency										
Sir/Madam			Class EA Form	Ministry of Environment, Conservation and Parks						eanotification.eregion@ontario.ca
Mr.	John	Boos	District Supervisor- Kemptville District	Ministry of Natural Resources and Forestry	Unit 1, 10 Campus Drive	Kemptville	ON	K0G 1J0	613-258-8222	john.boos@ontario.ca
Ms.	Karla	Barboza	Team Lead- Heritage, Heritage Planning Unit	Ministry of Heritage, Sport, Tourism and Culture Industries	401 Bay Street	Toronto	ON	M7A 0A7	416-314-7120	karla.barboza@ontario.ca
Ms.	Sarah	Zelcer	Manager, Indigenous Relations Unit	Ministry of Indigenous Affairs	160 Bloor Street, Suite 400	Toronto	ON	M7A 2E6	647-964-4095	sarah.zelcer@ontario.ca
Sir/Madam			Fish and Fish Habitat Protection Program	Fisheries and Oceans Canada Centre for Inland Waters	867 Lakeshore Road	Burlington	ON	L7S 1A1	905-336-4999	info@dfo-mpo.gc.ca
Mr.	Stéphane	Sarrazin	MPP	Glengarry-Prescott-Russell	290A McGill Street	Hawkesbury	ON	K6A 1P8	613-632-2706	Stephane.Sarrazin@pc.ola.org
Mr.	Francis	Drouin	Member of Parliament	Glengarry-Prescott-Russell	993 Notre Dame Street	Embrun	ON	K0A 1W0	613-292-8222	Francis.Drouin@parl.gc.ca
Municipal Agency										
Mr.	Francois	St. Amour	Mayor	The Nation Municipality	958 Route 500 West	Casselman	ON	K0A 1M0	613-524-5486 or 613-277	francois.st-amour@nationmun.ca
Mr.	Danik	Forgues	Councillor- Ward 3	The Nation Municipality	958 Route 500 West	Casselman	ON	K0A 1M0	613-222-1510	danik.forgues@nationmun.ca
Ms.	Josée	Brizard	Chief Administrative Officer-Clerk	The Nation Municipality	958 Route 500 West	Casselman	ON	K0A 1M0	613-764-5444 X 235	jbrizard@nationmun.ca
Mr.	Guylain	Lafleche	Director, Construction, Planner	The Nation Municipality	958 Route 500 West	Casselman	ON	K0A 1M0	613-764-5444 x 229	glafleche@nationmun.ca
Mr.	Marc	Legault	Director of Public Works	The Nation Municipality	958 Route 500 West	Casselman	ON	K0A 1M0	613-524-2932 x 202	marclegault@nationmun.ca
Ms.	Stéphane P.	Parisien	Chief Administrative Officer	United Counties of Prescott-Russell	59 Court Street, PO Box 304	L'Original	ON	K0B 1K0	613-675-4661 x 2000	spparisien@prescott-russell.on.ca
Mr.	Jérémie	Bouchard	Public Works Interim Director/Engineer	United Counties of Prescott-Russell	59 Court Street, PO Box 304	L'Original	ON	K0B 1K0	613-675-4661 x 3501	jbouchard@prescott-russell.on.ca
Emergency Services										
Mr.	Richard	Groulx	Fire Chief/Health and Safety Coordinator	The Nation Municipality	958 Route 500 West	Casselman	ON	K0A 1M0	613-764-5444	rgroulx@nationmun.ca
Inspector	Luc	Duval	Detachment Commander	Ontario Provincial Police - Russell County	411 New York Central Avenue	Embrun	ON	K0A 1W1	613-443-4499	luc.duval@opp.ca
Mr.	Marc-Andre	Periard	Director, Emergency Services	United Counties of Prescott-Russell	584 County Road 9, P.O Box 150	Plantagenet	ON	K0B 1L0	613-673-5139	maperiard@prescott-russell.on.ca
Mr.	Christian	Boudreau	Deputy Chief of Operations	United Counties of Prescott-Russell	111 Millennium Parkway	Plantagenet	ON	K0B 1L0	613-673-5139	cboudreau@prescott-russell.on.ca
Indigenous Communities										
Grand Chief	Abram	Benedict	Grand Chief	Mohawk Council of Akwesasne	101 Tewesateni Road	Akwesasne	ON	K6H 0G5	613-575-2250 x 2166	grand.chief@akwesasne.ca
Sir/Madam			Consultation Unit	Métis Nation of Ontario	Suite 1100 - 11th Floor 66 Slater Street	Ottawa	ON	K1P 5H1	613-798-1488	consultations@metisnation.org
Mr.	Daniel	Charbonneau	Executive Director	Algonquins of Ontario	31 Riverside Drive, Suite 101	Pembroke	ON	K8A 8R6	613-735-3759	algonquins@tanakiwin.com
Grand Chief	Remy	Vincent	Grand Chief	Huron-Wendat First Nation	255, place Chef Michel Laveau	Wendake	QC	G0A 4V0	418-843-3767	administration@wendake.ca
Ms.	Maxime	Picard	Project Coordinator - Ontario	Huron-Wendat First Nation	255, place Chef Michel Laveau	Wendake	QC	G0A 4V0	418-843-3769 x. 2105	maxime.picard@cnhw.qc.ca
Conservation Authority										
Ms.	Alison	McDonald	Team Lead, Approvals	South Nation Conservation	38 Victoria Street, PO Box 29	Finch	ON	K0C 1K0		amcdonald@nation.on.ca
Ms	Michelle	Cavanagh	Team Lead, Stewardship	South Nation Conservation	38 Victoria Street, PO Box 29	Finch	ON	K0C 1K0		mcavanagh@nation.on.ca
Mr.	Geoff	Owens	Regulation Officer	South Nation Conservation	38 Victoria Street, PO Box 29	Finch	ON	K0C 1K0		gowens@nation.on.ca
School Boards/Transportation										
Mr.	Ron	Ferguson	Director of Education	Upper Canada District School Board	225 Central Avenue West	Brockville	ON	K6V 5X1	613-342-0371	ron.ferguson@ucdsb.on.ca
Ms.	Lyne	Racine	Director of Education and Secretary	Conseil scolaire de district catholique de l'Est ontarien	875 County Road 17	L'Original	ON	K0B 1K0	613 675-4691	courriel@csdceo.org or email@csdceo.org
Ms.	Laurie	Corrigan	Director of Education	Catholic District School Board of Eastern Ontario	Box 2222, 2755 Highway 43	Kemptville	ON	K0G 1J0	613-258-7757	director@cdsbeo.on.ca
Ms.	Sylvie CR	Tremblay	Director of Education	Conseil des écoles publiques de l'Est de l'Ontario	2445 Boul. St-Laurent	Ottawa	ON	K1C 6C3	613-742-8960	sylvie.tremblay@cepeo.on.ca
Sir/Madam				Consortium de transport scolaire de l'Est	665 rue Principale	Casselman	ON	K0A 1M0	1-855-689-2873	info@ctse.ca
Sir/Madam				Student Transportation of Eastern Ontario	PO Box 1179, 104 Commerce Drive	Prescott	ON	K0E 1T0	613-925-0022	transportation@steo.ca
Businesses/Residents										
Direct Mail to residents within 1 km of bridge										
Sir/Madam						Casselman	ON	K0A 1M0		
				St. Albert Storage		Casselman	ON	K0A 1M0		
Sir/Madam						Casselman	ON	K0A 1M0		
Sir/Madam						Casselman	ON	K0A 1M0		
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Sir/Madam						Casselman	ON	K0A 1M0		
Sir/Madam						Casselman	ON	K0A 1M0		
Ms.						Casselman	ON	K0A 1M0		
Sir/Madam						Casselman	ON	K0A 1M0		
Sir/Madam						Casselman	ON	K0A 1M0		
Sir/Madam						Casselman	ON	K0A 1M0		
Mr.						Casselman	ON	K0A 1M0		
Utilities										

Ms.	Jessica	Prézeau		The Nation Municipality	958 Route 500 West	Casselman	ON	K0A 1M0	613-764-5444 x 234	utility@nationmun.ca
Mr.	Doug	Renaud	Director of Water and Wastewater	The Nation Municipality	959 Route 500 West	Casselman	ON	K0A 1M0	613-764-5444 x 300	drenaud@nationmun.ca
Sir/Madam				Bell Canada Municipal Operations Centre	7777 Weston Road	Vaughan	ON	L4L 0G9		
Sir/Madam				Hydro Ottawa	3025 Albion Road North, Box 8700	Ottawa	ON	K1G 3S4	613-738-6400	
Sir/Madam				Rogers Communications	800 York Street	London	ON	N6A 5B1		
Sir/Madam				Hydro One Networks	483 Bay Street South Tower, 8th Floor	Toronto	ON	M5G 2P5		
Sir/Madam				B2B2C Inc.	2700, Michelin Street	Laval	QC	H7L 5Y1	519-336-1829	
Sir/Madam				Multilink Wireless	568 Rte 600 Est #3	Casselman	ON	K0A 1M0	613-764-4441	
Sir/Madam				Eastlink	PO Box 8660, Station A	Halifax	NS	B3K 5M3		
Sir/Madam				TekSavvy	800 Richmond Street	Chatham	ON	N7M 5J5		
Sir/Madam				Xplornet	300 Lockhart Mill Road, PO Box 9060	Woodstock	ON	E7M 6B5	506-328-8853	

September 19, 2022

To Whom it May Concern:

**Re: Notice of Commencement
Route 800 East Realignment
Municipal Class Environmental Assessment**

The Nation Municipality has retained McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) to provide consulting services to complete a Municipal Class Environmental Assessment for an existing bridge (C001) on Route 800 East. The existing bridge (C001) that spans Butternut Creek on Route 800 East has reached the end of its service life. The Municipality is considering various alternative solutions. At this time, the preliminary Technically Preferred Alternative is to close Route 800 East at the bridge and construct a new road alignment to by-pass the creek on the north-east side.

The study is being conducted in accordance with Schedule B of the Municipal Class Environmental Assessment (EA) (October 2000, as amended) process. This notice signals the commencement of the Class EA. The study will confirm and document the existing structural deficiencies and identify alternative solutions. This study will investigate the potential environmental, social and economic impacts of the preferred alternative and identify measures to mitigate any adverse impacts. The environmental impacts of each alternative will be evaluated and in consultation with the public and external agencies, a technically preferred alternative will be selected. Per the requirements of the Schedule 'B' Municipal Class Environmental Assessment, a draft Project File Report has been prepared and is available for viewing on Nation Municipality website: <https://nationmun.ca/en/council-staff/announcements-notices>.

Public consultation is vital to the success of this study. We want to ensure that anyone interested in this study has the opportunity to get involved and provide input. If you have any questions or comments regarding the study or would like to be included on the mailing list to receive future notices and study updates, please contact one of the Project Team members below. Input received will be incorporated into the planning and design process for this project and will be received until October 19, 2022.

For further information on this project please contact the following:

Marc Legault
The Nation Municipality
3248 County Road 9
Fournier, ON K0B 1G0
Telephone: 613-524-2932 ext. 202
Email: marclegault@nationmun.ca

Christine Shillinglaw, P.Eng.
McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road, R.R.3
Carp, ON, K0A 1L0
Phone: 613-714-0794
Fax: 613-836-3742
Email: c.shillinglaw@mcintoshperry.com

Pour des renseignements en français au sujet de ce projet, veuillez rejoindre Patrick Leblanc en composant le 613-714-4586 ou par courriel au p.leblanc@mcintoshperry.com.

Information collected will be used in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments become part of the public record. If you have accessibility requirements in order to participate in this project, please contact one of the project team members listed above.

Thank you for your anticipated assistance and cooperation.

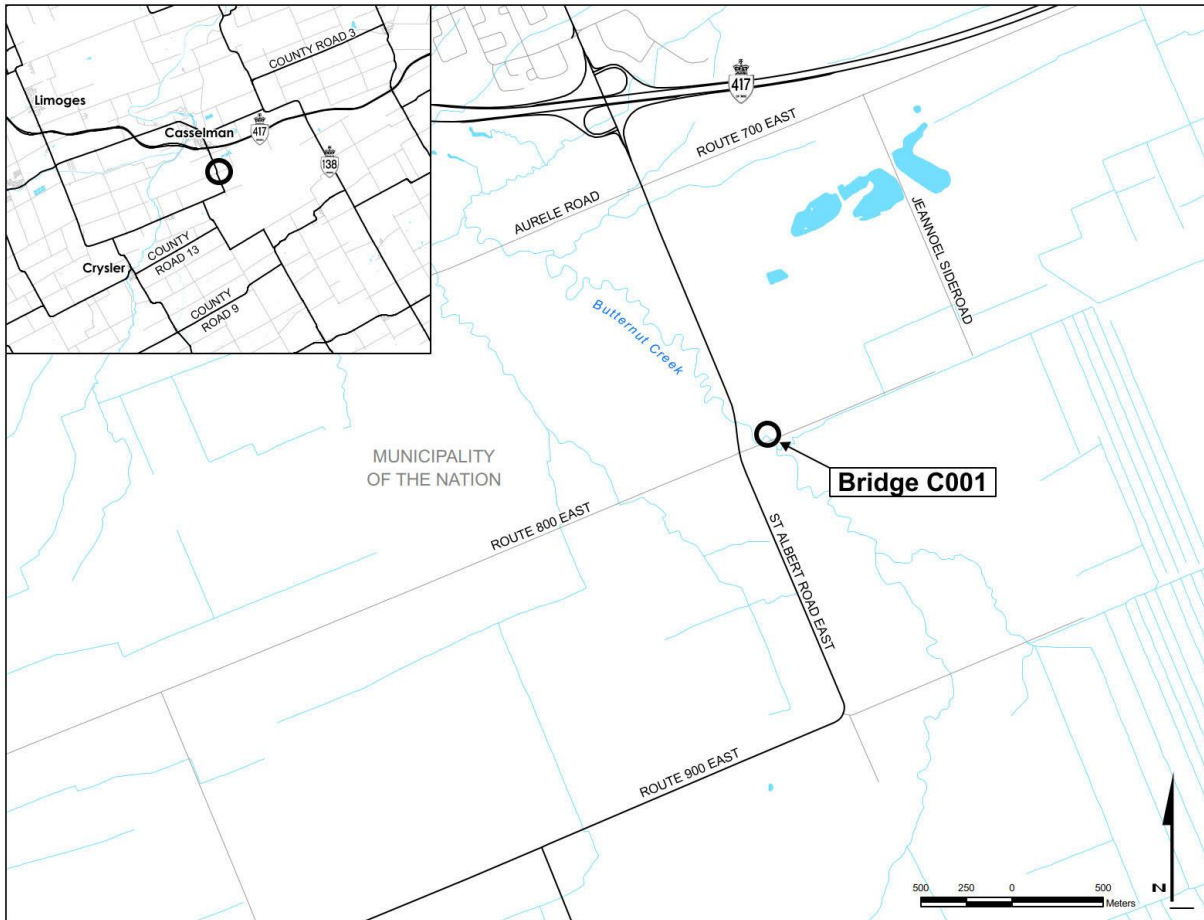
Sincerely,

McIntosh Perry Consulting Engineers Ltd.,



Christine Shillinglaw, P.Eng.
Project Manager

Encl. Key Plan



Key Plan

Le 20 septembre 2022

À qui de droit:

**Objet: Avis de début d'étude réaligement de la Route 800 est
Évaluation environnementale de classe municipale**

La Municipalité de La Nation a retenu les services de McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) pour fournir des services de consultation afin de réaliser une évaluation environnementale de portée municipale pour un pont existant (C001) sur la route 800 Est.

Le pont existant (C001) qui enjambe le ruisseau Butternut sur la route 800 Est a atteint la fin de sa durée de vie utile. La Municipalité envisage diverses solutions alternatives. À l'heure actuelle, l'alternative techniquement préférée préliminaire consiste à fermer la route 800 Est au pont et à construire un nouveau tracé routier pour contourner le ruisseau du côté nord-est. L'étude est menée conformément à l'annexe B du processus d'évaluation environnementale municipale de portée générale (EE) (octobre 2000, tel que modifié). Cet avis signale le début de l'évaluation environnementale de classe.

L'étude confirmera et documentera les déficiences structurelles existantes et identifiera des solutions alternatives. Les impacts environnementaux de chaque alternative seront évalués et en consultation avec le public et les agences externes, une alternative techniquement préférée sera sélectionnée. Conformément aux exigences de l'évaluation environnementale municipale de portée générale de l'annexe « B », une ébauche du rapport de dossier de projet a été préparée et peut être consultée sur le site Web de la municipalité de la Nation: <https://nationmun.ca/en/council-staff/annoncements-notices>.

La consultation publique est essentielle à la réussite de cette étude. Nous voulons nous assurer que toute personne intéressée par cette étude ait la possibilité de s'impliquer et de fournir des commentaires. Si vous souhaitez participer à cette étude ou recevoir des informations, veuillez contacter l'un des membres de l'équipe de projet identifié ci-dessous. Les commentaires reçus seront intégrés au processus de planification et de conception de ce projet et seront reçus jusqu'au 19 octobre 2022.

Pour plus d'informations sur ce projet, veuillez contacter :

Marc Legault
La Municipalité de la Nation
Directeur des travaux publics
3248, chemin de comté 9
Fournier, Ontario K0B 1G0
T – 613-524-2932 poste. 202
marclegault@nationmun.ca

Christine Shillinglaw, P.Eng.
McIntosh Perry Consulting Engineers Ltd.
Chef de projet
115, chemin Walgreen
Carpe, Ontario K0A 1L0
T-613-714-0794
c.shillinglaw@mcintoshperry.com

Pour des renseignements en français au sujet de ce projet, veuillez rejoindre Patrick Leblanc en composant le 613-714-4586 ou par courriel au p.leblanc@mcintoshperry.com.

Les renseignements recueillis seront utilisés conformément à la Loi sur l'accès à l'information municipale et la protection de la vie privée. À l'exception des renseignements personnels, tous les commentaires font partie du dossier public. Si vous avez des exigences en matière d'accessibilité pour participer à ce projet, veuillez contacter l'un des membres de l'équipe de projet énumérés ci-dessus.

Merci d'avance pour votre assistance et coopération.

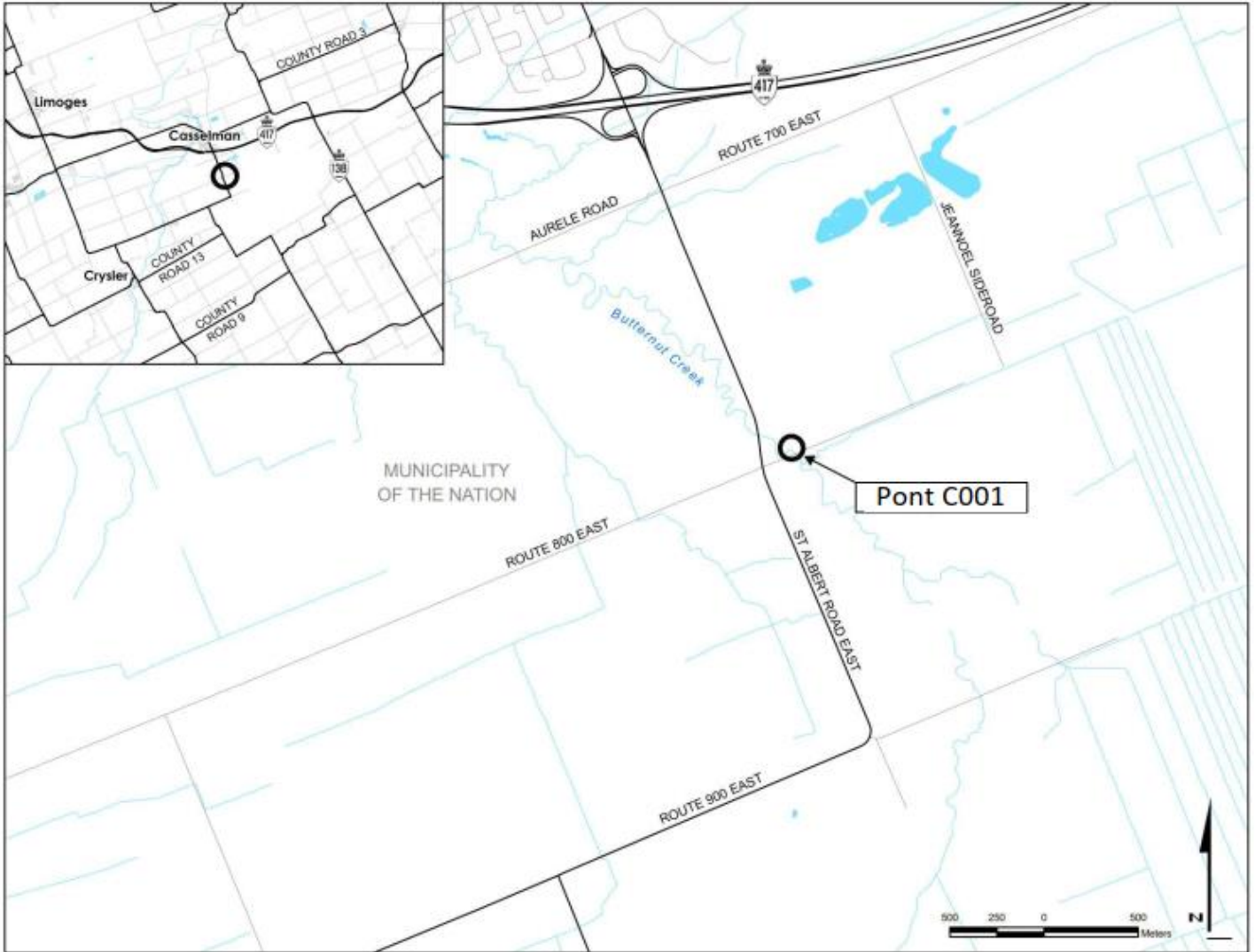
Je vous prie d'agréer, Mesdames, Messieurs, mes salutations distinguées,

McIntosh Perry Consulting Engineers Ltd.,



Christine Shillinglaw, P.Eng.
Chef de projet

p.j. Plan de la région à l'étude



Plan de la region à l'étude

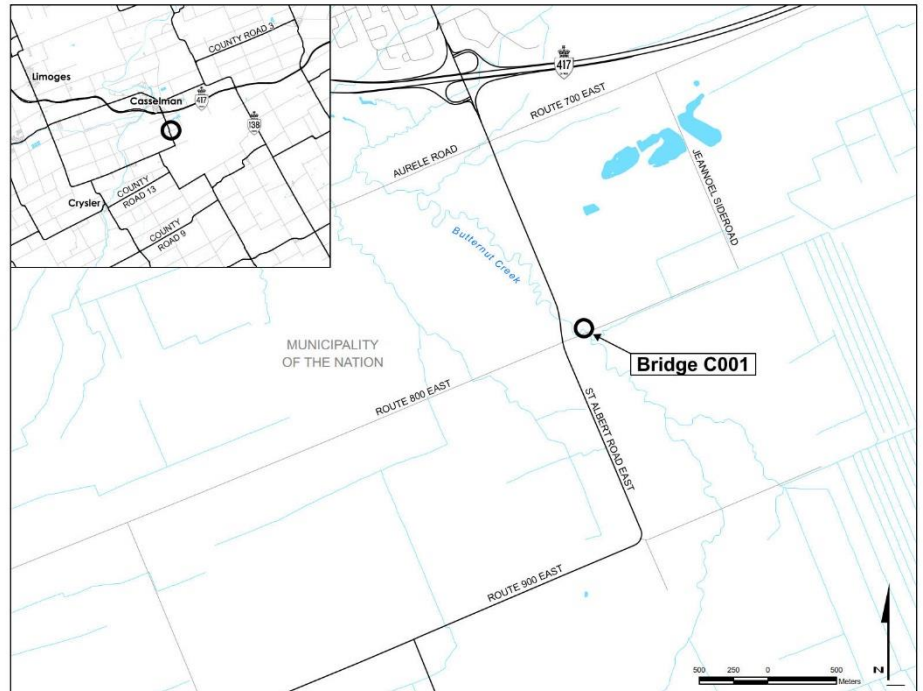


NOTICE OF STUDY COMMENCEMENT ROUTE 800 EAST REALIGNMENT MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

The Nation Municipality has retained McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) to provide consulting services to complete a Municipal Class Environmental Assessment for an existing bridge (C001) on Route 800 East.

The existing bridge (C001) that spans Butternut Creek on Route 800 East has reached the end of its service life. The Municipality is considering various alternative solutions. At this time, the preliminary Technically Preferred Alternative is to close Route 800 East at the bridge and construct a new road alignment to by-pass the creek on the north-east side.

The study is being conducted in accordance with Schedule B of the Municipal Class Environmental Assessment (EA) (October 2000, as amended) process. This notice signals the commencement of the Class EA. The study will confirm and document the existing structural deficiencies and identify alternative solutions. The environmental impacts of each alternative will be evaluated and in consultation with the public and external agencies, a technically preferred alternative will be selected. Per the requirements of the Schedule 'B' Municipal Class Environmental Assessment, a draft Project File Report has been prepared and is available for viewing on Nation Municipality website: <https://nationmun.ca/en/council-staff/announcements-notices>.



Public consultation is vital to the success of this study. We want to ensure that anyone interested in this study has the opportunity to get involved and provide input. If you wish to be involved in this study or receive information, please contact one of the Project Team Members identified below. Input received will be incorporated into the planning and design process for this project and will be received until October 19, 2022.

