

County of Renfrew

# **Petawawa Transportation Study Municipal Class Environmental Assessment Study Phase 3 and 4 Environmental Study Report Addendum**

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# Table of Contents

	page
<b>1. Introduction and Background.....</b>	<b>1</b>
<b>2. Purpose of Addendum .....</b>	<b>2</b>
2.1 What is