For further information on this project please contact the following:

Marc Legault

The Nation Municipality
Director of Public Works
3248 County Road 9
Fournier, Ontario K0B 1G0
T – 613-524-2932 ext. 202
marclegault@nationmun.ca

Christine Shillinglaw, P.Eng

McIntosh Perry Consulting Engineers Ltd.
Project Manager
115 Walgreen Road
Carp, Ontario K0A 1L0
T – 613-714-0794
c.shillinglaw@mcintoshperry.com

Pour des renseignements en français au sujet de ce projet, veuillez rejoindre Patrick Leblanc en composant le 613-714-4586 ou par courriel au p.leblanc@mcintoshperry.com.

Information collected will be used in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments become part of the public record. If you have accessibility requirements in order to participate in this project, please contact one of the project team members listed above.

This notice was first issued on September 19, 2022

November 28, 2022

To Whom it May Concern:

**Re: Notice of Council Meeting
Route 800 East Realignment
Municipal Class Environmental Assessment**

The Nation Municipality has retained McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) to provide consulting services to complete a Municipal Class Environmental Assessment for an existing bridge (C001) on Route 800 East.

The existing bridge (C001) that spans Butternut Creek on Route 800 East has reached the end of its service life. The Municipality is considering various alternative solutions. At this time, the preliminary Technically Preferred Alternative is to close Route 800 East at the bridge and construct a new road alignment to by-pass the creek on the north-east side.

The study is being conducted in accordance with Schedule B of the Municipal Class Environmental Assessment (EA) (October 2000, as amended) process. This notice signals the commencement of the Class EA. The study will confirm and document the existing structural deficiencies and identify alternative solutions. This study will investigate the potential environmental, social and economic impacts of the preferred alternative and identify measures to mitigate any adverse impacts. The environmental impacts of each alternative will be evaluated and in consultation with the public and external agencies, a technically preferred alternative will be selected. Per the requirements of the Schedule 'B' Municipal Class Environmental Assessment, a draft Project File Report has been prepared and is available for viewing on Nation Municipality's website: <https://nationmun.ca/en/council-staff/announcements-notices>.

At this time, Mr. Marc Legault, Director of Public Works, has requested that McIntosh Perry provide an update to the new Council members pertaining to the Butternut Creek Bridge and potential realignment of Route 800 East. The presentation will outline the history of this project, as well as inform them of the current Environmental Assessment process. The Council Meeting has been scheduled for December 12th, 2022 @ 4:30 pm. The Council meeting will be held at 958 Route 500 W, Casselman, Ontario.

Public consultation is vital to the success of this study. We want to ensure that anyone interested in this study has the opportunity to get involved and provide input. If you have any questions or comments regarding the study following the Council Meeting, please contact one of the Project Team members below.

For further information on this project, please contact the following:

Marc Legault
The Nation Municipality
Director of Public Works
3248 County Road 9
Fournier, ON K0B 1G0
Telephone: 613-524-2932 ext. 202
Email: marclegault@nationmun.ca

Christine Shillinglaw, P.Eng.
McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road, R.R.3
Carp, ON, K0A 1L0
Phone: 613-714-0794
Fax: 613-836-3742
Email: c.shillinglaw@mcintoshperry.com

Pour des renseignements en français au sujet de ce projet, veuillez rejoindre Patrick Leblanc en composant le 613-714-4586 ou par courriel au p.leblanc@mcintoshperry.com.

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Thank you for your anticipated assistance and cooperation.

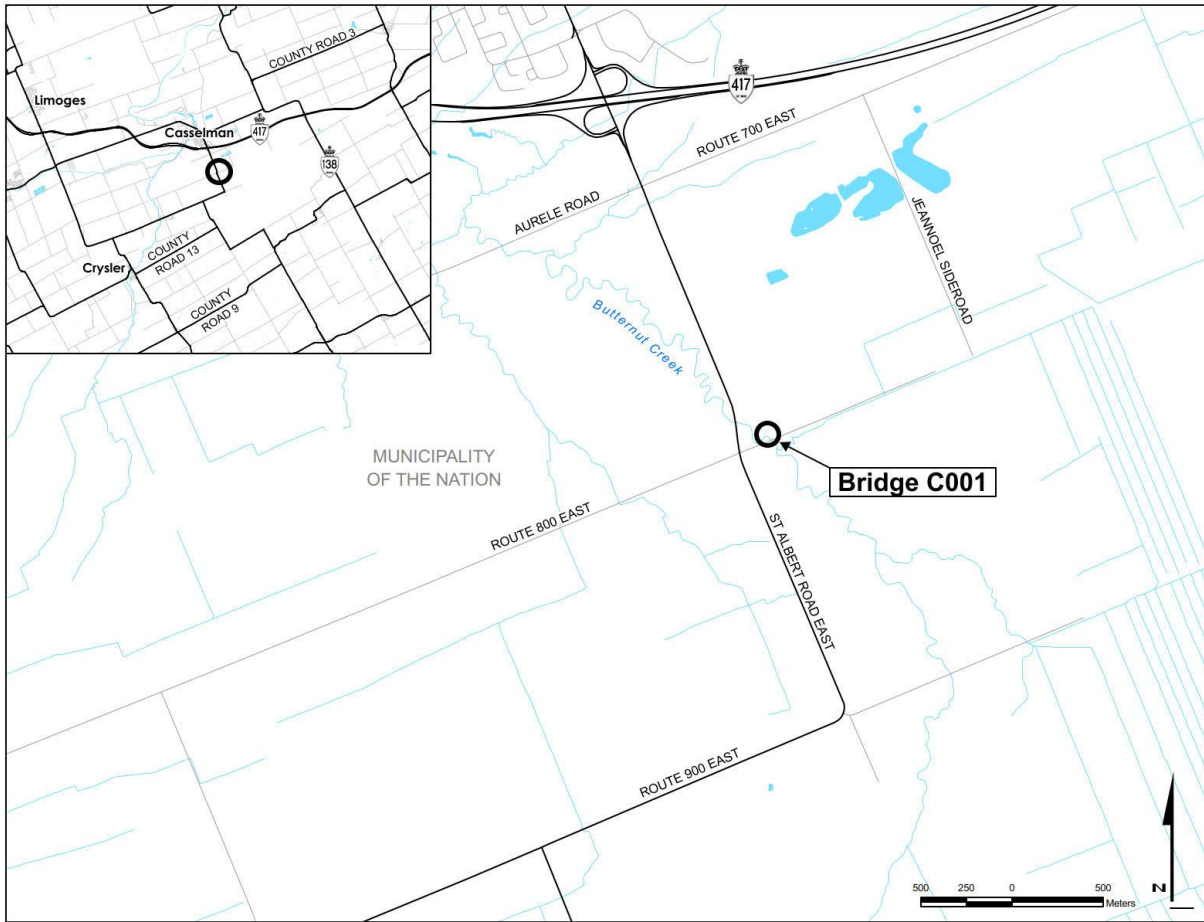
Sincerely,

McIntosh Perry Consulting Engineers Ltd.,



Christine Shillinglaw, P.Eng.
Project Manager

Encl. Key Plan



Key Plan

À qui de droit:

**Objet: Avis de convocation à la réunion du Conseil concernant
le réalignement de la route 800 Est
Évaluation environnementale de classe municipale**

La Municipalité de La Nation a retenu les services de McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) pour fournir des services de consultation afin de réaliser une évaluation environnementale de portée municipale pour un pont existant (C001) sur la route 800 Est.

Le pont existant (C001) qui enjambe le ruisseau Butternut sur la route 800 Est a atteint la fin de sa durée de vie utile. La Municipalité envisage diverses solutions alternatives. À l'heure actuelle, l'alternative techniquement préférée préliminaire consiste à fermer la route 800 Est au pont et à construire un nouveau tracé routier pour contourner le ruisseau du côté nord-est.

L'étude est menée conformément à l'annexe B du processus d'évaluation environnementale municipale de portée générale (EE) (octobre 2000, tel que modifié). Cet avis signale le début de l'évaluation environnementale de classe. L'étude confirmera et documentera les déficiences structurelles existantes et identifiera des solutions alternatives. Les impacts environnementaux de chaque alternative seront évalués et en consultation avec le public et les agences externes, une alternative techniquement préférée sera sélectionnée. Conformément aux exigences de l'évaluation environnementale municipale de portée générale de l'annexe « B », une ébauche du rapport de dossier de projet a été préparée et peut être consultée sur le site Web de la municipalité de la Nation: <https://nationmun.ca/en/council-staff/announcements-notice>.

M. Marc Legault, directeur des travaux publics, a demandé que McIntosh Perry fournisse une mise à jour aux nouveaux membres du conseil concernant le pont Butternut Creek et le réalignement potentiel de la route 800 Est. La présentation retracera l'histoire de ce projet et les informera du processus d'Évaluation Environnementale. La réunion du Conseil est prévue pour le 12 Décembre 2022 à 16h30 au 958 Route 500 W, Casselman, Ontario.

La consultation publique est essentielle à la réussite de cette étude. Nous voulons nous assurer que toute personne intéressée par cette étude ait la possibilité de s'impliquer et de fournir des commentaires. Si vous avez des questions ou des commentaires concernant l'étude après la réunion du Conseil, veuillez contacter l'un des membres de l'équipe de projet identifié ci-dessous.

Pour plus d'informations sur ce projet, veuillez contacter :

Marc Legault
La Municipalité de la Nation
Directeur des travaux publics
3248, chemin de comté 9
Fournier, Ontario K0B 1G0
T – 613-524-2932 poste. 202
marclegault@nationmun.ca

Christine Shillinglaw, P.Eng.
McIntosh Perry Consulting Engineers Ltd.
Chef de projet
115, chemin Walgreen
Carpe, Ontario K0A 1L0
T-613-714-0794
c.shillinglaw@mcintoshperry.com

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Merci d'avance pour votre assistance et coopération.

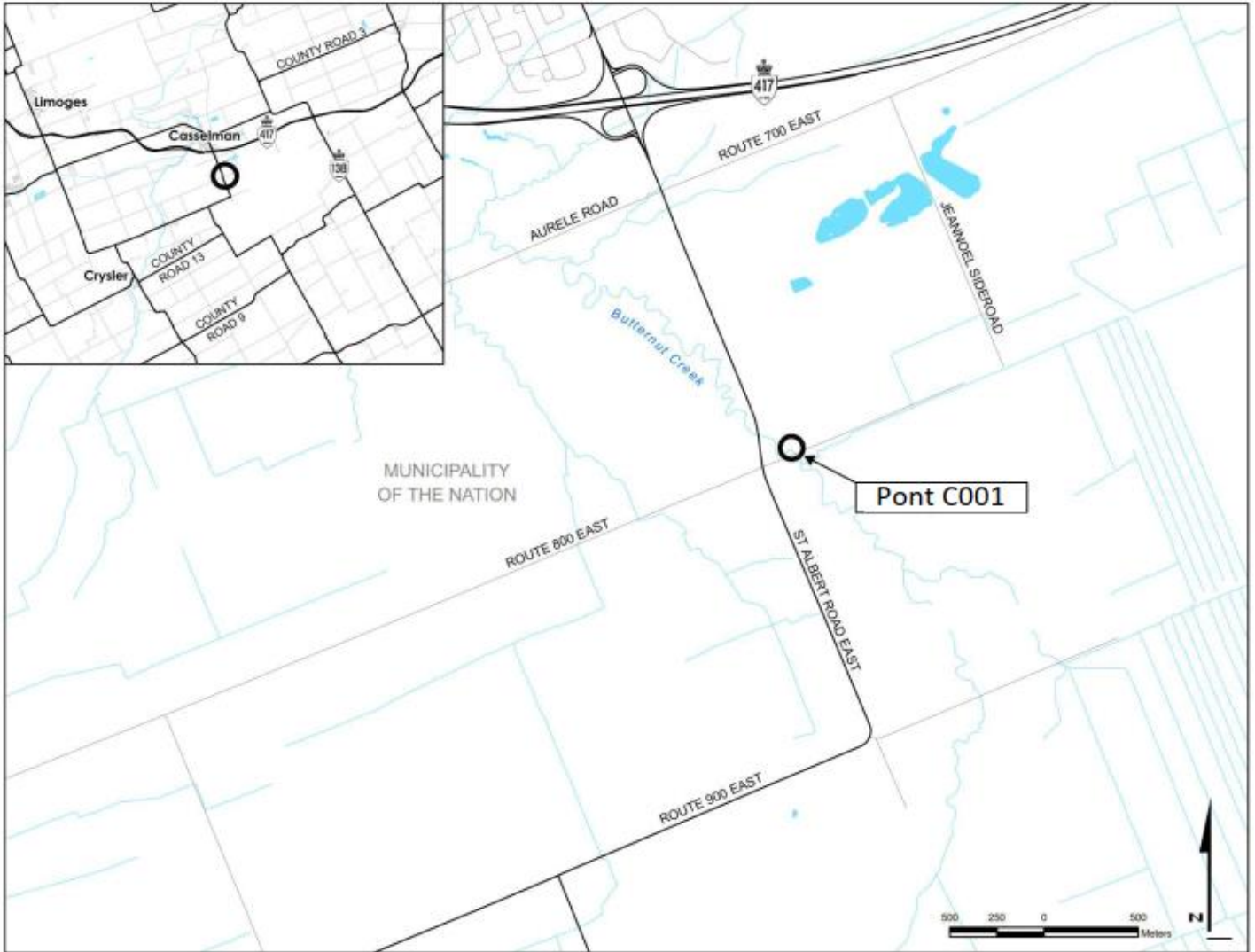
Je vous prie d'agréer, Mesdames, Messieurs, mes salutations distinguées,

McIntosh Perry Consulting Engineers Ltd.,



Christine Shillinglaw, P.Eng.
Chef de projet

p.j. Plan de la région à l'étude



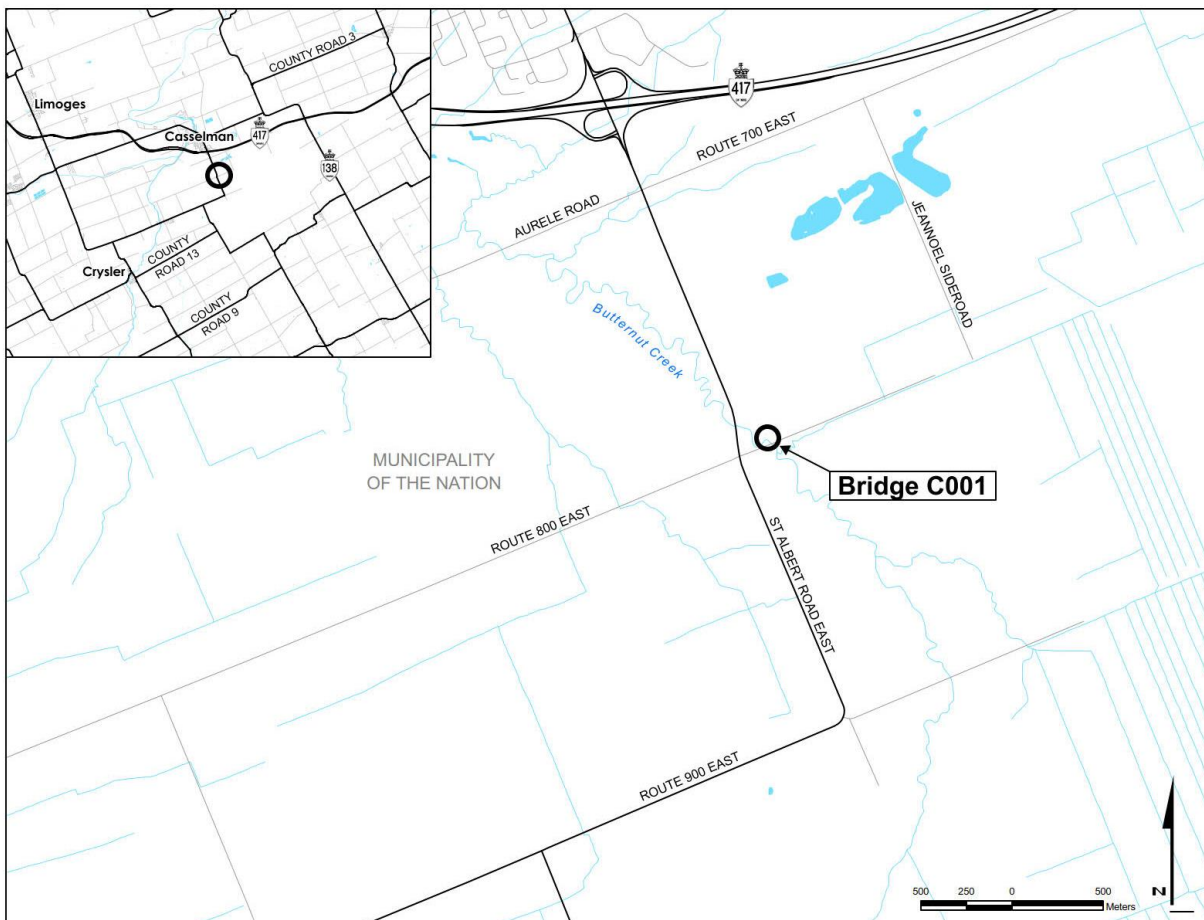
Plan de la région à l'étude



NOTICE OF PUBLIC INFORMATION CENTRE ROUTE 800 EAST REALIGNMENT MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

The Nation Municipality has retained McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) to provide consulting services to complete a Municipal Class Environmental Assessment for an existing bridge (C001) on Route 800 East.

The existing bridge (C001) that spans Butternut Creek on Route 800 East has reached the end of its service life. The Municipality is considering various alternative solutions. At this time, the preliminary Technically Preferred Alternative is to close Route 800 East at the bridge and construct a new road alignment to by-pass the creek on the north-east side.



The Study Process

The study is being conducted in accordance with Schedule B of the Municipal Class Environmental Assessment (EA) (October 2000, as amended) process in order to identify and develop a technically preferred alternative solution for addressing concerns related to the existing bridge (C001) on Route 800 East.

Public Information Centre

The purpose of this notice is to invite you to participate in the Public Information Centre (PIC) for this project. The PIC will present the study process, existing conditions, alternative solutions, identify the recommended Technically Preferred Alternative and provide opportunity for public input and comments. The PIC will be held as follows:

Wednesday, January 11, 2023
St-Albert Community Centre
201 Principale Street, St-Albert, Ontario
6:00 p.m. – 8:00 p.m. (Presentation format)

As per the requirements of the Schedule B MCEA, a draft Project File Report is being maintained throughout the Class EA Study and is available for viewing on Nation Municipality's website: <https://nationmun.ca/en/council-staff/announcements-notices>. The final Project File Report will be made available for a 30-day public review period at the conclusion of the study.

For further information on this project please contact the following:

Marc Legault

The Nation Municipality
Director of Public Works
3248 County Road 9
Fournier, Ontario K0B 1G0
Telephone: 613-524-2932 ext. 202
marclegault@nationmun.ca

Christine Shillinglaw, P.Eng.

McIntosh Perry Consulting Engineers Ltd.
Project Manager
115 Walgreen Road
Carp, Ontario K0A 1L0
Telephone: 613-714-0794
c.shillinglaw@mcintoshperry.com

Pour des renseignements en français au sujet de ce projet, veuillez rejoindre Patrick Leblanc en composant le 613-714-4586 ou par courriel au p.leblanc@mcintoshperry.com.

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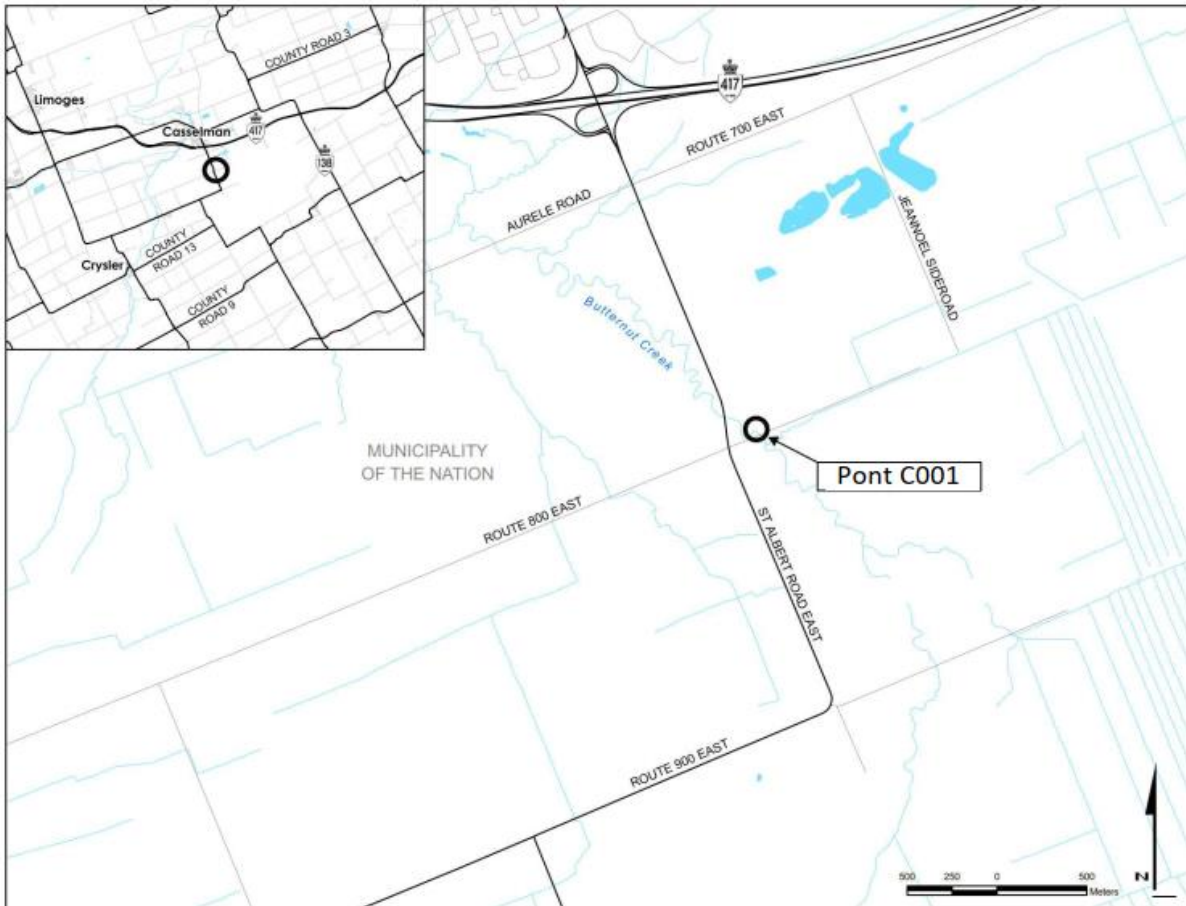
This notice was first issued on December 12, 2022



AVIS DE CENTRE D'INFORMATION PUBLIQUE LE RÉALIGNEMENT DE LA ROUTE 800 EST ÉVALUATION ENVIRONNEMENTALE DE CLASSE MUNICIPALE

La Municipalité de La Nation a retenu les services de McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) pour fournir des services de consultation afin de réaliser une évaluation environnementale de portée municipale pour un pont existant (C001) sur la route 800 Est.

Le pont existant (C001) qui enjambe le ruisseau Butternut sur la route 800 Est a atteint la fin de sa durée de vie utile. La Municipalité envisage diverses solutions alternatives. À l'heure actuelle, l'alternative techniquement préférée préliminaire consiste à fermer la route 800 Est au pont et à construire un nouveau tracé routier pour contourner le ruisseau du côté nord-est.



Le processus d'étude

L'étude est menée conformément à l'annexe B du processus d'évaluation environnementale municipale de portée générale (octobre 2000, telle que modifiée) afin de déterminer et d'élaborer une solution de rechange techniquement privilégiée pour répondre aux préoccupations liées au pont existant (C001) sur la route 800 Est.

Centre d'information publique

Le but de cet avis est de vous inviter à participer au Centre d'information publique (CIP) pour ce projet. Le commandant de bord présentera le processus d'étude, les conditions existantes, les solutions de rechange, identifiera la solution de rechange techniquement privilégiée recommandée et donnera au public l'occasion de formuler des commentaires et des commentaires. Le CIP se déroulera comme suit :

Mercredi 11 janvier 2023
Centre communautaire de St-Albert
201 Rue Principale, St-Albert, Ontario
18h00 – 20h00 (Format de présentation)

Conformément aux exigences de l'évaluation environnementale municipale de portée générale de l'annexe « B », une ébauche du rapport de dossier de projet a été préparée et peut être consultée sur le site Web de la municipalité de La Nation: <https://nationmun.ca/en/council-staff/annoncements-notices>. Le rapport final du dossier de projet sera disponible pour une période d'examen public de 30 jours à la fin de l'étude.

Pour plus d'informations sur ce projet, veuillez contacter :

Marc Legault

La Municipalité de la Nation
Directeur des travaux publics
3248, chemin de comté 9
Fournier, Ontario K0B 1G0
Téléphone: 613-524-2932 poste. 202
marclegault@nationmun.ca

Christine Shillinglaw, P.Eng.

McIntosh Perry Consulting Engineers Ltd.
Chef de projet
115 Walgreen Road
Carp, Ontario K0A 1L0
Téléphone: 613-714-0794
c.shillinglaw@mcintoshperry.com

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Cet avis a été émis pour la première fois le 12 décembre 2022.



PUBLIC INFORMATION CENTRE
BRIDGE C001 AND POTENTIAL
REALIGNMENT OF ROUTE 800

January 11, 2023



McINTOSH PERRY

1

PRESENTATION OUTLINE

- 1 Project Study Area
- 2 Purpose of the Study
- 3 Existing Structure
- 4 Municipal Class Environmental Assessment Process
- 5 Problem and Opportunity Statement
- 6 Summary of Consultation
- 7 Alternative Solutions
- 8 Evaluation of Alternative Solutions & Criteria
- 9 Recommended Technically Preferred Alternative
- 10 Proposed Realignment

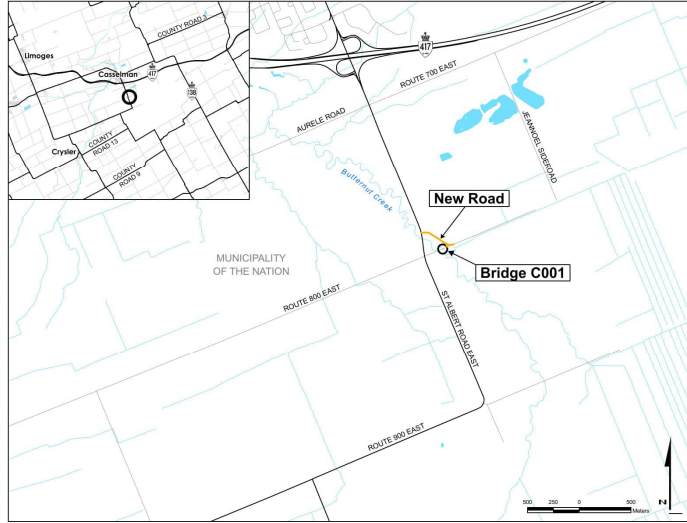


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PROJECT STUDY AREA

The Bridge C001 is located in the Municipality of Nation, United Counties of Prescott and Russell, Ontario. The existing Bridge C001 is located on Route 800 East and 0.2 km east of St. Albert Street and runs in an east-west direction. The bridge Butternut Creek.



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3

PURPOSE OF THE STUDY

The bridge is in poor condition and requires replacement.

The bridge serves as a connection for local residence and is used by the farming community.

Nation Municipality is currently undertaking a Schedule "B" Municipal Class Environmental Assessment Study to identify and evaluate alternative solutions to address the aging infrastructure.



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4

EXISTING STRUCTURE



Configuration and Condition

- The bridge was built in 1951 (71 years old) and is reaching the end of its service life.
- The existing Bridge C001 is a single-span 8.0 m long concrete slab on steel girder bridge.
- The bridge is a single lane structure that accommodates two-way traffic and terminates in a dead end approximately 1 km east of the bridge.
- The bridge railings are comprised of steel posts set into the concrete abutment or attached to the steel girders and linked by steel cables. Railing along the approach to the bridge are comprised of timber posts linked by steel cables.
- The recent inspections on the bridge note the bridge is in poor condition.



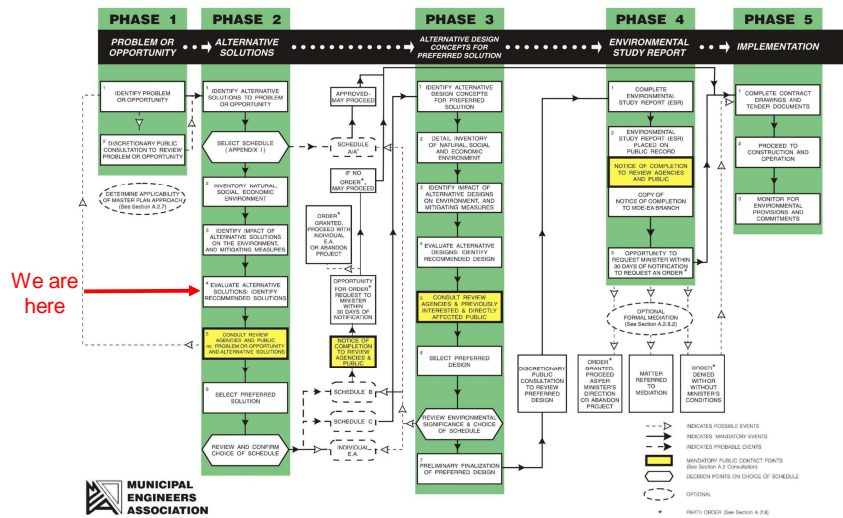
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5

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT PROCESS

The Municipal Class Environmental Assessment Process (MCEA) is a process by which municipal infrastructure projects are planned in accordance with the Environmental Assessment Act. The MCEA gives due regard to protect the environment, impacts, and includes the involvement of affected stakeholders in the decision-making process.

Please visit: <https://municipalclasse.ca> for more information on the Municipal Class Environmental Assessment Process.



Source: The process flow chart was adapted from the Municipal Class Environment Assessment documentation at www.municipalclasse.ca.
Note: The current step of the Class EA process is highlighted in red.



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PROBLEM/OPPORTUNITY STATEMENT



The existing Bridge C001 is located on Route 800 East and 0.2 km east of St. Albert Street and runs in an east-west direction. The bridge was built in 1951 and is a concrete slab on steel girder structure with a length of 8.0 m and a width of 5.0 m. Bridge C001 is nearing the end of its service life. Therefore, the Nation Municipality has the opportunity to identify and evaluate alternative solutions and determine a preferred solution in accordance with the Municipal Class Environmental Process.



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SUMMARY OF CONSULTATION

- The following consultation was conducted during this MCEA study:
- Notice of Study Commencement – September 19, 2022
 - Distributed to the project contact list.
- Consultation with Indigenous Communities – October 12, 2022
 - Mohawk Council of Akwesasne, Algonquins of Ontario, Huron-Wendat Nation
- Pre-Consultation with South Nation Conservation Authority – April 18, 2020 & October 21, 2022
 - Presented the study process, potential alternative solution and elicit input.
- Pre-Consultation with United Counties of Prescott and Russell – September 30, 2022



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ALTERNATIVE SOLUTIONS TO THE PROBLEM/ OPPORTUNITY STATEMENT

Alternative 1: Do Nothing

Involves leaving the existing bridge in place, in its deteriorating condition and continuing to restrict public access. Through the MCEA process this alternative acts as a benchmark for the other Alternative Solutions.

Alternative 2: Rehabilitate the existing Bridge C001

Rehabilitate the existing bridge to meet engineering and public safety standards. This alternative would attempt to extend the service of the structure by 10-15 years. A temporary detour would need to be installed on private property adjacent to the existing structure to detour traffic as the existing structure is not wide enough to accommodate staged construction for the rehabilitation. This alternative would require a temporary limited interest on private property to construct the detour.

Alternative 3: Replace the Existing Bridge

The new structure will have a life span of 75 years. The intention is to provide a structure that meets operational and safety standards. A temporary detour would need to be installed on private property to detour traffic to facilitate the demolition of the old bridge and construction of the new structure. This alternative would require a temporary limited interest on private property to construct the detour.

Alternative 4: Decommission of Existing Bridge and Construct a New Road Realignment

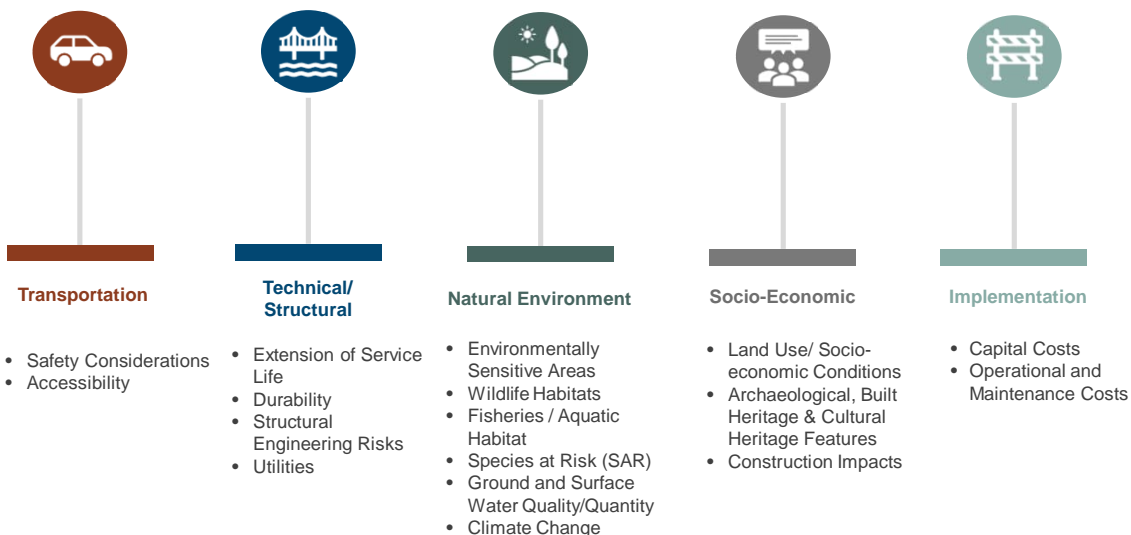
Removal of the existing bridge and provide new turn around areas on either side of the river crossing. This alternative would consist of constructing a new road alignment to by-pass the creek on the north-east side, as well as construction of new turnaround areas at the east and west ends of the bridge on Route 800. This alternative would include a permanent property acquisition.



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9



EVALUATION CRITERIA





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ALTERNATIVE 3: REPLACE THE EXISTING BRIDGE



 <p>PRO'S</p> <ul style="list-style-type: none"> • Provides connectivity for traffic over Butternut Creek. • Provides 75 year service life. • Low engineering risks (all components would be new). • Improvements to accessibility. New structure would have sufficient width to accommodate two lanes of traffic. • Low impacts to land use/socio-economic conditions with temporary limited interest (temporary property required) for the temporary detour. 	 <p>CON'S</p> <ul style="list-style-type: none"> • High impacts to environmentally sensitive areas/wildlife habitat for the construction of a temporary detour which would require tree and vegetation removals on both sides of Butternut Creek for the construction of the temporary detour and new bridge. • High operational and maintenance costs. • Highest capital cost (\$1,100,000 for Twin Corrugated Steel Pipes & \$1,250,000 for Concrete Box Culvert). • Road cannot be closed and temporary detour is required to facilitate construction – high costs. • <i>**Given the age and condition of the structure, rehabilitation is not recommended.</i>
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ALTERNATIVE 4: DECOMMISSION OF EXISTING BRIDGE AND CONSTRUCT A NEW ROAD REALIGNMENT

 <p>PRO'S</p> <ul style="list-style-type: none"> • Addresses safety concerns with the existing bridge for the long term as the bridge would be decommissioned. • Low structural engineering risks as loading on the bridge would be reduced with decommissioning. • No changes to accessibility. • Low construction impacts to local residents with construction duration anticipated to be completed in one construction season. 	 <p>CON'S</p> <ul style="list-style-type: none"> • High impacts to land use/socio-economic conditions with permanent property acquisition required for the road realignment. • Moderate operational and maintenance costs. • Second highest capital cost (\$511,000)
---	---

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RECOMMENDED TECHNICALLY PREFERRED ALTERNATIVE

Alternative Solution #4 - Decommission the Existing Bridge and Construct a New Road Alignment for Route 800 - This alternative does not extend the service life of the existing bridge, however, provides an alternative route.

The key benefits of the Recommended Technically Preferred Alternative are:

- Addresses safety concerns with the existing bridge for the long term as the bridge would be decommissioned.
- Enhancements to the structure guards would be required if the structure remains open for pedestrians and cyclists.
- Low structural engineering risks as loading on the bridge would be reduced with decommissioning.
- Low impacts to environmentally sensitive areas, wildlife habitat, fisheries, Species-at-Risk and vegetation.
- Low construction impacts to local residents with construction duration anticipated to be completed in one construction season.
- Costs associated with this alternative are the second highest capital cost but more cost effective than Alternative 3.

Anticipated mitigation measures during construction:

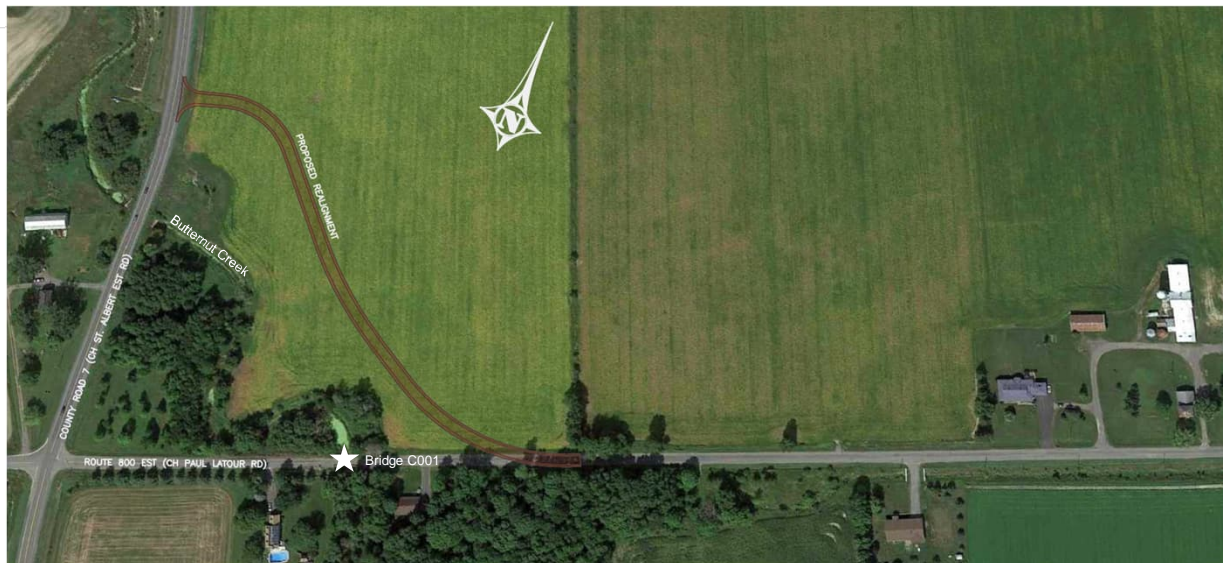
- During construction, existing bridge would remain open to traffic until work is complete.
- Any wildlife and vegetation, including SAR that may be disturbed during construction will be considered and mitigation for in-water timing windows, migratory bird timing window restrictions, reestablishment of vegetation removal areas, etc. will be included in the Contract Documents and adhered to by the Contractor.



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PROPOSED REALIGNMENT



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14

IF YOU WOULD LIKE MORE INFORMATION, PLEASE CONTACT:

Christine Shillinglaw, P.Eng.
McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road, R.R.3
Carp, ON, K0A 1L0
Phone: 613-714-0794
Email: c.shillinglaw@mcintoshperry.com

Marc Legault, Director of Public Works
The Nation Municipality
3248 County Road 9
Fournier, ON K0B 1G0
Phone: 613-524-2932 ext. 202
Email: marclegault@nationmun.ca

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McINTOSH PERRY

15



Thank you!
Any Question?

16

McINTOSH PERRY

May 1, 2023

To Whom it May Concern:

**Re: Notice of Study Completion
Route 800 East – Bridge C001
Municipal Class Environmental Assessment**

The Nation Municipality retained McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) to provide consulting services to complete a Municipal Class Environmental Assessment for an existing bridge (C001) on Route 800 East. The existing bridge (C001) that spans Butternut Creek on Route 800 East has reached the end of its service life. The Municipality is considering various alternative solutions. The study was conducted in accordance with Schedule B of the Municipal Class Environmental Assessment (MCEA) process (October 2000, as amended).

Through consultation with Agencies, Members of the Public, and Indigenous Communities, the preferred solution for the existing bridge (C001) on Route 800 East is to replace existing bridge with a new structure.

A Project File Report (PFR) has been prepared to document the planning and decision-making process for this study. By this Notice, the PFR is being placed on the public record for a 30-day review period from May 1 2023 to May 30, 2023. The PFR is available for review on Nation Municipality's website: <https://nationmun.ca/en/council-staff/announcements-notice>.

If you have any questions, comments or concerns regarding this study, please contact one of the Project Team members below by May 30, 2023:

Marc Legault
The Nation Municipality
3248 County Road 9
Fournier, ON K0B 1G0
Telephone: 613-524-2932 ext. 202
Email: MarcLegault@nationmun.ca

Christine Shillinglaw, P.Eng.
McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road, R.R.3
Carp, ON, K0A 1L0
Phone: 613-714-0794
Email: c.shillinglaw@mcintoshperry.com

Pour des renseignements en français au sujet de ce projet, veuillez rejoindre Patrick Leblanc en composant le 613-714-4586 ou par courriel au p.leblanc@mcintoshperry.com.

In addition, a request may be made to the Ministry of Environment, Conservation and Parks for an order requiring a higher level of study, or that conditions may be imposed, only on the grounds that the requested order may prevent, mitigate, or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requesters' contact information and full name for the ministry.

Requests should specify what kind of order is being requested, how an order may prevent, mitigate, or remedy those potential adverse impacts, and any information in support of the statements in the request. The request should be sent in writing or by email to the project contacts noted above and the following:

Minister of the Environment, Conservation and Parks

Ministry of Environment, Conservation and Parks
77 Bay Street, 5th Floor
Toronto, ON M7A 2J3
Minister.mecp@ontario.ca

Director, Environmental Assessment Branch

Ministry of Environment, Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto, ON M4V 1P5
EABDirector@ontario.ca

Information collected will be used in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments become part of the public record. If you have accessibility requirements in order to participate in this project, please contact one of the project team members listed above.

Thank you for your anticipated assistance and cooperation.

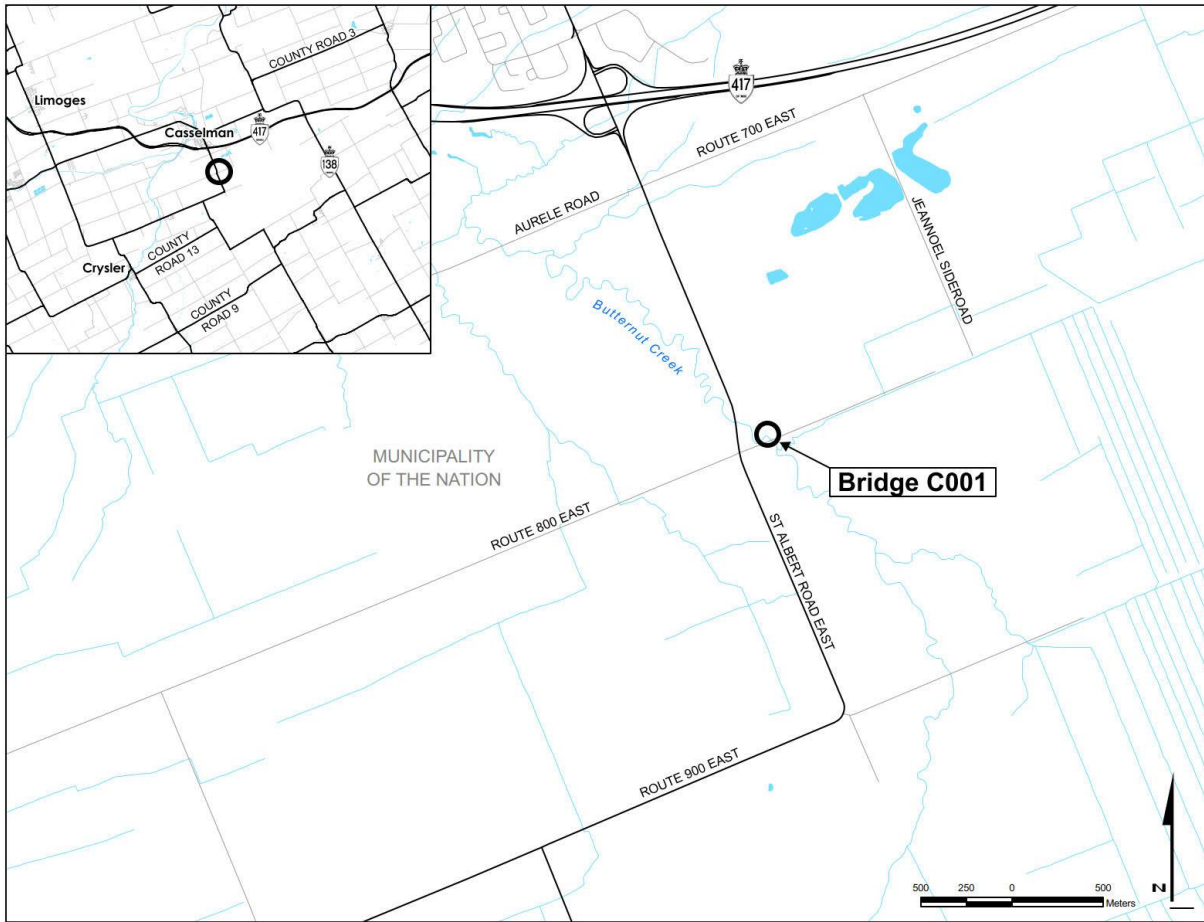
Sincerely,

McIntosh Perry Consulting Engineers Ltd.,



Christine Shillinglaw, P.Eng.
Project Manager

Encl. Key Plan



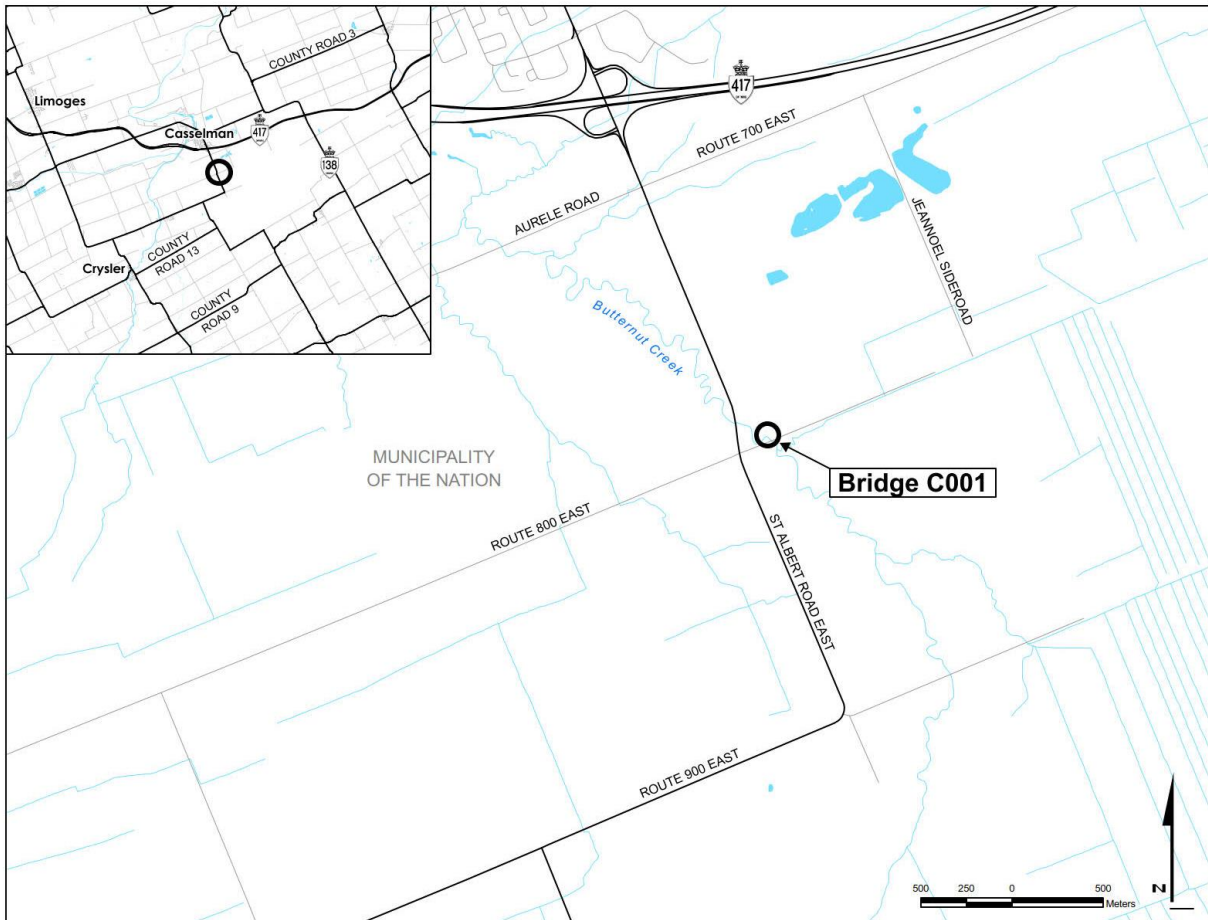
Key Plan



NOTICE OF STUDY COMPLETION ROUTE 800 EAST – BRIDGE C001 MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

The Nation Municipality retained McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) to provide consulting services to complete a Municipal Class Environmental Assessment for an existing bridge (C001) on Route 800 East. The existing bridge (C001) that spans Butternut Creek on Route 800 East has reached the end of its service life. The Municipality is considering various alternative solutions. The study was conducted in accordance with Schedule B of the Municipal Class Environmental Assessment (MCEA) process (October 2000, as amended).

Through consultation with Agencies, Members of the Public, and Indigenous Communities, the preferred solution for the existing bridge (C001) on Route 800 East is to replace existing bridge with a new structure.



20

Project File Report

A Project File Report (PFR) has been prepared to document the planning and decision-making process for this study. By this Notice, the PFR is being placed on the public record for a 30-day review period from May 1, 2023 to May 30, 2023. The PFR is available for review on Nation Municipality's website: <https://nationmun.ca/en/council-staff/announcements-notices>.

If you have any questions, comments or concerns regarding this study, please contact one of the Project Team members below by May 30, 2023:

Marc Legault
The Nation Municipality
Director of Public Works
3248 County Road 9
Fournier, Ontario K0B 1G0
Telephone: 613-524-2932 ext. 202
MarcLegault@nationmun.ca

Christine Shillinglaw, P.Eng.
McIntosh Perry Consulting Engineers Ltd.
Project Manager
115 Walgreen Road
Carp, Ontario K0A 1L0
Telephone: 613-714-0794
c.shillinglaw@mcintoshperry.com

Pour des renseignements en français au sujet de ce projet, veuillez rejoindre Patrick Leblanc en composant le 613-714-4586 ou par courriel au p.leblanc@mcintoshperry.com.

In addition, a request may be made to the Ministry of Environment, Conservation and Parks for an order requiring a higher level of study, or that conditions may be imposed, only on the grounds that the requested order may prevent, mitigate,

or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests on other grounds will not be considered. Requests should include the requesters' contact information and full name for the ministry.

Requests should specify what kind of order is being requested, how an order may prevent, mitigate, or remedy those potential adverse impacts, and any information in support of the statements in the request. The request should be sent in writing or by email to the project contacts noted above and the following:

Minister of the Environment, Conservation and Parks

Ministry of Environment, Conservation and Parks

77 Bay Street, 5th Floor

Toronto, ON M7A 2J3

Minister.mecp@ontario.ca

Director, Environmental Assessment Branch

Ministry of Environment, Conservation and Parks

135 St. Clair Ave. W, 1st Floor

Toronto, ON M4V 1P5

EABDirector@ontario.ca

Information collected will be used in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments become part of the public record. If you have accessibility requirements in order to participate in this project, please contact one of the project team members listed above.

APPENDIX E – CONSULTATION COMMENTS/RESPONSES

Kerry Reed

From: Drouin, Francis - Député <Francis.Drouin@parl.gc.ca>
Sent: September 19, 2022 1:58 PM
To: Kerry Reed
Subject: Automatic reply: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Bonjour,

Nous avons bien reçu votre courriel et nous vous remercions d'avoir pris le temps de communiquer avec le bureau de Francis Drouin, Député de Glengarry-Prescott-Russell.

Pour nous permettre de répondre plus rapidement à votre enquête, veuillez nous indiquer dans votre courriel votre :

- * Nom complet;
- * Adresse avec code postal;
- * Numéro de téléphone; et
- * Le meilleur moment de la journée pour vous joindre.

Une fois de plus, merci d'avoir communiqué avec mon bureau.

Cordialement,

Francis Drouin
Député/M.P.
Glengarry-Prescott-Russell

Hello,

Thank you for contacting the office of Francis Drouin, MP for Glengarry-Prescott-Russell. This message is to acknowledge that we have received your email.

To address your concerns more quickly, please include within your email:

- * Your full name;
- * Address with postal code;
- * Telephone number; and
- * The best time of day to reach you.

Thank you

Francis Drouin

Député/M.P.

Glengarry-Prescott-Russell

Kerry Reed

From: info <info@ctse.ca>
Sent: September 19, 2022 2:01 PM
To: Kerry Reed
Subject: Automatic reply: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Bonjour,

Nous avons bien reçu votre courriel, un agent vous répondra sous peu.

****Nous recevons présentement un nombre très important de courriels et de formulaires, le délai de traitement de votre courriel ou de votre formulaire peut prendre jusqu'à 10 jours ouvrables. Un courriel de confirmation vous sera envoyé dès que votre formulaire sera traité. Surveillez votre dossier de courriel indésirable! ****

QUESTIONS FRÉQUENTES

- **Comment puis-je obtenir les informations de transport de mon enfant?**

L'information du transport pour l'année 2022-2023 est disponible via [Bus Planner Web/portail des parents](#).

Si vous n'avez pas de compte, vous devrez en créer un lors de votre première visite.

Un guide d'utilisateur de Bus Planner Web est disponible ici : <https://www.ctse.ca/index.php/guide-dutilisateur-parents/>

- **Je ne suis pas en mesure d'ajouter mon enfant à mon compte, comment puis-je procéder?**

Si vous obtenez l'erreur "**Impossible de trouver l'élève**", il est possible que l'information que nous avons au dossier de votre enfant diffère de l'information que vous entrez. Avisez-nous par courriel et nous validerons les informations avec vous.

- **L'adresse utilisée pour le transport n'est plus valide, comment puis-je mettre à jour l'information?**

Tout changement d'adresse doit être soumis via un formulaire électronique. Visitez le

<https://www.ctse.ca/formulaires/> pour remplir un formulaire. Aucun changement d'adresse ne sera traité par téléphone.

L'équipe du CTSE

Kerry Reed

From: CSDCEO Bureau Central <courriel@csdceo.org>
Sent: September 19, 2022 2:01 PM
To: Kerry Reed
Subject: Accusé de réception Re: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Bonjour,

Nous avons bien reçu votre courriel à l'adresse générale du Conseil scolaire de district catholique de l'Est ontarien.

Un membre de notre équipe assurera un suivi dans les plus brefs délais.

Passez une belle fin de journée!

--

Bureau de la direction de l'éducation
1 800-204-4098 / 613 675-4691
www.csdceo.ca

AVIS DE CONFIDENTIALITÉ

Ce courriel (de même que les fichiers qui y sont joints) est strictement réservé à l'usage de la personne ou de l'entité à laquelle il est adressé. Il peut contenir de l'information privilégiée et confidentielle. Toute divulgation, distribution ou copie de ce courriel est strictement prohibée. Si vous avez reçu ce courriel par erreur, veuillez nous en aviser et le supprimer de votre système informatique. Merci.

CONFIDENTIALITY NOTICE

This communication (including any files transmitted with it) is intended solely for the person or entity to whom it is addressed. It may contain confidential and privileged information. The disclosure, distribution or copying of this message is strictly forbidden. Should you have received this email in error, please contact the sender and delete it from your computer system. Thank you.



Kerry Reed

From: Consultations <Consultations@metisnation.org>
Sent: September 19, 2022 2:03 PM
To: Kerry Reed
Subject: Automatic reply: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

This is an automatically generated response from consultations@metisnation.org. Please do not reply to this e-mail address.

The MNO is adjusting standard work practices due to the Covid-19 outbreak and to better enable staff to work remotely. **Please note that the MNO's Lands, Resources and Consultations (LRC) Branch will no longer review hard copy consultation notices mailed to MNO offices.** The LRC Branch will review all electronic notices and process them in accordance with our standard operating procedures. All consultation notices must be sent electronically to consultations@metisnation.org.

The Métis Nation of Ontario's LRC Branch acknowledges your information notice. The MNO reserves the right to request additional information, meetings and consultations in respect of the project should the MNO deem it to be necessary.

For additional information pertaining to consulting with Ontario Métis please visit the MNO web site at: <https://www.metisnation.org/programs-and-services/lands-resources-consultations/duty-to-consult/>

Kerry Reed

From: Geoff Owens <GOwens@nation.on.ca>
Sent: September 19, 2022 2:02 PM
To: Kerry Reed
Subject: Automatic reply: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Hello,

This email account is not active. Please see the notes below to redirect your inquiry.

1. To determine if you need a Conservation Authority permit: email the location and project details to regulations@nation.on.ca, or call 1-877-984-2948. You may also consult our [FAQ here](#).
To submit a Conservation Authority permit: use our [online application](#) form or send completed applications with attachments by email to: regulations@nation.on.ca.
2. Application forms can be found here: [Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Application](#)
3. Fees are determined using the [Planning and Regulations Fee Schedule](#) (see Schedule B). Staff will identify a fee after a preliminary review of your application.
4. SNC Clean Water Program (including Erosion Grant inquiries), please contact: Lorie Henderson at: lhenderson@nation.on.ca
5. General SNC Inquires: info@nation.on.ca

Following the directions above will help us get to your request as soon as possible.

Bonjour,

Merci pour votre courriel, nous apprécions le fait que vous ayez contacté notre bureau.

Cet e-mail n'est pas surveillé. Veuillez consulter les notes ci-dessous pour rediriger votre demande.

1. Pour déterminer si vous avez besoin d'un permis de l'Office de protection de la nature : envoyez-nous un aperçu du projet, y compris son emplacement et les détails relatifs par courriel à regulations@nation.on.ca, ou par téléphone au 1-877-984-2948. Vous pouvez également consulter notre [FAQ ici](#).
2. Pour soumettre un permis de l'Office de protection de la nature : utilisez notre [formulaire de demande en ligne](#) ou envoyez les demandes remplies avec pièces jointes par courriel à regulations@nation.on.ca.


Les formulaires de demande se trouvent ici : [Développement, interférence avec les terres humides et altérations des berges et des cours d'eau](#).

3. Les frais sont déterminés à l'aide du [barème des frais liés à la planification et la réglementation](#) (voir l'annexe B). Le personnel déterminera les coûts après un examen préliminaire de votre demande.
4. Pour les demandes concernant le Programme d'assainissement de l'eau de la CNS (y compris les demandes de subventions pour l'érosion), veuillez communiquer avec Lorie Henderson à : lhenderson@nation.on.ca
5. Renseignements généraux sur la CNS : info@nation.on.ca

Grâce aux directives ci-dessus, nous pourrions répondre à votre demande le plus rapidement possible.



Geoff Owens | Regulations Officer

38 Victoria Street, Box 29, Finch, ON K0C 1K0
Tel: 613-984-2948 or 1-877-984-2948 | Fax: 613-984-2872
nation.on.ca | [make a donation](#) 

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Notre environnement local, protégeons-le ensemble.

Celebrating 75 Years of Conservation in 2022 | Célébrer 75 ans de conservation en 2022

Kerry Reed

From: Kerry Reed
Sent: November 30, 2022 8:53 AM
To: Bouchard, Jeremie
Cc: PLMainville@prescott-russell.on.ca; Tessier, Guy; Lisa Marshall; Christine Shillinglaw; marclegault@nationmun.ca
Subject: RE: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Hello Jérémie,

Upon further discussion, Nation Municipality has decided to move forward with a Public Information Centre (PIC) for the Butternut Creek Bridge and potential realignment of Route 800 East. Therefore, there will be no presentation to Council on December 12, 2022. A Notice of Public Information Centre letter will be distributed once the PIC details have been finalized.

Thank you,
Kerry

From: Kerry Reed <K.Reed@mcIntoshperry.com>
Sent: November 22, 2022 1:46 PM
To: Bouchard, Jeremie <JBouchard@prescott-russell.on.ca>
Cc: PLMainville@prescott-russell.on.ca; Tessier, Guy <GTessier@prescott-russell.on.ca>; Lisa Marshall <l.marshall@mcintoshperry.com>; Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>; marclegault@nationmun.ca
Subject: RE: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Hello Jérémie,

Thank you for your interest in the project. MP will continue to update UCPR throughout the Environmental Assessment process.

At this time, Mr. Marc Legault, Director of Public Works, has requested that McIntosh Perry provide an update to the new Council members pertaining to the Butternut Creek Bridge and potential realignment of Route 800 East. The presentation will outline the history of this project, as well as inform them of the current Environmental Assessment process. The Council Meeting has been scheduled for December 12th, 2022 @ 4:30 pm. The Council meeting will be held at 958 Route 500 W, Casselman, Ontario.

Thank you,
Kerry

Kerry Reed

Environmental Planner

T. 343.925.0187 | C. 613.808.3464

McINTOSH PERRY

Turning Possibilities Into Reality

Confidentiality Notice – If this email wasn't intended for you, please return or delete it. Click [here](#) to read all of the legal language around this concept.



Platinum member

From: Bouchard, Jeremie <JBouchard@prescott-russell.on.ca>

Sent: September 30, 2022 4:30 PM

To: Kerry Reed <K.Reed@mcintoshperry.com>; Lisa Marshall <l.marshall@mcintoshperry.com>; Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>; Marc Legault <marclegault@nationmun.ca>

Cc: PLMainville@prescott-russell.on.ca; Tessier, Guy <GTessier@prescott-russell.on.ca>

Subject: RE: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Hi Christine and Marc,

The UCPR would like to be involved in the project because that new road will intersect County Road 7 (St-Albert Road East).

Thank you,

J r mie Bouchard, P.Eng

Directeur des Travaux publics par int rim

Public Works Interim Director

613-675-4661

JBouchard@prescott-russell.on.ca

www.prescott-russell.on.ca |  



From: Kerry Reed <K.Reed@mcintoshperry.com>

Sent: September 19, 2022 1:54 PM

Cc: Lisa Marshall <l.marshall@mcintoshperry.com>; Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>; Marc Legault <marclegault@nationmun.ca>

Subject: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Some people who received this message don't often get email from k.reed@mcintoshperry.com. [Learn why this is important](#)

Hello,

Please find the attached Notice of Study Commencement Letter for the Municipal Class Environmental Assessment Study currently being undertaken by the Nation Municipality for Route 800 East Realignment.

If you have any questions or comments, please contact one of the Project Team members noted in the enclosed notice.

Thank you,

Kerry

Kerry Reed

Environmental Planner

T. 343.925.0187 | C. 613.808.3464

K.Reed@mcIntoshperry.com | www.mcintoshperry.com

McINTOSH PERRY

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Platinum
member

Kerry Reed

From: Christine Shillinglaw
Sent: September 20, 2022 10:22 AM
To: Kerry Reed; Lisa Marshall
Subject: FW: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Follow Up Flag: Follow up
Flag Status: Flagged

FYI

Christine Shillinglaw, P.Eng.

Manager, Transportation Structures Division, Eastern Ontario

T. 613.714.0794 | F. 613.836.3742 | C. 613.325.2984

c.shillinglaw@mcintoshperry.com | www.mcintoshperry.com

McINTOSH PERRY

Turning Possibilities Into Reality

From: Michelle Cavanagh <MCavanagh@nation.on.ca>
Sent: September 20, 2022 10:05 AM
To: Marc Legault, Director Public Works <marclegault@nationmun.ca>; Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>
Subject: RE: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

You don't often get email from mcavanagh@nation.on.ca. [Learn why this is important](#)

Hello,

Thank you for the notice. SNC would like to continue to be included on any circulations as the Class EA proceeds.

Regards,

Michelle

From: Kerry Reed <K.Reed@mcintoshperry.com>
Sent: September 19, 2022 2:00 PM
Cc: Lisa Marshall <l.marshall@mcintoshperry.com>; Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>; Marc Legault, Director Public Works <marclegault@nationmun.ca>
Subject: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

External email - if you don't know or can't confirm the identity of the sender, please exercise caution and do not open links or attachments.

Hello,

Please find the attached Notice of Study Commencement Letter for the Municipal Class Environmental Assessment Study currently being undertaken by the Nation Municipality for Route 800 East Realignment.

If you have any questions or comments, please contact one of the Project Team members noted in the enclosed notice.

Thank you,

Kerry

Kerry Reed

Environmental Planner

T. 343.925.0187 | C. 613.808.3464

K.Reed@mcintoshperry.com | www.mcintoshperry.com

McINTOSH PERRY

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Platinum member



Michelle Cavanagh | Team Lead, Special Projects

38 Victoria Street, Box 29, Finch, ON K0C 1K0
Tel: 613-984-2948 or 1-877-984-2948 | Fax: 613-984-2872

nation.on.ca | [make a donation](#) 

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Notre environnement local, protégeons-le ensemble.

Celebrating 75 Years of Conservation in 2022 | Célébrer 75 ans de conservation en 2022

Kerry Reed

From: Christine Shillinglaw
Sent: September 27, 2022 10:00 AM
To: Quigley, Iain (MNRF)
Cc: marclegault@nationmun.ca; Kerry Reed; Lisa Marshall; Calum MacDonald
Subject: RE: Route 800 East Road Realignment - MCEA

Hi Iain,

Thanks for reaching out. I can confirm there will be no in water work during the project works.

Please reach out with any other questions.

Thanks,
Christine

Christine Shillinglaw, P.Eng.

Manager, Transportation Structures Division, Eastern Ontario

T. 613.714.0794 | F. 613.836.3742 | C. 613.325.2984

c.shillinglaw@mcintoshperry.com | www.mcintoshperry.com

McINTOSH PERRY

Turning Possibilities Into Reality

From: Quigley, Iain (MNRF) <Iain.Quigley@ontario.ca>
Sent: September 21, 2022 10:53 AM
To: Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>
Cc: marclegault@nationmun.ca; Kerry Reed <K.Reed@mcintoshperry.com>
Subject: Route 800 East Road Realignment - MCEA

Some people who received this message don't often get email from Iain.Quigley@ontario.ca. [Learn why this is important](#)

Good morning,

I hope this email finds you well. I'm reaching out regarding a municipal class environmental assessment our Ministry first received notice of on September 19th, 2022. While I understand the project is in the preliminary stages and alternatives are being assessed, is there a likelihood that in-water work will be required at any point during the project?

Kind regards,



Iain Quigley
Regional Lands Intern (MNRF)
M: 705-772-9310

Kerry Reed

From: Quigley, Iain (MNRF) <Iain.Quigley@ontario.ca>
Sent: October 11, 2022 12:59 PM
To: Christine Shillinglaw
Cc: marclegault@nationmun.ca; Kerry Reed; Lisa Marshall; Calum MacDonald
Subject: Route 800 East Realignment - MCEA MNRF Response
Attachments: Route 800 E.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Some people who received this message don't often get email from iain.quigley@ontario.ca. [Learn why this is important](#)

Good afternoon,

I hope you have all had a great long weekend. Please see the attached file for an outline of MNRF interests and permitting requirements for the Route 800 East Realignment. Should you have any questions or are seeking further technical resources please do not hesitate to reach out.

Best regards,
Iain



Iain Quigley
Regional Lands Intern (MNRF)
M: 705-772-9310
iain.quigley@ontario.ca

Oct. 11, 2022

SUBJECT: Route 800 East Realignment - MCEA

The Ministry of Natural Resources and Forestry (MNRF) received the notice of study commencement on September 19th, 2022. Thank you for circulating this to our office. Please note that we have not completed a comprehensive screening of natural heritage or other resource values for the project at this time. This response, however, does provide information to guide you in identifying and assessing natural features and resources as required by applicable policies and legislation, as well as engaging with the Ministry for advice as needed.

Please also note that it is the proponent's responsibility to be aware of, and comply with, all relevant federal or provincial legislation, municipal by-laws or other agency approvals.

Natural Heritage

MNRF's natural heritage and natural resources GIS data layers can be obtained through the Ministry's [Land Information Ontario \(LIO\)](#) website. You may also view natural heritage information online (e.g., Provincially Significant Wetlands, ANSI's, woodlands, etc.) using the [Make a Map: Natural Heritage Areas](#) tool.

We recommend that you use the above-noted sources of information during the review of your project proposal.

Natural Hazards

A series of natural hazard technical guides developed by MNRF are available to support municipalities and conservation authorities implement the natural hazard policies in the Provincial Policy Statement (PPS). For example, standards to address flood risks and the potential impacts and costs from riverine flooding are addressed in the *Technical Guide River and Stream Systems: Flooding Hazard Limit (2002)*. We recommend that you consider these technical guides as you assess specific improvement projects that can be undertaken to reduce the risk of flooding.

Petroleum Wells & Oil, Gas and Salt Resources Act

There may be petroleum wells within the proposed project area. Please consult the Ontario Oil, Gas and Salt Resources Library website (www.ogsrlibrary.com) for the best-known data on any wells recorded by MNRF. Please reference the 'Definitions and Terminology Guide' listed in the publications on the library website to better understand the well information available. Any oil and gas wells in your project area are regulated by the *Oil, Gas and Salt Resource Act*, and the supporting regulations and operating standards. If any unanticipated wells are

encountered during development of the project, or if the proponent has questions regarding petroleum operations, the proponent should contact the Petroleum Operations Section at POSRecords@ontario.ca or 519-873-4634.

Fish and Wildlife Conservation Act

Please note, that should the project require:

- The relocation of fish outside of the work area, a Licence to Collect Fish for Scientific Purposes under the *Fish and Wildlife Conservation Act* will be required.
- The relocation of wildlife outside of the work area (including amphibians, reptiles, and small mammals), a Wildlife Collector's Authorization under the *Fish and Wildlife Conservation Act* will be required.

Public Lands Act & Lakes and Rivers Improvement Act

Some projects may be subject to the provisions of the *Public Lands Act* or *Lakes and River Improvement Act*. Please review the information on MNRF's web pages provided below regarding when an approval is, or is not, required. Please note that many of the authorizations under the *Lakes and Rivers Improvement Act* are administered by the local Conservation Authority.

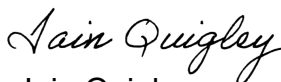
- For more information about the *Public Lands Act*: <https://www.ontario.ca/page/crown-land-work-permits>
- For more information about the *Lakes and Rivers Improvement Act*: <https://www.ontario.ca/page/lakes-and-rivers-improvement-act-administrative-guide>

It is understood by MNRF that there are currently no in-water works required for this project. Should this change, please reach out to MNRF as the work may require additional permitting under these Acts.

After reviewing the information provided, if you have not identified any of MNRF's interests stated above, there is no need to circulate any subsequent notices to our office. If you have identified any of NDMNRF's interests and/or may require permit(s) or further technical advice, please direct your specific questions to Iain Quigley.

If you have any questions or concerns, please feel free to contact me.

Best Regards,



Iain Quigley
Regional Lands Intern
Ministry of Natural Resources and Forestry (NDMNRF)
(705) 772-9310

iain.quigley@ontario.ca

Kerry Reed

From: Kerry Reed
Sent: November 22, 2022 1:59 PM
To: [REDACTED]
Cc: Christine Shillinglaw; Lisa Marshall; marclegault@nationmun.ca
Subject: RE: Bridge route 800 East

Hello [REDACTED]

Thank you for your interest in the project.

As part of the Municipal Class Environmental Assessment process, we want to ensure that anyone interested in this study has the opportunity to get involved and provide input. Therefore, please submit your comments and/or concerns to or one or both of the Project Team Members listed in the Notice of Study Commencement, and we will ensure that your comments and/or concerns are taken into consideration throughout the Environmental Assessment process.

Please note that a draft Project File Report is available for public viewing on the Municipality of Nation's website (<https://nationmun.ca/en/council-staff/announcements-notices>) which documents the existing natural, social, economic and cultural/heritage environmental of the study area, identifies the proposed alternative solutions being considered, outlines the evaluation process, and provides the rationale for the selection of the recommend Alternative Solution at this time. The Project File Report also outlines and documents the consultation process being followed for this Schedule B Municipal Class Environmental Assessment process. Please note that the Project File will be updated throughout the Environmental Assessment process and placed on public record for 30 days prior to completing the Environmental Assessment.

At this time, Mr. Marc Legault, Director of Public Works, has requested that McIntosh Perry provide an update to the new Council members pertaining to the Bitternut Creek Bridge and potential realignment of Route 800 East. The presentation will outline the history of this project, as well as inform them of the current Environmental Assessment process.

Please do not hesitate to reach out should you have any additional comments or questions.

Thank you,

Kerry

-----Original Message-----

From: [REDACTED]
Sent: September 27, 2022 10:07 AM
To: marclegault@nationmun.ca; Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>
Subject: Bridge route 800 East

[REDACTED]

Bonjour,

We have comments regarding the study of the existing bridge in our road and we would like to be included in the

notices and futur updates of the project.

We are concern of the safety of a new road alignment on the north east.

Will there be a specific date for public consultation?

You can reach us by email or phone :



Thank you!



St-Albert, On

September 30, 2022

McIntosh Perry
115 Walgreen Road
R.R.3. Carp, ON K0A 1L0

Re: Bridge on Butternut Creek, Paul Latour Road

Greetings,

My husband and I were happy to receive your letter last week inviting us to send our input on the realignment of Chemin Paul Latour, formerly Route 800 East in St-Albert. Since we do not use that bridge except for walks, we would certainly favor *closing the bridge and construct a new road alignment to bypass the creek on the North East side*, as you propose in the first paragraph of your letter.

Since 2011, we have known that the bridge, built in **1951**, *has reached the end of its service life*. I have enclosed a copy of the letter sent to the Nation municipality (care of Mary McCuade) on September 12, **2011**. In it, I included photos to show the damage that was done by the daughter of Denis Latour when she slammed her car against the side of the bridge and landed on the roof in our yard. She did not sustain any injuries but 2 posts on the South side of the bridge were unhinged and are still to this day. It is a sad state of affairs when all our output has been ignored for more than 10 years.

We have lived here for 46 years and that bridge has been a source of frustration the whole time:

-damaging vibrations from incessant daily heavy traffic like the McEwen trucks, the milk trucks, garbage trucks and bulky farm equipment rumbling along on potholes directly on the bridge.

-now a new farmer from 2 miles away on 800 East, André Desnoyers, has bought or rented land on Paul Latour Rd and spends whole days going back and forth with his haying or soja crops in GEHL farm equipment. These days, farmers rent or buy land far from home and travel great distances to get there. They expect to use public roads for their own benefit, as if they were on their own turf.

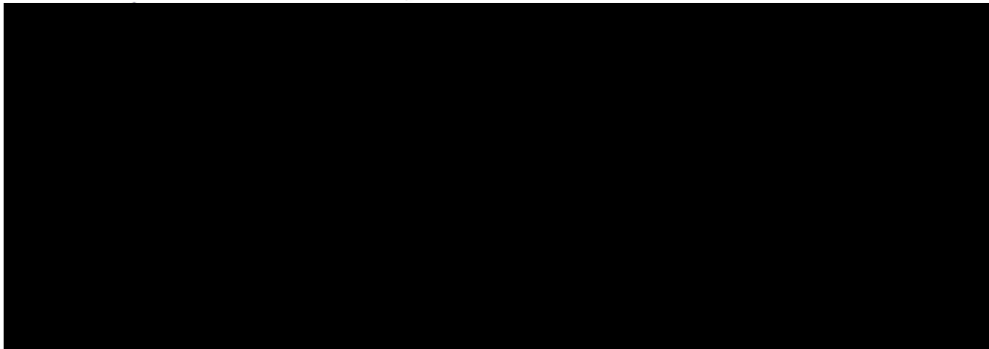
Over those last 10 years, I have spoken on the phone with Mr Marc Legault at Public Works (August 5 2012) and with Mr Gabriel Gagné (Bridges) who assured me 2 years ago that "they had come to an agreement with Mr Oscar Lafrance and so, a road would be built along the North side of the Butternut." This is exactly what you propose to do 2

years later. Both men told me the cost of a new, wider bridge would be prohibitive. They also could not use the *Chemin Denis* at the end of the road because CN Rail would not allow a public train crossing there. Too bad because it would have been perfect for the only active farm to use daily.

On August 21st 2020, Mr Guylain Laflèche called me back to assure me there would not be a new bridge. Instead, the old one would be used as a bike path for walkers and skidoos in the winter. That sounded very interesting so we were extremely disappointed when, in the spring of 2021, the work suddenly stopped for a reason that was never explained to me. We figured some farmer selfishly opposed the concept proposed to suit his own access needs.

So, here we are nearing the end of 2022 with nothing yet accomplished. My husband and I appreciate your effort at consultation so we can all get involved and provide input. But we find it is very late in the making having sent input for years now. We will certainly contact Mr Legault again, as you suggested, for future notices and study updates.

Finally, let us reiterate one last time that we are very much in favor of realigning Paul Latour Rd and then closing the bridge to car and truck traffic. Thank you in advance for your time and consideration,



Mary McCreedy (?)
Le 12 septembre 2011

Municipalité de la Nation

Suite à une conversation avec Mme Marielle, j'ai rencontré Mme Jeanne Latour, veuve de Paul, pour lui parler du projet de changement de nom à "Monté Paul Latour". Comme elle était la principale intéressée, je voulais en discuter avec elle en premier. Elle veut y réfléchir et pourrions l'idée de la pétition avec les voisins si nécessaire. Donc, il n'y aura pas de présentation à faire au conseil de la Nation le lundi 19 prochain.

Quant au fond, il serait utile d'en faire l'entretien chaque année fin juin sans que j'aie à vous le rappeler. Cela signifie coupe des herbes autour du pont, des mauvaises herbes et branchages dans le fossé vers le ruisseau, etc.

À cause de la vitesse excessive des voisins à l'autre bout du rang, cet entretien annuel devient nécessaire à titre de prévention d'accident. À cet effet, je suggère l'ajout de panneaux de signalisation : tout d'abord "cél de 50" puis la limite de vitesse (50 km) puisqu'il

VARADEROSylvie
Leduc

Honorary Consul

(045) 61-2078286-7444
(cell)
Mitnet 389-3974

(045) 66-7395 fax

Il s'agit d'un chemin de campagne et non
d'une piste de course ^{privée} comme certains semblent
le croire.

J'espère que la réparation de ce pont
fait partie de vos projets futurs. Il est en
pitoyable état, à cause des inondations printannières
et de l'accident de Belle Fatou il y a
quelques années. Des camions lourds (Mait,
Mc Ewen, etc.) y passent tous les jours et,
à l'aide des photos ci-jointes, vous pourrez
constater la nécessité de le réparer.

✱ Dans l'attente de la considération que
vous porterez à ma demande, je vous prie
d'agréer mes sentiments les meilleurs.

Kerry Reed

From: Kerry Reed
Sent: April 24, 2023 8:00 AM
To: Kerry Reed
Subject: FW: Commentaires sur réalignement du chemin Paul Latour
Attachments: Lettre a la Municipalite 12 septembre 2011 2ieme page.jpg; Lettre a la Municipalite 12 septembre 2011 1ere page.jpg; Letter to McIntosh Perry on Paul Latour Rd and Bridge.docx

From: [REDACTED]
Sent: October 1, 2022 11:45 AM
To: marclegault@nationmun.ca
Cc: c.schillinglaw@mcintoshperry.com; Patrick Leblanc <p.leblanc@mcintoshperry.com>; [REDACTED]
Subject: Commentaires sur réalignement du chemin Paul Latour

Some people who received this message don't often get email from belcaux@live.ca. [Learn why this is important](#)

Bonjour M. Legault,

Pour votre information, voici copie de la lettre postée ce matin aux ingénieurs de McIntosh Perry.

Je serais certainement intéressée à recevoir toute mise à jour du projet via courriel. Merci à l'avance,

[REDACTED]

Kerry Reed

From: Laura Crites <lcrites@nation.on.ca>
Sent: October 21, 2022 1:48 PM
To: Kerry Reed
Subject: RE: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment
Attachments: Route 800 - Proposed Road Re-alignment.pdf
Follow Up Flag: Follow up
Flag Status: Flagged

You don't often get email from lcrites@nation.on.ca. [Learn why this is important](#)

Hi Kerry,

Thanks for sending the sketch.

There are no SNC permit requirements for the proposed new road shown in the attached sketch.

The sketch shows a "approx. creek setback, to be confirmed by SNCA", please note SNC does not impose building setbacks from watercourses. At this location, there is no SNC regulated area adjacent to Butternut Creek; only if there is interference within the top of bank of the watercourse will a O. Reg 170/06 permit be required (new bridges, demolition of existing bridges, etc.).

Let me know if there are any questions.

Kind regards,
Laura

From: Kerry Reed <K.Reed@mcIntoshperry.com>
Sent: October 18, 2022 3:57 PM
To: Laura Crites <lcrites@nation.on.ca>
Cc: Lisa Marshall <l.marshall@mcintoshperry.com>; Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>; Marc Legault, Director Public Works <marclegault@nationmun.ca>
Subject: RE: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Hi Laura,

Please see attached for a high level sketch of the proposed re-alignment.

Thank you,
Kerry

Kerry Reed

Environmental Planner

T. 343.925.0187 | C. 613.808.3464

K.Reed@mcintoshperry.com | www.mcintoshperry.com

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Platinum
member

From: Laura Crites <lcrites@nation.on.ca>
Sent: October 3, 2022 11:24 AM
To: Kerry Reed <K.Reed@mcIntoshperry.com>
Cc: Lisa Marshall <l.marshall@mcintoshperry.com>; Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>; Marc Legault, Director Public Works <marclegault@nationmun.ca>
Subject: FW: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Some people who received this message don't often get email from lcrites@nation.on.ca. [Learn why this is important](#)

Good morning Kerry,

Thank you for circulating South Nation Conservation (SNC) on the Notice for the EA.

Do you have a map showing the new proposed road to Route 800 East?

Please note any interference with a watercourse (new bridges, demolition of existing bridges, etc.) will require a permit from SNC under O. Reg 170/06.

Thank you,
Laura

From: Kerry Reed <K.Reed@mcIntoshperry.com>
Sent: September 19, 2022 2:00 PM
Cc: Lisa Marshall <l.marshall@mcintoshperry.com>; Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>; Marc Legault, Director Public Works <marclegault@nationmun.ca>
Subject: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

External email - if you don't know or can't confirm the identity of the sender, please exercise caution and do not open links or attachments.

Hello,

Please find the attached Notice of Study Commencement Letter for the Municipal Class Environmental Assessment Study currently being undertaken by the Nation Municipality for Route 800 East Realignment.

If you have any questions or comments, please contact one of the Project Team members noted in the enclosed notice.

Thank you,

Kerry

Kerry Reed

Environmental Planner

T. 343.925.0187 | C. 613.808.3464

K.Reed@mcintoshperry.com | www.mcintoshperry.com

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Turning Possibilities Into Reality

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Platinum member



Laura Crites | Planning Technician

38 Victoria Street, Box 29, Finch, ON K0C 1K0

Tel: 613-984-2948 or 1-877-984-2948 | Fax: 613-984-2872

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**ROUTE 800
PROPOSED ROAD RE-ALIGNMENT**



FILENAME: C:\Users\cmacdonald\Desktop\Route 800 Road Re-alignment - Plans & Profile Drawings.dwg
 LAST SAVED: Thursday, October 13, 2022 1:52:45 PM BY: cmacdonald
 LAST PLOTTED: Thursday, October 13, 2022 2:05:12 PM BY: cmacdonald

Stamp:

McINTOSH PERRY

Suite 200 - 6240 Highway 7
 Woodbridge, ON L4H 4G3
 Tel: 905-856-5200 Fax: 905-695-0221
 www.mcintoshperry.com

Drawn by:
CDM

Scale:
NTS

Checked By:
CDM

Date:
10/13/2022

Project Number: **CCO-19-0127**

Client: The Nation Municipality

Project: Route 800 Road Re-alignment

Title: Proposed Re-alignment

No.	Revision / Issue	Date	Drawing Number:
			1

Kerry Reed

From: Christine Shillinglaw
Sent: October 4, 2022 3:30 PM
To: Kerry Reed; Lisa Marshall
Subject: FW: Voice Mail (37 seconds)
Attachments: audio.mp3

FYI

For Route 800 EA

I called him back – they don't have a business in this area at all so he was wondering why he received the letter – I advised it was likely not required but they came up in our research for companies

Hope that works

You can file with you EA docs.

Christine Shillinglaw, P.Eng.

Manager, Transportation Structures Division, Eastern Ontario

T. 613.714.0794 | **F.** 613.836.3742 | **C.** 613.325.2984

c.shillinglaw@mcintoshperry.com | www.mcintoshperry.com

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Turning Possibilities Into Reality

From: Teksavvy <+12262960353>
Sent: September 29, 2022 3:03 PM
To: Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>
Subject: Voice Mail (37 seconds)

Hello, Christine. My name is Andre Clarum calling from tech savvy. My phone number is 2262960353. I'm just calling because we received a notice in the mail today for environmental assessment. That's happening. I just. We're a bit confused as to why we're receiving it or which corporate entity is receiving it. So we're just going to get a bit more application. Give me a call back. That'd be fantastic. Once again, 2262960353. And I'm from tech savvy solutions incorporated. They might also be under LH net. Thank you. And have a great day.

You received a voice mail from [Teksavvy](tel:+12262960353).

Thank you for using Transcription! If you don't see a transcript above, it's because the audio quality was not clear enough to transcribe.

[Set Up Voice Mail](#)

Kerry Reed

From: Christine Shillinglaw
Sent: October 6, 2022 3:18 PM
To: Lisa Marshall; Kerry Reed
Subject: FW: MECP response to NOC Issued - Sept. 19, 2022 Route 800 East Realignment - Nation Municipality
Attachments: fjo_MEA_Nation Municipality_RoadBridgeoptions_Route800East_SchedB_NOC_Response.pdf; Supporting Attachment - Proponent's Intro to Delegation of Procedural Aspects of Consultation with Aboriginal Communities.docx; Supporting Attachment - Species at Risk Proponents Guide to Preliminary Screening (Draft May 2019).pdf

Christine Shillinglaw, P.Eng.

Manager, Transportation Structures Division, Eastern Ontario

T. 613.714.0794 | F. 613.836.3742 | C. 613.325.2984

c.shillinglaw@mcintoshperry.com | www.mcintoshperry.com

McINTOSH PERRY

Turning Possibilities Into Reality

From: Orpana, Jon (MECP) <Jon.Orpana@ontario.ca>
Sent: October 6, 2022 12:19 PM
To: Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>
Subject: FW: MECP response to NOC Issued - Sept. 19, 2022 Route 800 East Realignment - Nation Municipality

You don't often get email from jon.orpana@ontario.ca. [Learn why this is important](#)

Apologies ... typo in your email.

Jon

Jon K. Orpana
Regional Environmental Planner
Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
Kingston Regional Office
PO Box 22032, 1259 Gardiners Road
Kingston, Ontario
K7M 8S5

Phone: (613) 548-6918
Fax: (613) 548-6908
Email: jon.orpana@ontario.ca

From: Orpana, Jon (MECP)
Sent: October 6, 2022 12:17 PM
To: marclegault@nationmun.ca
Cc: c.shillinglaw@macintoshperry.com; Tieu, Emily (MECP) <Emily.Tieu@ontario.ca>
Subject: MECP response to NOC Issued - Sept. 19, 2022 Route 800 East Realignment - Nation Municipality

Hello Marc Legault,

Please find MECP's preliminary comments on this project. Included is a list representing the minimum required indigenous community consultation for this project.

There are also a few other resources for your consideration involving Indigenous Consultation and Species at Risk.

Regards,

Jon

Jon K. Orpana
Regional Environmental Planner
Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
Kingston Regional Office
PO Box 22032, 1259 Gardiners Road
Kingston, Ontario
K7M 8S5

Phone: (613) 548-6918
Fax: (613) 548-6908
Email: jon.orpana@ontario.ca

**Ministry of the Environment,
Conservation and Parks**

**Ministère de l'Environnement,
de la Protection de la nature
et des Parcs**

Environmental Assessment
Branch

Direction des évaluations
environnementales

1st Floor
135 St. Clair Avenue W
Toronto ON M4V 1P5
Tel.: 416 314-8001
Fax.: 416 314-8452

Rez-de-chaussée
135, avenue St. Clair Ouest
Toronto ON M4V 1P5
Tél. : 416 314-8001
Télééc. : 416 314-8452

October 6, 2022

Marc Legault
The Nation Municipality
Director of Public Works
3248 County Road 9
Fournier, ON. K0B 1G0
Email: marclegault@nationmun.ca

BY EMAIL ONLY

**Re: NOTICE OF STUDY COMMENCEMENT - ROUTE 800 EAST REALIGNMENT
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT**

Dear Mr. Marc Legault,

This letter is in response to the Notice of Commencement for the above noted project, received via Email and first issued September 19th, 2022. The Ministry of the Environment, Conservation and Parks (MECP) acknowledges that the Proponent has indicated that the study is following the approved environmental planning process for a Schedule B project under the Municipal Class Environmental Assessment (Class EA).

Project Overview

The existing bridge (C001) that spans Butternut Creek on Route 800 East has reached the end of its service life. The Municipality is considering various alternative solutions. At this time, the

preliminary Technically Preferred Alternative is to close Route 800 East at the bridge and construct a new road alignment to by-pass the creek on the north-east side.

The study is being conducted in accordance with Schedule B of the Municipal Class Environmental Assessment (EA) (October 2000, as amended) process. This notice signals the commencement of the Class EA. The study will confirm and document the existing structural deficiencies and identify alternative solutions. The environmental impacts of each alternative will be evaluated and in consultation with the public and external agencies, a technically preferred alternative will be selected. Per the requirements of the Schedule 'B' Municipal Class Environmental Assessment, a draft Project File Report has been prepared and is available for viewing on Nation Municipality website: <https://nationmun.ca/en/council-staff/announcements-notices>.

MECP Areas of Interest:

The **updated (February 2021)** attached "Areas of Interest" document provides guidance regarding the ministry's interests with respect to the Class EA process. Please address all areas of interest in the EA documentation at an appropriate level for the EA study. Proponents who address all the applicable areas of interest can minimize potential delays to the project schedule. **Further information is provided at the end of the Areas of Interest document relating to recent changes to the Environmental Assessment Act through Bill 197, Covid-19 Economic Recovery Act 2020.**

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before authorizing this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the consultation process.

The proposed project may have the potential to affect Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act* 1982. Where the Crown's duty to consult is triggered in relation to the proposed project, **the MECP is delegating the procedural aspects of rights-based consultation to the proponent through this letter.** The Crown intends to rely on the delegated consultation process in discharging its duty to consult and maintains the right to participate in the consultation process as it sees fit.

Based on information provided to date and the Crown's preliminary assessment the proponent is required to consult with the following communities who have been identified as potentially affected by the proposed project:

- **Mohawk Council of Akwesasne**

- **Algonquins of Ontario (AOO)**

If the proponent has undertaken archeological studies and are required to undertake any work related to archeological resources, they should also include:

- **Huron-Wendat**

Steps that the proponent may need to take in relation to Aboriginal consultation for the proposed project are outlined in the [“Code of Practice for Consultation in Ontario’s Environmental Assessment Process”](#). Additional information related to Ontario’s Environmental Assessment Act is available online at: www.ontario.ca/environmentalassessments.

Please also refer to the attached document “A Proponent’s Introduction to the Delegation of Procedural Aspects of consultation with Aboriginal Communities” for further information, including the MECP’s expectations for EA report documentation related to consultation with communities.

The proponent must contact the Director of Environmental Assessment Branch (EABDirector@ontario.ca) under the following circumstances subsequent to initial discussions with the communities identified by the MECP:

- Aboriginal or treaty rights impacts are identified to you by the communities;
- You have reason to believe that your proposed project may adversely affect an Aboriginal or treaty right;
- Consultation with Indigenous communities or other stakeholders has reached an impasse; or
- A Section 16 Order request is expected on the basis of impacts to Aboriginal or treaty rights

The MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role you will be asked to play should additional steps and activities be required.

A draft copy of the report should be sent directly to me prior to the filing of the final report, allowing a minimum of 30 days for the ministry’s technical reviewers to provide comments.

Please also ensure a copy of the final notice is sent to the ministry’s Eastern Region EA notification email account (eanotification.eregion@ontario.ca) after the draft report is reviewed and finalized.

Should you or any members of your project team have any questions regarding the material above, please contact me at jon.orpana@ontario.ca.

Sincerely,



Jon Orpana
Regional Environmental Planner – Eastern Region

Cc:

Emily Tieu, (A) Compliance Supervisor,
MECP Ottawa District Office – for Cornwall Area Office
emily.tieu@ontario.ca

Christine Shillinglaw, P.Eng
Project Manager
McIntosh Perry Consulting Engineers Ltd.
Telephone: (613) 714 0794
Email: c.shillinglaw@mcintoshperry.com

Encl. **Areas of Interest**

AREAS OF INTEREST (v. February 2021)

It is suggested that you check off each section after you have considered / addressed it.

Planning and Policy

- Projects located in MECP Eastern Region are subject to. Parts of the study area may be subject to the [Oak Ridges Moraine Conservation Plan](#) (2017), [Greenbelt Plan](#) (2017) or [Lake Simcoe Protection Plan](#) (2014). Applicable plans and the applicable policies should be identified in the report, and the proponent should describe how the proposed project adheres to the relevant policies in these plans.
- The [Provincial Policy Statement \(2020\)](#) contains policies that protect Ontario's natural heritage and water resources. Applicable policies should be referenced in the report, and the proponent should describe how the proposed project is consistent with these policies.
- In addition to the provincial planning and policy level, the report should also discuss the planning context at the municipal and federal levels, as appropriate.

Source Water Protection

The *Clean Water Act*, 2006 (CWA) aims to protect existing and future sources of drinking water. To achieve this, several types of vulnerable areas have been delineated around surface water intakes and wellheads for every municipal residential drinking water system that is located in a source protection area. These vulnerable areas are known as a Wellhead Protection Areas (WHPAs) and surface water Intake Protection Zones (IPZs). Other vulnerable areas that have been delineated under the CWA include Highly Vulnerable Aquifers (HVAs), Significant Groundwater Recharge Areas (SGRAs), Event-based modelling areas (EBAs), and Issues Contributing Areas (ICAs). Source protection plans have been developed that include policies to address existing and future risks to sources of municipal drinking water within these vulnerable areas.

Projects that are subject to the Environmental Assessment Act that fall under a Class EA, or one of the Regulations, have the potential to impact sources of drinking water if they occur in designated vulnerable areas or in the vicinity of other at-risk drinking water systems (i.e. systems that are not municipal residential systems). MEA Class EA projects may include activities that, if located in a vulnerable area, could be a threat to sources of drinking water (i.e. have the potential to adversely affect the quality or quantity of drinking water sources) and the activity could therefore be subject to policies in a source protection plan. Where an activity poses a risk to drinking water, policies in the local source protection plan may impact how or where that activity is undertaken. Policies may prohibit certain activities, or they may require risk management measures for these activities. Municipal Official Plans, planning decisions, Class EA projects (where the project includes an activity that is a threat to drinking water) and

prescribed instruments must conform with policies that address significant risks to drinking water and must have regard for policies that address moderate or low risks.

- In October 2015, the MEA Parent Class EA document was amended to include reference to the Clean Water Act (Section A.2.10.6) and indicates that proponents undertaking a Municipal Class EA project must identify early in their process whether a project is or could potentially be occurring with a vulnerable area. **Given this requirement, please include a section in the report on source water protection.**
 - The proponent should identify the source protection area and should clearly document how the proximity of the project to sources of drinking water (municipal or other) and any delineated vulnerable areas was considered and assessed. Specifically, the report should discuss whether or not the project is located in a vulnerable area and provide applicable details about the area.
 - If located in a vulnerable area, proponents should document whether any project activities are prescribed drinking water threats and thus pose a risk to drinking water (this should be consulted on with the appropriate Source Protection Authority). Where an activity poses a risk to drinking water, the proponent must document and discuss in the report how the project adheres to or has regard to applicable policies in the local source protection plan. This section should then be used to inform and be reflected in other sections of the report, such as the identification of net positive/negative effects of alternatives, mitigation measures, evaluation of alternatives etc.
- While most source protection plans focused on including policies for significant drinking water threats in the WHPAs and IPZs it should be noted that even though source protection plan policies may not apply in HVAs, these are areas where aquifers are sensitive and at risk to impacts and within these areas, activities may impact the quality of sources of drinking water for systems other than municipal residential systems.
- In order to determine if this project is occurring within a vulnerable area, proponents can use this mapping tool: <http://www.applications.ene.gov.on.ca/swp/en/index.php>. Note that various layers (including WHPAs, WHPA-Q1 and WHPA-Q2, IPZs, HVAs, SGRAs, EBAs, ICAs) can be turned on through the “Map Legend” bar on the left. The mapping tool will also provide a link to the appropriate source protection plan in order to identify what policies may be applicable in the vulnerable area.
- For further information on the maps or source protection plan policies which may relate to their project, proponents must contact the appropriate source protection authority. **Please consult with the local source protection authority to discuss potential impacts on drinking water. Please document the results of that consultation within the report and include all communication documents/correspondence.**

More Information

For more information on the *Clean Water Act*, source protection areas and plans, including specific information on the vulnerable areas and drinking water threats, please refer to [Conservation Ontario's website](#) where you will also find links to the local source protection plan/assessment report.

A list of the prescribed drinking water threats can be found in [section 1.1 of Ontario Regulation 287/07](#) made under the *Clean Water Act*. In addition to prescribed drinking water threats, some source protection plans may include policies to address additional "local" threat activities, as approved by the MECP.

Climate Change

The document "[Considering Climate Change in the Environmental Assessment Process](#)" (Guide) is now a part of the Environmental Assessment program's Guides and Codes of Practice. The Guide sets out the MECP's expectation for considering climate change in the preparation, execution and documentation of environmental assessment studies and processes. The guide provides examples, approaches, resources, and references to assist proponents with consideration of climate change in EA. Proponents should review this Guide in detail.

• **The MECP expects proponents of Class EA projects to:**

1. Consider during the assessment of alternative solutions and alternative designs, the following:
 - a. the project's expected production of greenhouse gas emissions and impacts on carbon sinks (climate change mitigation); and
 - b. resilience or vulnerability of the undertaking to changing climatic conditions (climate change adaptation).
2. Include a discrete section in the report detailing how climate change was considered in the EA.

How climate change is considered can be qualitative or quantitative in nature and should be scaled to the project's level of environmental effect. In all instances, both a project's impacts on climate change (mitigation) and impacts of climate change on a project (adaptation) should be considered.

- The MECP has also prepared another guide to support provincial land use planning direction related to the completion of energy and emission plans. The "[Community Emissions Reduction Planning: A Guide for Municipalities](#)" document is designed to educate stakeholders on the municipal opportunities to reduce energy and greenhouse gas emissions, and to provide guidance on methods and techniques to incorporate consideration of energy and greenhouse gas emissions into municipal activities of all types. We encourage you to review the Guide for information.

□ Air Quality, Dust and Noise

- If there are sensitive receptors in the surrounding area of this project, a quantitative air quality/odour impact assessment will be useful to evaluate alternatives, determine impacts and identify appropriate mitigation measures. The scope of the assessment can be determined based on the potential effects of the proposed alternatives, and typically includes source and receptor characterization and a quantification of local air quality impacts on the sensitive receptors and the environment in the study area. The assessment will compare to all applicable standards or guidelines for all contaminants of concern. **Please contact this office for further consultation on the level of Air Quality Impact Assessment required for this project if not already advised.**
- If a quantitative Air Quality Impact Assessment is not required for the project, the MECP expects that the report contain a qualitative assessment which includes:
 - A discussion of local air quality including existing activities/sources that significantly impact local air quality and how the project may impact existing conditions;
 - A discussion of the nearby sensitive receptors and the project's potential air quality impacts on present and future sensitive receptors;
 - A discussion of local air quality impacts that could arise from this project during both construction and operation; and
 - A discussion of potential mitigation measures.
- As a common practice, "air quality" should be used as an evaluation criterion for all road projects.
- Dust and noise control measures should be addressed and included in the construction plans to ensure that nearby residential and other sensitive land uses within the study area are not adversely affected during construction activities.
- The MECP recommends that non-chloride dust-suppressants be applied. For a comprehensive list of fugitive dust prevention and control measures that could be applied, refer to [Cheminfo Services Inc. Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities](#) report prepared for Environment Canada. March 2005.
- The report should consider the potential impacts of increased noise levels during the operation of the completed project. The proponent should explore all potential measures to mitigate significant noise impacts during the assessment of alternatives.

□ **Ecosystem Protection and Restoration**

- Any impacts to ecosystem form and function must be avoided where possible. The report should describe any proposed mitigation measures and how project planning will protect and enhance the local ecosystem.
- Natural heritage and hydrologic features should be identified and described in detail to assess potential impacts and to develop appropriate mitigation measures. The following sensitive environmental features may be located within or adjacent to the study area:
 - Key Natural Heritage Features: Habitat of endangered species and threatened species, fish habitat, wetlands, areas of natural and scientific interest (ANSIs), significant valley lands, significant woodlands; significant wildlife habitat (including habitat of special concern species); sand barrens, savannahs, and tallgrass prairies; and alvars.
 - Key Hydrologic Features: Permanent streams, intermittent streams, inland lakes and their littoral zones, seepage areas and springs, and wetlands.
 - Other natural heritage features and areas such as: vegetation communities, rare species of flora or fauna, Environmentally Sensitive Areas, Environmentally Sensitive Policy Areas, federal and provincial parks and conservation reserves, Greenland systems etc.

We recommend consulting with the Ministry of Natural Resources and Forestry (MNRF), Fisheries and Oceans Canada (DFO) and your local conservation authority to determine if special measures or additional studies will be necessary to preserve and protect these sensitive features. In addition, you may consider the provisions of the Rouge Park Management Plan if applicable.

□ **Species at Risk**

- The Ministry of the Environment, Conservation and Parks has now assumed responsibility of Ontario's Species at Risk program. Information, standards, guidelines, reference materials and technical resources to assist you are found at <https://www.ontario.ca/page/species-risk>.
- The Client's Guide to Preliminary Screening for Species at Risk (Draft May 2019) has been attached to the covering email for your reference and use. Please review this document for next steps.
- For any questions related to subsequent permit requirements, please contact SAROntario@ontario.ca.

□ Surface Water

- The report must include enough information to demonstrate that there will be no negative impacts on the natural features or ecological functions of any watercourses within the study area. Measures should be included in the planning and design process to ensure that any impacts to watercourses from construction or operational activities (e.g. spills, erosion, pollution) are mitigated as part of the proposed undertaking.
- Additional stormwater runoff from new pavement can impact receiving watercourses and flood conditions. Quality and quantity control measures to treat stormwater runoff should be considered for all new impervious areas and, where possible, existing surfaces. The ministry's [Stormwater Management Planning and Design Manual \(2003\)](#) should be referenced in the report and utilized when designing stormwater control methods. **A Stormwater Management Plan should be prepared as part of the Class EA process** that includes:
 - Strategies to address potential water quantity and erosion impacts related to stormwater draining into streams or other sensitive environmental features, and to ensure that adequate (enhanced) water quality is maintained
 - Watershed information, drainage conditions, and other relevant background information
 - Future drainage conditions, stormwater management options, information on erosion and sediment control during construction, and other details of the proposed works
 - Information on maintenance and monitoring commitments.
- Ontario Regulation 60/08 under the *Ontario Water Resources Act* (OWRA) applies to the Lake Simcoe Basin, which encompasses Lake Simcoe and the lands from which surface water drains into Lake Simcoe. If the proposed sewage treatment plant is listed in Table 1 of the regulation, the report should describe how the proposed project and its mitigation measures are consistent with the requirements of this regulation and the OWRA.
- Any potential approval requirements for surface water taking or discharge should be identified in the report. A Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, except for certain water taking activities that have been prescribed by the Water Taking EASR Regulation – *O. Reg. 63/16*. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the [Water Taking User Guide for EASR](#) for more information. Additionally, an Environmental Compliance Approval under the OWRA is required for municipal stormwater management works.

□ **Groundwater**

- The status of, and potential impacts to any well water supplies should be addressed. If the project involves groundwater takings or changes to drainage patterns, the quantity and quality of groundwater may be affected due to drawdown effects or the redirection of existing contamination flows. In addition, project activities may infringe on existing wells such that they must be reconstructed or sealed and abandoned. Appropriate information to define existing groundwater conditions should be included in the report.
- If the potential construction or decommissioning of water wells is identified as an issue, the report should refer to Ontario Regulation 903, Wells, under the OWRA.
- Potential impacts to groundwater-dependent natural features should be addressed. Any changes to groundwater flow or quality from groundwater taking may interfere with the ecological processes of streams, wetlands or other surficial features. In addition, discharging contaminated or high volumes of groundwater to these features may have direct impacts on their function. Any potential effects should be identified, and appropriate mitigation measures should be recommended. The level of detail required will be dependent on the significance of the potential impacts.
- Any potential approval requirements for groundwater taking or discharge should be identified in the report. A Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, with the exception of certain water taking activities that have been prescribed by the Water Taking EASR Regulation – *O. Reg. 63/16*. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the [Water Taking User Guide for EASR](#) for more information.
- Consultation with the railroad authorities is necessary wherever there is a plan to use construction dewatering in the vicinity of railroad lines or where the zone of influence of the construction dewatering potentially intercepts railroad lines.

□ **Excess Materials Management**

- In December 2019, MECP released a new regulation under the Environmental Protection Act, titled “On-Site and Excess Soil Management” (O. Reg. 406/19) to support improved management of excess construction soil. This regulation is a key step to support proper management of excess soils, ensuring valuable resources don’t go to waste and to provide clear rules on managing and reusing excess soil. New risk-based standards referenced by this regulation help to facilitate local beneficial reuse which in turn will reduce greenhouse gas emissions from soil transportation, while ensuring strong protection of human health and the environment. The new regulation is being phased in over time, with the first phase

in effect on January 1, 2021. For more information, please visit <https://www.ontario.ca/page/handling-excess-soil>.

- The report should reference that activities involving the management of excess soil should be completed in accordance with O. Reg. 406/19 and the MECP's current guidance document titled "[Management of Excess Soil – A Guide for Best Management Practices](#)" (2014).
- All waste generated during construction must be disposed of in accordance with ministry requirements

Contaminated Sites

- Any current or historical waste disposal sites should be identified in the report. The status of these sites should be determined to confirm whether approval pursuant to Section 46 of the EPA may be required for land uses on former disposal sites. We recommend referring to the [MECP's D-4 guideline](#) for land use considerations near landfills and dumps.
 - Resources available may include regional/local municipal official plans and data; provincial data on [large landfill sites](#) and [small landfill sites](#); Environmental Compliance Approval information for waste disposal sites on [Access Environment](#).
- Other known contaminated sites (local, provincial, federal) in the study area should also be identified in the report (Note – information on federal contaminated sites is found on the Government of Canada's [website](#)).
- The location of any underground storage tanks should be investigated in the report. Measures should be identified to ensure the integrity of these tanks and to ensure an appropriate response in the event of a spill. The ministry's Spills Action Centre must be contacted in such an event.
- Since the removal or movement of soils may be required, appropriate tests to determine contaminant levels from previous land uses or dumping should be undertaken. If the soils are contaminated, you must determine how and where they are to be disposed of, consistent with *Part XV.1 of the Environmental Protection Act* (EPA) and Ontario Regulation 153/04, Records of Site Condition, which details the new requirements related to site assessment and clean up. Please contact the appropriate MECP District Office for further consultation if contaminated sites are present.

□ **Servicing, Utilities and Facilities**

- The report should identify any above or underground utilities in the study area such as transmission lines, telephone/internet, oil/gas etc. The owners should be consulted to discuss impacts to this infrastructure, including potential spills.
- The report should identify any servicing infrastructure in the study area such as wastewater, water, stormwater that may potentially be impacted by the project.
- Any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste must have an Environmental Compliance Approval (ECA) before it can operate lawfully. Please consult with MECP's Environmental Permissions Branch to determine whether a new or amended ECA will be required for any proposed infrastructure.
- We recommend referring to the ministry's [environmental land use planning guides](#) to ensure that any potential land use conflicts are considered when planning for any infrastructure or facilities related to wastewater, pipelines, landfills or industrial uses.

□ **Mitigation and Monitoring**

- Contractors must be made aware of all environmental considerations so that all environmental standards and commitments for both construction and operation are met. Mitigation measures should be clearly referenced in the report and regularly monitored during the construction stage of the project. In addition, we encourage proponents to conduct post-construction monitoring to ensure all mitigation measures have been effective and are functioning properly.
- Design and construction reports and plans should be based on a best management approach that centres on the prevention of impacts, protection of the existing environment, and opportunities for rehabilitation and enhancement of any impacted areas.
- The proponent's construction and post-construction monitoring plans must be documented in the report, as outlined in Section A.2.5 and A.4.1 of the MEA Class EA parent document.

□ **Consultation**

- The report must demonstrate how the consultation provisions of the Class EA have been fulfilled, including documentation of all stakeholder consultation efforts undertaken during

the planning process. This includes a discussion in the report that identifies concerns that were raised and **describes how they have been addressed by the proponent** throughout the planning process. The report should also include copies of comments submitted on the project by interested stakeholders, and the proponent's responses to these comments (as directed by the Class EA to include full documentation).

- Please include the full stakeholder distribution/consultation list in the documentation.

Class EA Process

- If this project is a Master Plan: there are several different approaches that can be used to conduct a Master Plan, examples of which are outlined in Appendix 4 of the Class EA. **The Master Plan should clearly indicate the selected approach for conducting the plan**, by identifying whether the levels of assessment, consultation and documentation are sufficient to fulfill the requirements for Schedule B or C projects. Please note that any Schedule B or C projects identified in the plan would be subject to Part II Order Requests under the Environmental Assessment Act, although the plan itself would not be. **Please include a description of the approach being undertaken (use Appendix 4 as a reference).**
- If this project is a Master Plan: Any identified projects should also include information on the MCEA schedule associated with the project.
- The report should provide clear and complete documentation of the planning process in order to allow for transparency in decision-making.
- The Class EA requires the consideration of the effects of each alternative on all aspects of the environment (including planning, natural, social, cultural, economic, technical). The report should include a level of detail (e.g. hydrogeological investigations, terrestrial and aquatic assessments, cultural heritage assessments) such that all potential impacts can be identified, and appropriate mitigation measures can be developed. Any supporting studies conducted during the Class EA process should be referenced and included as part of the report.
- Please include in the report a list of all subsequent permits or approvals that may be required for the implementation of the preferred alternative, including but not limited to, MECP's PTTW, EASR Registrations and ECAs, conservation authority permits, species at risk permits, MTO permits and approvals under the *Impact Assessment Act*, 2019.
- Ministry guidelines and other information related to the issues above are available at <http://www.ontario.ca/environment-and-energy/environment-and-energy>. We encourage you to review all the available guides and to reference any relevant information in the report.

Amendments to the EAA through the Covid-19 Economic Recovery Act, 2020

Once the EA Report is finalized, the proponent must issue a Notice of Completion providing a minimum 30-day period during which documentation may be reviewed and comment and input can be submitted to the proponent. The Notice of Completion must be sent to the appropriate MECP Regional Office email address (for projects in MECP Eastern Region, the email is eanotification.eregion@ontario.ca).

The public has the ability to request a higher level of assessment on a project if they are concerned about potential adverse impacts to constitutionally protected Aboriginal and treaty rights. In addition, the Minister may issue an order on his or her own initiative within a specified time period. The Director (of the Environmental Assessment Branch) will issue a Notice of Proposed Order to the proponent if the Minister is considering an order for the project within 30 days after the conclusion of the comment period on the Notice of Completion. At this time, the Director may request additional information from the proponent. Once the requested information has been received, the Minister will have 30 days within which to make a decision or impose conditions on your project.

Therefore, the proponent cannot proceed with the project until at least 30 days after the end of the comment period provided for in the Notice of Completion. Further, the proponent may not proceed after this time if:

- a Section 16 Order request has been submitted to the ministry regarding potential adverse impacts to constitutionally protected Aboriginal and treaty rights, or
- the Director has issued a Notice of Proposed order regarding the project.

Please ensure that the Notice of Completion advises that outstanding concerns are to be directed to the proponent for a response, and that in the event there are outstanding concerns regarding potential adverse impacts to constitutionally protected Aboriginal and treaty rights, Section 16 Order requests on those matters should be addressed in writing to:

Minister
Ministry of Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto ON M7A 2J3
minister.mecp@ontario.ca

and

Director, Environmental Assessment Branch
Ministry of Environment, Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto ON, M4V 1P5
EABDirector@ontario.ca

A PROPONENT’S INTRODUCTION TO THE DELEGATION OF PROCEDURAL ASPECTS OF CONSULTATION WITH ABORIGINAL COMMUNITIES

DEFINITIONS

The following definitions are specific to this document and may not apply in other contexts:

Aboriginal communities – the First Nation or Métis communities identified by the Crown for the purpose of consultation.

Consultation – the Crown’s legal obligation to consult when the Crown has knowledge of an established or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. This is the type of consultation required pursuant to s. 35 of the *Constitution Act, 1982*. Note that this definition does not include consultation with Aboriginal communities for other reasons, such as regulatory requirements.

Crown – the Ontario Crown, acting through a particular ministry or ministries.

Procedural aspects of consultation – those portions of consultation related to the process of consultation, such as notifying an Aboriginal community about a project, providing information about the potential impacts of a project, responding to concerns raised by an Aboriginal community and proposing changes to the project to avoid negative impacts.

Proponent – the person or entity that wants to undertake a project and requires an Ontario Crown decision or approval for the project.

I. PURPOSE

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that may adversely impact that right. In outlining a framework for the duty to consult, the Supreme Court of Canada has stated that the Crown may delegate procedural aspects of consultation to third parties. This document provides general information about the Ontario Crown’s approach to delegation of the procedural aspects of consultation to proponents.

This document is not intended to instruct a proponent about an individual project, and it does not constitute legal advice.

II. WHY IS IT NECESSARY TO CONSULT WITH ABORIGINAL COMMUNITIES?

The objective of the modern law of Aboriginal and treaty rights is the *reconciliation* of Aboriginal peoples and non-Aboriginal peoples and their respective rights, claims and interests. Consultation is an important component of the reconciliation process.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. For example, the Crown’s duty to consult is triggered when it considers

issuing a permit, authorization or approval for a project which has the potential to adversely impact an Aboriginal right, such as the right to hunt, fish, or trap in a particular area.

The scope of consultation required in particular circumstances ranges across a spectrum depending on both the nature of the asserted or established right and the seriousness of the potential adverse impacts on that right.

Depending on the particular circumstances, the Crown may also need to take steps to accommodate the potentially impacted Aboriginal or treaty right. For example, the Crown may be required to avoid or minimize the potential adverse impacts of the project.

III. THE CROWN'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

The Crown has the responsibility for ensuring that the duty to consult, and accommodate where appropriate, is met. However, the Crown may delegate the procedural aspects of consultation to a proponent.

There are different ways in which the Crown may delegate the procedural aspects of consultation to a proponent, including through a letter, a memorandum of understanding, legislation, regulation, policy and codes of practice.

If the Crown decides to delegate procedural aspects of consultation, the Crown will generally:

- Ensure that the delegation of procedural aspects of consultation and the responsibilities of the proponent are clearly communicated to the proponent;
- Identify which Aboriginal communities must be consulted;
- Provide contact information for the Aboriginal communities;
- Revise, as necessary, the list of Aboriginal communities to be consulted as new information becomes available and is assessed by the Crown;
- Assess the scope of consultation owed to the Aboriginal communities;
- Maintain appropriate oversight of the actions taken by the proponent in fulfilling the procedural aspects of consultation;
- Assess the adequacy of consultation that is undertaken and any accommodation that may be required;
- Provide a contact within any responsible ministry in case issues arise that require direction from the Crown; and
- Participate in the consultation process as necessary and as determined by the Crown.

IV. THE PROPONENT'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

Where aspects of the consultation process have been delegated to a proponent, the Crown, in meeting its duty to consult, will rely on the proponent's consultation activities and documentation of those activities. The consultation process informs the Crown's decision of whether or not to approve a proposed project or activity.

A proponent's role and responsibilities will vary depending on a variety of factors including the extent of consultation required in the circumstance and the procedural aspects of consultation the Crown has delegated to it. Proponents are often in a better position than the Crown to discuss a project and its potential impacts with Aboriginal communities and to determine ways to avoid or minimize the adverse impacts of a project.

A proponent can raise issues or questions with the Crown at any time during the consultation process. If issues or concerns arise during the consultation that cannot be addressed by the proponent, the proponent should contact the Crown.

a) What might a proponent be required to do in carrying out the procedural aspects of consultation?

Where the Crown delegates procedural aspects of consultation, it is often the proponent's responsibility to provide notice of the proposed project to the identified Aboriginal communities. The notice should indicate that the Crown has delegated the procedural aspects of consultation to the proponent and should include the following information:

- a description of the proposed project or activity;
- mapping;
- proposed timelines;
- details regarding anticipated environmental and other impacts;
- details regarding opportunities to comment; and
- any changes to the proposed project that have been made for seasonal conditions or other factors, where relevant.

Proponents should provide enough information and time to allow Aboriginal communities to provide meaningful feedback regarding the potential impacts of the project. Depending on the nature of consultation required for a project, a proponent also may be required to:

- provide the Crown with copies of any consultation plans prepared and an opportunity to review and comment;
- ensure that any necessary follow-up discussions with Aboriginal communities take place in a timely manner, including to confirm receipt of information, share and update information and to address questions or concerns that may arise;

- as appropriate, discuss with Aboriginal communities potential mitigation measures and/or changes to the project in response to concerns raised by Aboriginal communities;
- use language that is accessible and not overly technical, and translate material into Aboriginal languages where requested or appropriate;
- bear the reasonable costs associated with the consultation process such as, but not limited to, meeting hall rental, meal costs, document translation(s), or to address technical & capacity issues;
- provide the Crown with all the details about potential impacts on established or asserted Aboriginal or treaty rights, how these concerns have been considered and addressed by the proponent and the Aboriginal communities and any steps taken to mitigate the potential impacts;
- provide the Crown with complete and accurate documentation from these meetings and communications; and
- notify the Crown immediately if an Aboriginal community not identified by the Crown approaches the proponent seeking consultation opportunities.

b) What documentation and reporting does the Crown need from the proponent?

Proponents should keep records of all communications with the Aboriginal communities involved in the consultation process and any information provided to these Aboriginal communities.

As the Crown is required to assess the adequacy of consultation, it needs documentation to satisfy itself that the proponent has fulfilled the procedural aspects of consultation delegated to it. The documentation required would typically include:

- the date of meetings, the agendas, any materials distributed, those in attendance and copies of any minutes prepared;
- the description of the proposed project that was shared at the meeting;
- any and all concerns or other feedback provided by the communities;
- any information that was shared by a community in relation to its asserted or established Aboriginal or treaty rights and any potential adverse impacts of the proposed activity, approval or disposition on such rights;
- any proposed project changes or mitigation measures that were discussed, and feedback from Aboriginal communities about the proposed changes and measures;
- any commitments made by the proponent in response to any concerns raised, and feedback from Aboriginal communities on those commitments;
- copies of correspondence to or from Aboriginal communities, and any materials distributed electronically or by mail;

- information regarding any financial assistance provided by the proponent to enable participation by Aboriginal communities in the consultation;
- periodic consultation progress reports or copies of meeting notes if requested by the Crown;
- a summary of how the delegated aspects of consultation were carried out and the results; and
- a summary of issues raised by the Aboriginal communities, how the issues were addressed and any outstanding issues.

In certain circumstances, the Crown may share and discuss the proponent's consultation record with an Aboriginal community to ensure that it is an accurate reflection of the consultation process.

c) Will the Crown require a proponent to provide information about its commercial arrangements with Aboriginal communities?

The Crown may require a proponent to share information about aspects of commercial arrangements between the proponent and Aboriginal communities where the arrangements:

- include elements that are directed at mitigating or otherwise addressing impacts of the project;
- include securing an Aboriginal community's support for the project; or
- may potentially affect the obligations of the Crown to the Aboriginal communities.

The proponent should make every reasonable effort to exempt the Crown from confidentiality provisions in commercial arrangements with Aboriginal communities to the extent necessary to allow this information to be shared with the Crown.

The Crown cannot guarantee that information shared with the Crown will remain confidential. Confidential commercial information should not be provided to the Crown as part of the consultation record if it is not relevant to the duty to consult or otherwise required to be submitted to the Crown as part of the regulatory process.

V. WHAT ARE THE ROLES AND RESPONSIBILITIES OF ABORIGINAL COMMUNITIES' IN THE CONSULTATION PROCESS?

Like the Crown, Aboriginal communities are expected to engage in consultation in good faith. This includes:

- responding to the consultation notice;
- engaging in the proposed consultation process;
- providing relevant documentation;

- clearly articulating the potential impacts of the proposed project on Aboriginal or treaty rights; and
- discussing ways to mitigate any adverse impacts.

Some Aboriginal communities have developed tools, such as consultation protocols, policies or processes that provide guidance on how they would prefer to be consulted. Although not legally binding, proponents are encouraged to respect these community processes where it is reasonable to do so. Please note that there is no obligation for a proponent to pay a fee to an Aboriginal community in order to enter into a consultation process.

To ensure that the Crown is aware of existing community consultation protocols, proponents should contact the relevant Crown ministry when presented with a consultation protocol by an Aboriginal community or anyone purporting to be a representative of an Aboriginal community.

VI. WHAT IF MORE THAN ONE PROVINCIAL CROWN MINISTRY IS INVOLVED IN APPROVING A PROPONENT'S PROJECT?

Depending on the project and the required permits or approvals, one or more ministries may delegate procedural aspects of the Crown's duty to consult to the proponent. The proponent may contact individual ministries for guidance related to the delegation of procedural aspects of consultation for ministry-specific permits/approvals required for the project in question. Proponents are encouraged to seek input from all involved Crown ministries sooner rather than later.

Client's Guide to Preliminary Screening for Species at Risk

***Ministry of the Environment, Conservation and Parks
Species at Risk Branch, Permissions and Compliance***

DRAFT - May 2019

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1.0 Purpose, Scope, Background and Context

1.1 Purpose of this Guide

This guide has been created to:

- help clients better understand their obligation to gather information and complete a preliminary screening for species at risk before contacting the ministry,
- outline guidance and advice clients can expect to receive from the ministry at the preliminary screening stage,
- help clients understand how they can gather information about species at risk by accessing publicly available information housed by the Government of Ontario, and
- provide a list of other potential sources of species at risk information that exist outside the Government of Ontario.

It remains the client's responsibility to:

- carry out a preliminary screening for their projects,
- obtain best available information from all applicable information sources,
- conduct any necessary field studies or inventories to identify and confirm the presence or absence of species at risk or their habitat,
- consider any potential impacts to species at risk that a proposed activity might cause, and
- comply with the *Endangered Species Act (ESA)*.

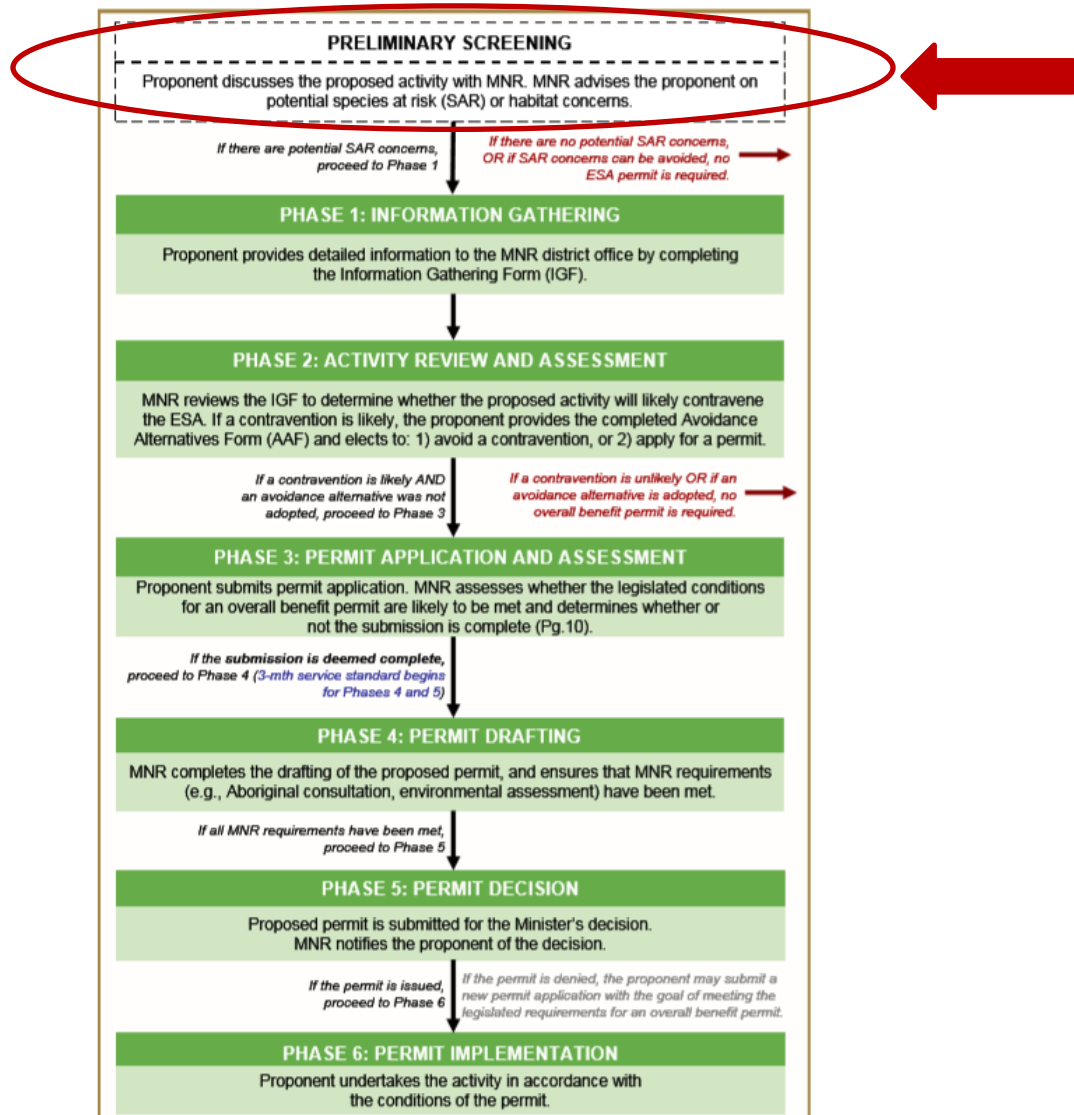
To provide the most efficient service, clients should initiate species at risk screenings and seek information from all applicable information sources identified in this guide, at a minimum, prior to contacting Government of Ontario ministry offices for further information or advice.

1.2 Scope

This guide is a resource for clients seeking to understand if their activity is likely to impact species at risk or if they are likely to trigger the need for an authorization under the ESA. It is not intended to circumvent any detailed site surveys that may be necessary to document species at risk or their habitat nor to circumvent the need to assess the impacts of a proposed activity on species at risk or their habitat. This guide is not an exhaustive list of available information sources for any given area as the availability of information on species at risk and their habitat varies across the province. This guide is intended to support projects and activities carried out on Crown and private land, by private landowners, businesses, other provincial ministries and agencies, or municipal government.

1.3 Background and Context

To receive advice on their proposed activity, clients must first determine whether any species at risk or their habitat exist or are likely to exist at or near their proposed activity, and whether their proposed activity is likely to contravene the ESA. Once this step is complete, clients may contact the ministry at SAROntario@ontario.ca to discuss the main purpose, general methods, timing and location of their proposed activity as well as information obtained about species at risk and their habitat at, or near, the site. At this stage, the ministry can provide advice and guidance to the client about potential species at risk or habitat concerns, measures that the client is considering to avoid adverse effects on species at risk or their habitat and whether additional field surveys are advisable. This is referred to as the “Preliminary Screening” stage. For more information on additional phases in the diagram below, please refer to the *Endangered Species Act Submission Standards for Activity Review and 17(2)(c) Overall Benefit Permits* policy available online at <https://www.ontario.ca/page/species-risk-overall-benefit-permits>



2.0 Roles and Responsibilities

To provide the most efficient service, clients should initiate species at risk screenings and seek information from all applicable information sources identified in this guide prior to contacting Government of Ontario ministry offices for further information or advice.

Step 1: Client seeks information regarding species at risk or their habitat that exist, or are likely to exist, at or near their proposed activity by referring to all applicable information sources identified in this guide.

Step 2: Client reviews and consider guidance on whether their proposed activity is likely to contravene the ESA (see section 3.4 of this guide for guidance on what to consider).

Step 3: Client gathers information identified in the checklist in section 4 of this guide.

Step 4: Client contacts the ministry at SAROntario@ontario.ca to discuss their preliminary screening. Ministry staff will ask the client questions about the main purpose, general methods, timing and location of their proposed activity as well as information obtained about species at risk and their habitat at, or near, the site. Ministry staff will also ask the client for their interpretation of the impacts of their activity on species at risk or their habitat as well as measures the client has considered to avoid any adverse impacts.

Step 5: Ministry staff will provide advice on next steps.

Option A: Ministry staff may advise the client they can proceed with their activity without an authorization under the ESA where the ministry is confident that:

- no protected species at risk or habitats are likely to be present at or near the proposed location of the activity; or
- protected species at risk or habitats are known to be present but the activity is not likely to contravene the ESA; or
- through the adoption of avoidance measures, the modified activity is not likely to contravene the ESA.

Option B: Ministry staff may advise the client to proceed to Phase 1 of the overall benefit permitting process (i.e. Information Gathering in the previous diagram), where:

- there is uncertainty as to whether any protected species at risk or habitats are present at or near the proposed location of the activity; or
- the potential impacts of the proposed activity are uncertain; or
- ministry staff anticipate the proposed activity is likely to contravene the ESA.

3.0 Information Sources

Land Information Ontario (LIO) and the Natural Heritage Information Centre (NHIC) maintain and provide information about species at risk, as well as related information about fisheries, wildlife, crown lands, protected lands and more. This information is made available to organizations, private individuals, consultants, and developers through online sources and is often considered under various pieces of legislation or as part of regulatory approvals and planning processes.

The information available from LIO or NHIC and the sources listed in this guide should not be considered as a substitute for site visits and appropriate field surveys. Generally, this information can be regarded as a starting point from which to conduct further field surveys, if needed. While this data represents best available current information, it is important to note that a lack of information for a site does not mean that species at risk or their habitat are not present. There are many areas where the Government of Ontario does not currently have information, especially in more remote parts of the province. The absence of species at risk location data at or near your site does not necessarily mean no species at risk are present at that location. On-site assessments can better verify site conditions, identify and confirm presence of species at risk and/or their habitats.

Information on the location (i.e. observations and occurrences) of species at risk is considered sensitive and therefore publicly available only on a 1km square grid as opposed to as a detailed point on a map. This generalized information can help you understand which species at risk are in the general vicinity of your proposed activity and can help inform field level studies you may want to undertake to confirm the presence, or absence of species at risk at or near your site.

Should you require specific and detailed information pertaining to species at risk observations and occurrences at or near your site on a finer geographic scale; you will be required to demonstrate your need to access this information, to complete data sensitivity training and to obtain a Sensitive Data Use License from the NHIC. Information on how to obtain a license can be found online at <https://www.ontario.ca/page/get-natural-heritage-information>.

Many organizations (e.g. other Ontario ministries, municipalities, conservation authorities) have ongoing licensing to access this data so be sure to check if your organization has this access and consult this data as part of your preliminary screening if your organization already has a license.

3.1 Make a Map: Natural Heritage Areas

The Make a Natural Heritage Area Map (available online at http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US) provides public access to natural heritage information, including species at risk, without the user needing to have Geographic Information System (GIS) capability. It allows users to view and identify generalized species at risk information, mark areas of interest, and create and print a custom map directly from the web application. The tool also shows topographic information such as roads, rivers, contours and municipal boundaries.

Users are advised that sensitive information has been removed from the natural areas dataset and the occurrences of species at risk has been generalized to a 1-kilometre grid to mitigate the risks to the species (e.g. illegal harvest, habitat disturbance, poaching).

The web-based mapping tool displays natural heritage data, including:

- Generalized Species at risk occurrence data (based on a 1-km square grid),
- Natural Heritage Information Centre data.

Data cannot be downloaded directly from this web map; however, information included in this application is available digitally through Land Information Ontario (LIO) at <https://www.ontario.ca/page/land-information-ontario>.

3.2 Land Information Ontario (LIO)

Most natural heritage data is publicly available. This data is managed in a large provincial corporate database called the LIO Warehouse and can be accessed online through the LIO Metadata Management Tool at <https://www.javacoeapp.lrc.gov.on.ca/geonetwork/srv/en/main.home>. This tool provides descriptive information about the characteristics, quality and context of the data. Publicly available geospatial data can be downloaded directly from this site.

While most data are publicly available, some data may be considered highly sensitive (i.e. nursery areas for fish, species at risk observations) and as such, access to some data maybe restricted.

3.3 Additional Species at Risk Information Sources

- The Breeding Bird Atlas can be accessed online at <http://www.birdsontario.org/atlas/index.jsp?lang=en>
- eBird can be accessed online at <https://ebird.org/home>
- iNaturalist can be accessed online at <https://www.inaturalist.org/>
- The Ontario Reptile and Amphibian Atlas can be accessed online at <https://ontarionature.org/programs/citizen-science/reptile-amphibian-atlas>
- Your local Conservation Authority. Information to help you find your local Conservation Authority can be accessed online at <https://conservationontario.ca/conservation-authorities/find-a-conservation-authority/>

Local naturalist groups or other similar community-based organizations

- Local Indigenous communities
- Local land trusts or other similar Environmental Non-Government Organizations
- Field level studies to identify if species at risk, or their habitat, are likely present or absent at or near the site.
- When an activity is proposed within one of the continuous caribou ranges, please be sure to consider the caribou Range Management Policy. This policy includes figures and maps of the continuous caribou range, can be found online at <https://www.ontario.ca/page/range-management-policy-support-woodland-caribou-conservation-and-recovery>

3.4 Information Sources to Support Impact Assessments

- Guidance to help you understand if your activity is likely to adversely impact species at risk or their habitat can be found online at <https://www.ontario.ca/page/policy-guidance-harm-and-harass-under-endangered-species-act> and <https://www.ontario.ca/page/categorizing-and-protecting-habitat-under-endangered-species-act>
- A list of species at risk in Ontario is available online at <https://www.ontario.ca/page/species-risk-ontario>. On this webpage, you can find out more about each species, including where it lives, what threatens it and any specific habitat protections that apply to it by clicking on the photo of the species.

4.0 Check-List

Please feel free to use the check list below to help you confirm you have explored all applicable information sources and to support your discussion with Ministry staff at the preliminary screening stage.

- ✓ Land Information Ontario (LIO)
- ✓ Natural Heritage Information Centre (NHIC)
- ✓ The Breeding Bird Atlas
- ✓ eBird
- ✓ iNaturalist
- ✓ Ontario Reptile and Amphibian Atlas
- ✓ List Conservation Authorities you contacted: _____

- ✓ List local naturalist groups you contacted: _____

- ✓ List local Indigenous communities you contacted: _____

- ✓ List any other local land trusts or Environmental Non-Government Organizations you contacted: _____

- ✓ List and field studies that were conducted to identify species at risk, or their habitat, likely to be present or absent at or near the site: _____

- ✓ List what you think the likely impacts of your activity are on species at risk and their habitat (e.g. damage or destruction of habitat, killing, harming or harassing species at risk): _____

Kerry Reed

From: Christine Shillinglaw
Sent: October 6, 2022 3:22 PM
To: Lisa Marshall; Kerry Reed; Calum MacDonald
Subject: FW:
Attachments: [REDACTED] 05102022141308.pdf

FYI

Trying to set up a call next week with Marc to discuss

Christine Shillinglaw, P.Eng.

Manager, Transportation Structures Division, Eastern Ontario
T. 613.714.0794 | F. 613.836.3742 | C. 613.325.2984
c.shillinglaw@mcintoshperry.com | www.mcintoshperry.com

McINTOSH PERRY

Turning Possibilities Into Reality

From: Marc Legault <MarcLegault@nationmun.ca>
Sent: October 6, 2022 10:25 AM
To: Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>
Subject:

We just got this letter from [REDACTED], it's in French but he is stating pretty clear that is not going to play ball.

Marc



Marc Legault
Directeur des travaux publics / Director of Public Works
La Municipalité de La Nation / The Nation Municipality
3248 Chemin de comté 9 / County Road 9
Fournier, Ontario, K0B 1G0
Phone: 613-524-2932



N'oubliez pas de voter aux élections municipales et scolaires 2022! Pour en savoir plus : [Conseil - The Nation \(nationmun.ca\)](http://Conseil - The Nation (nationmun.ca))

Les bureaux de la municipalité de La Nation sont ouverts au public. Si vous désirez rencontrer un employé en personne, veuillez communiquer avec nous au bureau de Casselman au 613-764-5444 ou au bureau de Fournier au 613-524-2932 pour prendre rendez-vous.

Ce message est confidentiel. Il peut également être privilégié ou autrement protégé par l'immunité au produit du travail ou par d'autres règles juridiques. Si vous l'avez reçu par erreur, veuillez nous en informer par courrier électronique et le supprimer de votre système. Vous ne pouvez pas copier ce message ou divulguer son contenu à qui que ce soit.

Don't forget to vote at the upcoming 2022 Municipal and School Board Elections. Visit our website to find out more: [Council - The Nation \(nationmun.ca\)](http://nationmun.ca)

The Nation offices are open to the public. If you wish to meet a staff member in person, you may contact us at our Casselman office at 613-764-5444 or at our Fournier office at 613-524-2932 to make an appointment.

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Le 1er Octobre, 2022



Marc Legault,
Municipalite Nation
3248 County Rd. 9
Fournier, Ont. K0B1G0

Monsieur,

Pour faire suite à votre lettre du 19 septembre, je répond en français apprécierais recevoir futures documentations en français.

Je passe a la description du terrain en question. Mon père a acheté ce 50 acres en 1969 et je suis maintenant propriétaire unique. D'après la configuration des Sols de l'Ontario, c'est du sol Bainsville ou North Gower, loam argileux granulaire, gris foncé, Topographie Unie avec une VALEUR EXCELLENTE. Si nous passons au drainage de surface qui a un baissière naturelle, l'eau coule vers le sud ouest. Tant qu'au drainage souterrain de 30 acres, l'eau coule elle aussi vers le sud ouest, avec deux 'main drains' qui coulent dans le Butternut Creek.

Un ingénieur de McIntosh Perry m'a téléphoné pour me demander la permission de droit de passage. Pendant sa visite, il m'a confié qu'il ne comprenait pas pourquoi la Municipalité ne contruisait pas le pont. "BEAUCOUP PLUS DE PROBLÈMES A PASSER CHEZ VOUS". Le contremaitre de Tomlison Construction a aussi visité le site. Il m'a avisé que si un cul de sac survient a cause du réalignement du chemin, les pompiers et vehicules d'urgence n'accepteront pas de servir ce 'DEAD END'. Ca prend un rond-point.

J'ai avec plusieurs voisins et amis donné des solutions pour la construction du pont ainsi que la route de service durant la construction. La Municipalité fait la SOURDE OREILLE et nous ignore. Saviez vous que les contribuables ont le droit d'être écouté? L'écoute est importante non seulement en temps d'élections.

Je tiens a vous aviser que la création de ce chemin va vous mener a des poursuites en justice de la part de LAFRANCE. J'ai des droits civiles en ce qui concerne ce projet sur MA FERME. Pourquoi autant d'études pendant toutes ces années??? Pendant ces années écoulées, le coût des matériaux et la main d'oeuvre augmentent. CHOSE CERTAINE, vous pouvez mettre fin a vos études. Je ne suis DEFINITIVEMENT PAS A VENDRE. Non negociab le, hier, aujourd'hui et demain.....FAITES LE PONT!!!!!! C'est la responsabilité et obligation municipales de construire ce charmant pont. Saviez vous que un overpass a Ottawa est construit OVERNIGHT!!!!!! Pourquoi ne pas prendre cet expertise....

Depuis quand on se permet d'abandonner un pont afin de passer dans les champ du voisin?
QUELLE AUDACE!!!!!! Vous venez detruire 10 acres de GOOD FARMLAND. En plus, le
chemin va agir comme un barrage car l'eau va s'écouler sur les terres de chaques côtes et le
tout garni de mauvaises herbes..... Les parçèles restantes vont devenir un NO MAN'S LAND!!

Le respect des terres agricoles dans la Municipalité Nation est un GROS ZERO!!!! Pensons
aussi au éoliennes, SAUVONS NATIONS!!!

Mettez donc mon petit poème en pratique.....

ENFIN NATION
PASSE A L'ACTION
AVEC LA CONSTRUCTION
DU FAMEUX PONT
ET SON NOM SERA
PAUL LATOUR

Votre contribuable.



FAO 934992 FBR

Kerry Reed

From: Harvey, Joseph (MTCS) <Joseph.Harvey@ontario.ca>
Sent: October 12, 2022 9:13 AM
To: marclegault@nationmun.ca
Cc: Kerry Reed; Christine Shillinglaw
Subject: FW: File 0016309: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment
Attachments: Nation Municipality_Route 800 East Realignment_NOSC_Final_19Sept2022.pdf; 2022-10-12_Route800East-MTCS-Ltr.pdf

Marc Legault,

Please find attached MTCS comments on the above referenced undertaking. Do not hesitate to contact me with any questions or concerns.

Regards,

Joseph Harvey | Heritage Planner

Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit

Ministry of Tourism, Culture, and Sport

613.242.3743

Joseph.Harvey@ontario.ca

From: Kerry Reed K.Reed@mcintoshperry.com
Sent: September-19-22 1:49 PM
Cc: Lisa Marshall l.marshall@mcintoshperry.com; Christine Shillinglaw c.shillinglaw@mcintoshperry.com; Marc Legault marclegault@nationmun.ca
Subject: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Hello,

Please find the attached Notice of Study Commencement Letter for the Municipal Class Environmental Assessment Study currently being undertaken by the Nation Municipality for Route 800 East Realignment.

If you have any questions or comments, please contact one of the Project Team members noted in the enclosed notice.

Thank you,

Kerry

Kerry Reed

Environmental Planner

T. 343.925.0187 | C. 613.808.3464

K.Reed@mcintoshperry.com | www.mcintoshperry.com

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Platinum
member

Kerry Reed

From: Kerry Reed
Sent: November 16, 2022 9:41 AM
To: Naomi Leduc
Cc: Dominic Ste-Marie; Christine Shillinglaw; Lisa Marshall; marclegault@nationmun.ca
Subject: RE: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Hi Naomi,

Thank you for your interest in the project. A Stage 1 & 2 archaeological assessment has already been completed for this site. Past Recovery, our archaeological consultant, has circulated the report for your review and comment.

Thank you,
Kerry

From: Naomi Leduc <Naomi.Leduc@wendake.ca>
Sent: October 14, 2022 3:30 PM
To: Kerry Reed <K.Reed@mcIntoshperry.com>
Cc: Dominic Ste-Marie <Dominic.Sainte-Marie@wendake.ca>
Subject: RE: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

You don't often get email from naomi.leduc@wendake.ca. [Learn why this is important](#)

Kwe Kerry,

Thank you for your email. Could you please let us know if any archaeological studies or fieldwork will be necessary as part of this project?

Tiawenhk inenh chia' entïio'



NATION HURONNE-WENDAT
Bureau du Nionwentsïo

Naomi Leduc, B. Sc.

Conseillère en aménagement du territoire

255, Place Chef Michel-Laveau

Wendake (Qc) G0A 4V0

Téléphone : 418-843-3767

Courriel : naomi.leduc@wendake.ca



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De : Jean-Francois Richard <Jean-Francois.Richard@wendake.ca>

Envoyé : 14 octobre 2022 13:50

À : Dominic Ste-Marie <Dominic.Sainte-Marie@wendake.ca>; Lori-Jeanne Bolduc <Lori-Jeanne.Bolduc@wendake.ca>; Naomi Leduc <Naomi.Leduc@wendake.ca>

Objet : TR: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

PVI



NATION HURONNE-WENDAT
Bureau du Nionwentsïo

Jean-François Richard, M.A.

Anthropologue

255, Place Chef Michel-Laveau

Wendake (Qc) G0A 4V0

Téléphone : 418-843-3767 # 2117

Courriel : jean-francois.richard@wendake.ca



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De : Administration <Administration@wendake.ca>

Envoyé : 12 octobre 2022 13:47

À : Jean-Francois Richard <Jean-Francois.Richard@wendake.ca>

Objet : TR: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Je ne sais pas si cela est pertinent

Tiawenhk chia' entiio' (merci et bonne journée)! 😊



Mélina Sioui

Agente de secrétariat

Conseil de la Nation huronne-wendat

255, place Chef Michel Laveau

Wendake (Québec), G0A 4V0

Tél. : 418 843-3767, Téléc. : 418 842-1108

Courriel : administration@wendake.ca

De : Kerry Reed <K.Reed@mcIntoshperry.com>

Envoyé : 12 octobre 2022 12:13

À : Administration <Administration@wendake.ca>; Maxime Picard <Maxime.Picard@wendake.ca>

Cc : Lisa Marshall <l.marshall@mcintoshperry.com>; Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>; marclegault@nationmun.ca

Objet : Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Vous ne recevez pas souvent de courriers de la part de k.reed@mcintoshperry.com. [Découvrez pourquoi cela est important](#)

Hello,

Please find the attached Notice of Study Commencement Letter for the Municipal Class Environmental Assessment Study currently being undertaken by the Nation Municipality for Route 800 East Realignment.

If you have any questions or comments, please contact one of the Project Team members noted in the enclosed notice.

Thank you,

Kerry

Kerry Reed

Environmental Planner

T. 343.925.0187 | C. 613.808.3464

K.Reed@mcintoshperry.com | www.mcintoshperry.com

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Turning Possibilities Into Reality

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Platinum
member

October 1st, 2022

Mr. Marc Legault,
Nation Municipality,
3248 County Rd. 9,
Fournier, Not. K0B1G0

Sir:

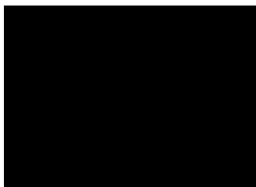
This is following a French letter sent by Oscar Lafrance dated October 1st, 2022.

Please consider these comments regarding the anticipated road that is to bypass the bridge on Route Paul Latour, Rte 800 East.

The existing intersection will be approximately only 1,000 feet from the proposed exit and entrance of this road. This can prove to create major problems for there is an inside and outside curve within a short distance. In addition, there also exists a bridge with numerous bumps which create a dangerous hazard to circulation. Are you aware that there has been major accidents on that section of St-Albert Rd.?? Is it truly your priority to save money or are the lives of the people less important??? WHAT IS YOUR MAIN CONCERN??????

The surrounding farmers prefer crossing a new bridge with the existing intersection . The proposed road may prove to be a major handicap for farming equipment. Since this bridge will be mostly used by farmers, their concerns and recommendations should be a PRIORITY.

Trusting you will pay total attention to the above comments given in good faith.



Le 1er Octobre,2022

Marc Legault,
Municipalite Nation
3248 County Rd. 9
Fournier, Ont. K0B1G0

Monsieur,

Pour faire suite a votre lettre du 19 septembre, je repond en francais apprecierais recevoir futures documentations en francais.

Je passe a la description du terrain en question. Mon pere a achete ce 50 acres en 1969 et je suis maintenant proprietaire unique. D'apres la configuration des Sols de l'Ontario, c'est du sol Bainsville ou North Gower, loam argileux granulaire, gris fonce, Topographie Unie avec une VALEUR EXCELLENTE. Si nous passons au drainage de surface qui a un baissiere naturelle l'eau coule vers le sud ouest. Tant qu'au drainage souterrain de 30 acres, l'eau coule elle aussi vers le sud ouest, avec deux 'main drains' qui coulent dans le Butternut Creek.

Un ingenieur de McIntosh Perry m'a telephone pour me demander la permission de droit de passage. Pendant sa visite, il m'a confie qu'il ne comprenait pas pourquoi la Municipalite ne contruisait pas le pont. "BEAUCOUP PLUS DE PROBLEMES A PASSER CHEZ VOUS". Le contremaitre de Tomlison Construction a aussi visite le site. Il m'a avise que si un cul de sac survient a cause du realignement du chemin, les pompiers et vehicules d'urgence n'accepterons pas de servir ce 'DEAD END". Ca prend un rond-point.

J'ai avec plusieurs voisins et amis donne des solutions pour la construction du pont ainsi que la route de service durant la construction. La Municipalite fait la SOURDE OREILLE et nous ignore. Saviez vous que les contribuables ont le droit d'etre ecoute? L'ecoute est importante non seulement en temps d'elections.

Je tiens a vous aviser que la creation de ce chemin va vous mener a des poursuites en justice de la part de LAFRANCE. J'ai des droits civiles en ce qui concerne ce projet sur MA FERME. Pourquoi autant d'etudes pendant toutes ces annees??? Pendant ces annees ecoulees, le cout des materiaux et la main d'oeuvre augmentent. CHOSE CERTAINE, vous pouvez mettre fin a vos etudes. Je ne suis DEFINITIVEMENT PAS A VENDRE. Non negociab le, hier, aujourd'hui et demain.....FAITES LE PONT!!!!!! C'est la responsabilite et obligation municipales de construire ce charmant pont. Saviez vous que un overpass a Ottawa est construit OVERNIGHT!!!!!! Pourquoi ne pas prendre cet expertise....

Depuis quand on se permet d'abandonner un pont afin de passer dans les champ du voisin?
QUELLE AUDACE!!!! Vous venez detruire 10 acres de GOOD FARMLAND. En plus, le
chemin va agir comme un barrage car l'eau va s'ecouler sur les terres de chaques cotes et le
tout garni de mauvaises herbes..... Les parcelles restantes vont devenir un NO MAN'S LAND!!

Le respect des terres agricoles dans la Municipalite Nation est un GROS ZERO!!!! Pensons
aussi au eoliennes, SAUVONS NATIONS!!!

Mettez donc mon petit poeme en pratique.....

ENFIN NATION
PASSE A L'ACTION
AVEC LA CONSTRUCTION
DU FAMEUX PONT
ET SON NOM SERA
PAUL LATOUR

Votre contribuable,



FAO 934992 FBR

Kerry Reed

From: Christine Shillinglaw
Sent: October 18, 2022 2:13 PM
To: marclegault@nationmun.ca
Cc: Lisa Marshall; Kerry Reed
Subject: FW: Pont Latour

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Marc,

See below.

Thanks,
Christine

Christine Shillinglaw, P.Eng.

Manager, Transportation Structures Division, Eastern Ontario
T. 613.714.0794 | F. 613.836.3742 | C. 613.325.2984
c.shillinglaw@mcintoshperry.com | www.mcintoshperry.com

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-----Original Message-----

From: [REDACTED]
Sent: October 18, 2022 1:33 PM
To: Christine Shillinglaw <c.shillinglaw@mcintoshperry.com>
Cc: Patrick Leblanc <p.leblanc@mcintoshperry.com>
Subject: Pont Latour

[Some people who received this message don't often get email from [REDACTED] Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

Bonjour Mme Shillinglaw,

il me fait plaisir de vous écrire en tant que président de l'association pour l'amélioration des sols et récoltes du comté de Russell pour vous donner mon opinion sur l'intention de la municipalité de La Nation d'utiliser plusieurs acres agricoles de première qualité pour y construire un chemin de contournement au lieu de tout simplement remplacer le vieux pont Latour par une nouvelle construction.

Je comprend très bien M. Oscar Lafrance de refuser de vendre la moindre parcelle de terrain et il a parfaitement raison de s'objecter.

Le type de sol que possède la ferme Lafrance est parmi les meilleurs de tout l'Est-Ontarien. Il serait logiquement primordiale qu'une municipalité rurale favorise la protection des terres agricoles au lieu de vouloir la morceler dans le but d'y construire un simple chemin de contournement.

Le directeur du secteur de la voirie le sait très bien qu'il n'est vraiment pas recommandé par les différents départements d'urgence (police, ambulance et pompier) de créer de nouveaux chemins sans issues (dead end), et c'est exactement ce qui va ce produire si la municipalité va de l'avant avec son projet.

En tant qu'ancien conseiller municipale à La Nation, je sais très bien que les différentes options au remplacement du vieux pont Latour n'ont pas toute été étudiés; il serait donc de mise que les personnes attitrées à ce dossier retournent faire leur devoirs.

Si c'est pour une économie d'argent que cette option est envisagée, les citoyens de ce secteur et la protection des terres agricoles ne devrait pas être ignorée.

Bien à vous,



Envoyé de mon iPhone

Kerry Reed

From: Patrick Leblanc
Sent: October 18, 2022 11:51 AM
To: Kerry Reed
Cc: Lisa Marshall; Christine Shillinglaw
Subject: Route 800 East Realignment - French Phone call from a member of the public

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Kerry,

Please note that I just received a phone call from [REDACTED] regarding the above-noted project and took down a few notes. He advised that [REDACTED] who he claims owns some of the land that will be affected (expropriated?) for this project is opposed to the preferred solution and that he is looking to support [REDACTED] in his opposition. [REDACTED] also indicated that he is an ex-municipal council member and also current involved in some capacity with the local Russell branch of the "Association pour l'amélioration des sols et récoltes de l'Ontario" (i.e. local branch of the Ontario Soils and Crop Improvement Association (OSCIA)) and will be looking to vehemently oppose this project using the available EA processes in place. He said he would circulate a formal letter in French with his comments, likely this afternoon. He stated he would be circulating it to Christine Shillinglaw, Marc Legault at the Township, and myself.

He asked to please be added to the circulation list for the project moving forward as per the following contact info:

[REDACTED]

Thanks,

Patrick Leblanc, P.Eng.

Senior Environmental Engineer

T. 613.714.4586 | F. 613.836.3742 | C. 613.229.5863

p.leblanc@mcintoshperry.com | www.mcintoshperry.com

McINTOSH PERRY

Turning Possibilities Into Reality

Kerry Reed

From: Algonquins of Ontario Consultation Office <algonquins@tanakiwin.com>
Sent: October 12, 2022 12:03 PM
To: Kerry Reed
Subject: Automatic reply: Notice of Study Commencement - Nation Municipality - Municipal Class Environmental Assessment Study for Route 800 East Realignment

Thank you for contacting the Algonquins of Ontario Consultation Office. This automated response is your assurance that your message has been received by this office and will be reviewed as soon as resources permit. Due to the high volume of correspondence received by this office, we are not able to respond personally to every inquiry.

Please do not hesitate to contact our office at the coordinates below should you have any questions regarding the status of your query.

This automated message may not be relied upon to fulfil, in whole or part, any duty to consult the Algonquins of Ontario.

****Important Notice****

Thank you for your email message.

In light of the ongoing developments resulting from the novel Coronavirus (COVID-19), the Algonquins of Ontario are taking proactive steps to keep our employees and workplace safe and secure.

Effective immediately the AOO Consultation Office will be following a hybrid work model. Please call prior to visiting the office to ensure a staff is in office.

During this time, to maintain our business continuity, we will be monitoring emails and will respond when possible. If you require immediate assistance or have any pressing inquiries, please contact our general inbox at algonquins@tanakiwin.com or visit our website at www.tanakiwin.com.

Thank you for your patience, understanding and support.

Ashley (Bernard) Keller
Consultation Administrator
Algonquins of Ontario Consultation Office

Table 3: Responses to Notice of Study Commencement

Stakeholder/Agency	Comments Received	How It Was Addressed / Response Sent
South Nation Conservation Authority (SNC)	<p>SNC would like to continue to be included on any circulations as the Class EA proceeds.</p> <p>There are no SNC permit requirements for the proposed new road shown in the attached sketch. The sketch shows a “approx. creek setback, to be confirmed by SNCA”, please note SNC does not impose building setbacks from watercourses. At this location, there is no SNC regulated area adjacent to Butternut Creek; only if there is interference within the top of bank of the watercourse will a O. Reg 170/06 permit be required (new bridges, demolition of existing bridges, etc.).</p>	<p>Noted, included on project contact list.</p>
Ministry of Natural Resources and Forestry (MNR)	<p>While I understand the project is in the preliminary stages and alternatives are being assessed, is there a likelihood that in-water work will be required at any point during the project?</p> <p>Provided a letter outlining MNR's interests which include Natural Heritage, Natural Hazards, Petroleum Wells & Oil, Gas and Salt Resources Act, Fish & Wildlife Conservation Act, Public Lands Act & Lakes and Rivers Improvement Act.</p>	<p>Thanks for reaching out. At this time, we can confirm there will be no in water work during the project works.</p> <p>MNR's interests were noted and will be taken into consideration.</p>
Resident	<p>We have comments regarding the study of the existing bridge in our road and we would like to be included in the notices and future updates of the project. We are concern of the safety of a new road alignment on the north east.</p> <p>Will there be a specific date for public consultation?</p>	<p>Thank you for your interest in the project. As part of the Municipal Class Environmental Assessment process, we want to ensure that anyone interested in this study has the opportunity to get involved and provide input. Therefore, please submit your comments and/or concerns to or one or both of the Project Team Members listed in the Notice of Study Commencement, and we will ensure that your comments and/or concerns are taken into consideration throughout the Environmental Assessment process.</p> <p>Please note that a draft Project File Report is available for public viewing on the Municipality of Nation's website (https://nationmun.ca/en/council-staff/announcements-notices) which documents the existing natural, social, economic and cultural/heritage environmental of the study area, identifies the proposed alternative solutions being considered, outlines the evaluation process, and provides the rationale for the selection of the recommend Alternative Solution at this time. The Project File Report also outlines and documents the consultation process being followed for this Schedule B Municipal Class Environmental Assessment process. Please note that the Project File will be updated throughout the Environmental Assessment process and placed on public record for 30 days prior to completing the Environmental Assessment. At this time, Mr. Marc Legault, Director of Public Works, has requested that McIntosh Perry provide an update to the new Council members pertaining to the Butternut Creek Bridge and potential realignment of Route 800 East. The presentation will outline the history of this project, as well as inform them of the current Environmental Assessment process.</p>
United Counties of Prescott and Russell	<p>The UCPR would like to be involved in the project because that new road will intersect County Road 7 (St-Albert Road East).</p>	<p>Upon further discussion, Nation Municipality has decided to move forward with a Public Information Centre (PIC) for the Butternut Creek Bridge and potential realignment of Route 800 East. Therefore, there will be no presentation to Council on December 12, 2022. A Notice of Public Information Centre letter will be distributed once the PIC details have been finalized.</p>

<p>Resident</p>	<p>We would certainly favor closing the bridge and construct a new road alignment to bypass the creek on the Northeast side, as you propose in the first paragraph of your letter.</p> <p>Since 2011, we have known that the bridge, built in 1951, has reached the end of its service life. We have lived here for 46 years and that bridge has been a source of frustration the whole time:</p> <ul style="list-style-type: none"> -damaging vibrations from incessant daily heavy traffic like the McEwen trucks, the milk trucks, garbage trucks and bulky farm equipment rumbling along on potholes directly on the bridge. -now a new farmer from 2 miles away on 800 East, has bought or rented land on Paul Latour Rd and spends whole days going back and forth with his haying or soja crops in GEHL farm equipment. These days, farmers rent or buy land far from home and travel great distances to get there. They expect to use public roads for their own benefit, as if they were on their own turf. <p>Over those last 10 years, the residents have contacted and spoken with municipal staff regarding the bridge.</p> <p>We are very much in favor of realigning Paul Latour Rd and then closing the bridge to car and truck traffic.</p>	<p>MP noted concerns and the Nation Municipality had regular communication with the residences throughout the project. Comments and concerns were addressed during the Public Information Centre.</p>
<p>MO</p>	<p>Please consider these comments regarding the anticipated road that is to bypass the bridge on Route Paul Latour, Rte. 800 East. The existing intersection will be approximately only 1,000 feet from the proposed exit and entrance of this road. This can prove to create major problems for there is an inside and outside curve within a short distance. In addition, there also exists a bridge with numerous bumps which creates a dangerous hazard to circulation. Are you aware that there has been major accidents on that section of St-Albert Rd.?? Is it truly your priority to save money or are the lives of the people less important? What is your main concern? The surrounding farmers prefer crossing a new bridge with the existing intersection. The proposed road may prove to be a major handicap for farming equipment. Since the bridge will be mostly used by farmers, their concerns and recommendations should be a priority. Trusting you will pay total attention to the above comments given in good faith.</p>	<p>MP noted concerns and the Nation Municipality had regular communication with the residences throughout the project. Comments and concerns were addressed during the Public Information Centre.</p>
<p>Resident</p>	<p>Advised that the landowner who claims owns some of the land that will be affected (expropriated?) for this project is opposed to the preferred solution and that he is looking to support the landowner in his opposition. The resident also indicated that he is an ex-municipal council member and also current involved in some capacity with the local Russell branch of the “Association pour l’améliorations des sols et récoltes de l’Ontario” (i.e. local branch of the Ontario Soils and Crop Improvement Association (OSCIA)) and will be looking to vehemently oppose this project using the available EA processes in place. He said he would circulate a formal letter in French with his comments, likely this afternoon. He stated he would be circulating it to Christine Shillinglaw, Marc Legault at the Township, and myself.</p> <p>He asked to please be added to the circulation list for the project moving forward.</p>	<p>MP noted concerns and the Nation Municipality had regular communication with the residences throughout the project. Comments and concerns were addressed during the Public Information Centre.</p>

Landowner	Is not in support of the proposed new municipal road location, which is to be located on their property.	MP noted concerns and the Nation Municipality had regular communication with the residences throughout the project. Comments and concerns were addressed during the Public Information Centre.
Teksavvy	Received the Notice of Study Commencement today and wondering why they received it.	MP called him back and they don't have a business in this area at all so he was wondering why he received the letter – MP advised it was likely not required but they came up in our search for companies.
Ministry of Environment, Conservation and Parks (MECP)	<p>MECP Areas of Interest:</p> <p>The updated (February 2021) attached “Areas of Interest” document provides guidance regarding the ministry’s interests with respect to the Class EA process. Please address all areas of interest in the EA documentation at an appropriate level for the EA study. Proponents who address all the applicable areas of interest can minimize potential delays to the project schedule. Further information is provided at the end of the Areas of Interest document relating to recent changes to the Environmental Assessment Act through Bill 197, Covid-19 Economic Recovery Act 2020. Based on information provided to date and the Crown’s preliminary assessment the proponent is required to consult with the following communities who have been identified as potentially affected by the proposed project: Mohawk Council of Akwesasne & Algonquins of Ontario (AOO).</p> <p>If the proponent has undertaken archeological studies and are required to undertake any work related to archeological resources, they should also include: Huron-Wendat The proponent must contact the Director of Environmental Assessment Branch (EABDirector@ontario.ca) under the following circumstances subsequent to initial discussions with the communities identified by the MECP:</p> <ul style="list-style-type: none"> • Aboriginal or treaty rights impacts are identified to you by the communities; • You have reason to believe that your proposed project may adversely affect an Aboriginal or treaty right; • Consultation with Indigenous communities or other stakeholders has reached an impasse; or • A Section 16 Order request is expected on the basis of impacts to Aboriginal or treaty rights <p>The MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role you will be asked to play should additional steps and activities be required. A draft copy of the report should be sent directly to me prior to the filing of the final report, allowing a minimum of 30 days for the ministry’s technical reviewers to provide comments.</p> <p>Please also ensure a copy of the final notice is sent to the ministry’s Eastern Region EA notification email account (eanotification.eregion@ontario.ca) after the draft report is reviewed and finalized.</p>	MECP’s interests were noted and will be taken into consideration.
Heritage Planner, Ministry of Tourism, Culture and Sport (MTCS)	Please note that archaeological concerns have not been addressed until reports have been entered into the Ontario Public Register of Archaeological Reports. If there is potential for built heritage resources and/or cultural heritage landscapes on the property or within the project area, a Cultural	Noted.

	<p>Heritage Evaluation Report (CHER) should be undertaken by a qualified person to determine the cultural heritage value or interest of the property (or project area). All technical cultural heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MTCS whether any technical cultural heritage studies will be completed for this EA project and provide them to MTCS before issuing a Notice of Completion or commencing any work on the site. If screening has identified no known or potential cultural heritage resources, or no impacts to these resources, please include the completed checklists and supporting documentation in the EA report or file.</p>	
Huran-Wendat First Nation	<p>Thank you for your email. Could you please let us know if any archaeological studies or fieldwork will be necessary as part of this project?</p>	<p>Thank you for your interest in the project. A Stage 1 & 2 archaeological assessment has already been completed for this site. Past Recovery, our archaeological consultant, has circulated the report for your review and comment.</p>

Table: Comments Received During the Public Information Centre

Stakeholder/Agency	Comments Received	How It Was Addressed / Response
Resident	Residents raised concerns pertaining to the line of sight in relation to the existing curve and the proposed intersection of the newly aligned road and St. Albert Road? Residents spoke of vehicles travelling at high speeds along St. Albert Road and Route 800 and safety concerns with traffic merging from the newly aligned road onto St. Albert Road.	<ul style="list-style-type: none"> • The posted speed limit on St. Albert Road is 80km/hr and the typical design speed used to review the Sight Distance for vehicles turning to and from the new road is either 10 km/hr or 20 km/hr over the posted speed limit. • McIntosh Perry used a more conservative approach with the design speed and used 20 km/hr over the posted speed for a design speed of 100 km/hr for the Sight Distance review. • Assuming a stop control at the new proposed road realignment where it meets St. Albert Road, the following sight triangles were used for the review: <ul style="list-style-type: none"> ▪ For a Passenger Car Design Vehicle making a left turn onto St. Albert Road, the Sight Distance required is 210 m which is achieved. ▪ For a WB20 Design Vehicle (Transport) which is similar as a tractor making a left turn onto St. Albert Road, the Sight Distance required is 320 m which can be achieved, however requires some minor tree clearing along the east side of St. Albert Road. ▪ For a WB20 Design Vehicle making a left turn from St. Albert Road onto the proposed Route 800 Realignment, the Sight Distance required is 210 m which is achieved. • The above sight distances were confirmed with a desktop review and verified in the field using a range finder at the location of the proposed new intersection. • With regards to the resident's safety concerns for speeding on St. Albert Road, the County could be commissioned to review speeding and confirm that the proposed design speed for the Sight Distance review is reflective of the operating speed of the roadway.
Resident	Residents questioned why rehabilitation of the structure was not further considered a viable alternative?	<ul style="list-style-type: none"> • Inspections on the structure note that the bridge required an updated barrier system, deck drains, barrier wall replacement, bearing replacement and painting of the structural steel. The deck top requires patch deck top waterproofing and paving. • McIntosh Perry conveyed that a structural evaluation has not been completed however given the condition of the structure a load restriction would most likely be required following rehabilitation works. This would restrict access to heavy vehicles, farm equipment and municipal service vehicles such as garbage and snow removal trucks. • McIntosh Perry also conveyed that the existing bridge was constructed in 1921 and is over 72 years old. It was noted that from an engineering perspective, the bridge is well beyond its service life and the major structural elements are failing or have failed making rehabilitation not the preferred alternative. • Mayor Francis Brière followed in agreement that the existing structure is beyond its service life and that the bridge no longer meets current industry design standards.
Resident	Why not construct a new bridge? Were alternative bridge/culvert types and configurations considered?	<ul style="list-style-type: none"> • McIntosh Perry indicated that replacing the existing bridge with a new structure was considered. The replacement alternative had the highest capital cost when compared to other alternatives. • McIntosh Perry considered replacement with Twin Corrugated Steel Pipes and an Open Footing Concrete Box Culvert as part of their assessment of alternatives. • Route 800 cannot be fully closed during construction, and therefore a temporary detour is required to facilitate construction, which increases the capital cost. In addition, temporary limited interest (temporary property) will be required during construction for the detour road and watercourse crossing (i.e., bailey bridge, culverts).

Resident	What is the estimated cost associated with each alternative? Were fees generated based on Industry Standards or the Nation Municipality undertaking the work themselves?	<ul style="list-style-type: none"> An accurate rehabilitation cost cannot be generated without an updated Structural Evaluation. Due to the age of the structure and current condition of the structure, rehabilitation was not put forward as the preferred alternative. McIntosh Perry advised rehabilitation would not be a beneficial use of capital funds given the likely requirement of a load restriction and replacement in less than 15 years. McIntosh Perry also advised that all cost estimates were based on the Municipality hiring a Contractor rather than using in house resources.
Resident	Did cost for <i>Alternative #4 - Decommission the Existing Bridge and Construct a New Road Alignment for Route 800</i> include the cost for expropriation? Approximately how much would the expropriation fee be approximately (per acre)?	<ul style="list-style-type: none"> McIntosh Perry acknowledged that the cost expropriation was not included in the overall cost associated with Alternative 4.
Resident	Residence requested to know how much the engineering fees were to undertake this study?	<ul style="list-style-type: none"> The Nation Municipality indicated that the study has costed approximately \$121,561.05 to date.
Resident	Residents expressed concerns pertaining to traffic control along Route 800 E/Chemin Paul Latour once a dead end has been constructed. The residents present at the PIC especially expressed concerns on behalf of the resident that currently resides directly adjacent to Bridge C001 (west side of the bridge) and the negative impacts associated to them and their property.	<ul style="list-style-type: none"> The Nation Municipality responded that they have spoken directly to the adjacent property owner. The property owner expressed safety concerns pertaining to the bridge and the number of accidents that have occurred at the structure. They conveyed that they are in favour of the realignment of Route 800 and the permanent closure of the bridge.
Resident	A resident raised concerns pertaining to the loss of environmental habitat with the extension of the new road realignment.	<ul style="list-style-type: none"> McIntosh Perry indicated that there is a higher anticipated impact to environmentally sensitive areas/wildlife habitat associated with the replacement of the bridge due to the need for a temporary detour/crossing during construction. The temporary detour/crossing will require more trees and vegetation to be removed on both sides of Butternut Creek for the construction of the temporary detour and new bridge, as well as require in-water works which will have impacts on fish and fish habitat. The new realignment would require minimal vegetation removal and would require no in-water works.
Resident	Residents inquired if this project would be constructed this year?	<ul style="list-style-type: none"> The Nation indicated pending the detailed design and obtaining the necessary approvals, the Municipality would like to complete construction in Summer 2023.
Resident	Residents inquired as to when a decision will be made on the selection of the preferred alternative.	<ul style="list-style-type: none"> Mayor Francis Brière indicated that information received this evening will be brought back to Council and a decision will be made in the near future.
Landowner	Is not in support of the proposed new municipal road location, which is to be located on their property.	<ul style="list-style-type: none"> After the PIC, based on public comments, the Municipality decided to replace the bridge and a property agreement will be obtained from the landowner for a temporary road or culverts as bypass in order to accommodate the bridge replacement.

MEETING MINUTES

PUBLIC INFORMATION CENTRE NO. 1

Date and Time: Wednesday, January 11th, 2023 – 6:00 pm – 8:00 pm

Location: St-Albert Community Centre - 201 Principale St, Saint Albert, Ontario

List of Invitees:

Marc Legault	Director of Public Works	The Nation Municipality
Josée Brizard	Chief Administrative Officer - Clerk	The Nation Municipality
Francis Brière	Mayor	The Nation Municipality
Alain Mainville	Councillor, Ward 2	The Nation Municipality
Danik Forgues	Councillor, Ward 3	The Nation Municipality
Christine Shillinglaw	Consultant Project Manager	McIntosh Perry
Calum MacDonald	Lead Design Engineer	McIntosh Perry
Lisa Marshall	Lead Environmental Engineer	McIntosh Perry
Kerry Reed	Environmental Planner	McIntosh Perry

Subject: The Nation Municipality
Schedule “B” Municipal Class Environmental Assessment for Bridge C001 and potential
realignment of Route 800
Public Information Centre (PIC) #1

1.0 INTRODUCTIONS

- Mayor Francis Brière provided a brief introduction to the project prior to handing over the presentation to Christine Shillinglaw.
- Christine Shillinglaw proceeded to introduce the project team and then commenced the PowerPoint presentation prepared for Bridge C001 and the potential realignment of Route 800.
- Approximately 17-20 residents and/or Stakeholders were in attendance at the Public Information Centre (PIC).

2.0 PRESENTATION

- Christine Shillinglaw, McIntosh Perry Project Manager, presented a PowerPoint presentation outlining: the purpose of the study, study area, defined the Municipal Class Environment Assessment Process, consultation process, existing conditions, proposed Alternative Design Solutions and Concepts, evaluation process, the recommend Technically Preferred Alternative Solution and next steps.

3.0 OPEN DISCUSSION

Comment #1: Residents raised concerns pertaining to the line of sight in relation to the existing curve and the proposed intersection of the newly aligned road and St. Albert Road? Residents spoke of vehicles travelling at high speeds along St. Albert Road and Route 800 and safety concerns with traffic merging from the newly aligned road onto St. Albert Road.

- The posted speed limit on St. Albert Road is 80km/hr and the typical design speed used to review the Sight Distance for vehicles turning to and from the new road is either 10km/hr or 20km/hr over the posted speed limit.
- McIntosh Perry used a more conservative approach with the design speed and used 20km/hr over the posted speed for a design speed of 100km/hr for the Sight Distance review.
- Assuming a stop control at the new proposed road realignment where it meets St. Albert Road, the following sight triangles were used for the review:
 - For a Passenger Car Design Vehicle making a left turn onto St. Albert Road, the Sight Distance required is 210m which is achieved.
 - For a WB20 Design Vehicle (Transport) which is similar as a tractor making a left turn onto St. Albert Road, the Sight Distance required is 320m which can be achieved, however requires some minor tree clearing along the east side of St. Albert Road.
 - For a WB20 Design Vehicle making a left turn from St. Albert Road onto the proposed Route 800 Realignment, the Sight Distance required is 210m which is achieved.
- The above sight distances were confirmed with a desktop review and verified in the field using a range finder at the location of the proposed new intersection.
- With regards to the resident's safety concerns for speeding on St. Albert Road, the County could be commissioned to review speeding and confirm that the proposed design speed for the Sight Distance review is reflective of the operating speed of the roadway.

Comment #2: Residents questioned why rehabilitation of the structure was not further considered a viable alternative?

- Inspections on the structure note that the bridge required an updated barrier system, deck drains, barrier wall replacement, bearing replacement and painting of the structural steel. The deck top requires patch deck top waterproofing and paving.
- McIntosh Perry conveyed that a structural evaluation has not been completed however given the condition of the structure a load restriction would most likely be required following rehabilitation works. This would restrict access to heavy vehicles, farm equipment and municipal service vehicles such as garbage and snow removal trucks.
- McIntosh Perry also conveyed that the existing bridge was constructed in 1921 and is over 72 years old. It was noted that from an engineering perspective, the bridge is well beyond its service life and the major structural elements are failing or have failed making rehabilitation not the preferred alternative.
- Mayor Francis Brière followed in agreement that the existing structure is beyond its service life and that the bridge no longer meets current industry design standards.

Comment #3: Why not construct a new bridge? Were alternative bridge/culvert types and configurations considered?

- McIntosh Perry indicated that replacing the existing bridge with a new structure was considered. The replacement alternative had the highest capital cost when compared to other alternatives.
- McIntosh Perry considered replacement with Twin Corrugated Steel Pipes and an Open Footing Concrete Box Culvert as part of their assessment of alternatives.
- Route 800 cannot be fully closed during construction, and therefore a temporary detour is required to facilitate construction, which increases the capital cost. In addition, temporary limited interest (temporary property) will be required during construction for the detour road and watercourse crossing (i.e., bailey bridge, culverts).

Comment #4: What is the estimated cost associated with each alternative? Were fees generated based on Industry Standards or the Nation Municipality undertaking the work themselves?

- An accurate rehabilitation cost cannot be generated without an updated Structural Evaluation. Due to the age of the structure and current condition of the structure, rehabilitation was not put forward as the preferred alternative. McIntosh Perry advised rehabilitation would not be a beneficial use of capital funds given the likely requirement of a load restriction and replacement in less than 15 years.
- McIntosh Perry also advised that all cost estimates were based on the Municipality hiring a Contractor rather than using in house resources.

Comment #5: Did cost for *Alternative #4 - Decommission the Existing Bridge and Construct a New Road Alignment for Route 800* include the cost for expropriation? Approximately how much would the expropriation fee be approximately (per acre)?

- McIntosh Perry acknowledged that the cost expropriation was not included in the overall cost associated with Alternative 4.

Comment #6: Residence requested to know how much the engineering fees were to undertake this study?

- The Nation Municipality indicated that the study has costed approximately \$121,561.05 to date.

Comment #7: Residents expressed concerns pertaining to traffic control along Route 800 E/Chemin Paul Latour once a dead end has been constructed. The residents present at the PIC especially expressed concerns on behalf of the resident that currently resides directly adjacent to Bridge C001 (west side of the bridge) and the negative impacts associated to them and their property.

- The Nation Municipality responded that they have spoken directly to the adjacent property owner. The property owner expressed safety concerns pertaining to the bridge and the number of accidents that have occurred at the structure. They conveyed that they are in favour of the realignment of Route 800 and the permanent closure of the bridge.

Comment# 8: A resident raised concerns pertaining to the loss of environmental habitat with the extension of the new road realignment.

- McIntosh Perry indicated that there is a higher anticipated impact to environmentally sensitive areas/wildlife habitat associated with the replacement of the bridge due to the need for a temporary detour/crossing during construction. The temporary detour/crossing will require more trees and vegetation to be removed on both sides of Butternut Creek for the construction of the temporary detour and new bridge, as well as require in-water works which will have impacts on fish and fish habitat. The new realignment would require minimal vegetation removal and would require no in-water works.

Comment #9: Residents inquired if this project would be constructed this year?

- The Nation indicated pending the detailed design and obtaining the necessary approvals, the Municipality would like to complete construction in Summer 2023.

Comment #10: Residents inquired as to when a decision will be made on the selection of the preferred alternative.

- Mayor Francis Brière indicated that information received this evening will be brought back to Council and a decision will be made in the near future.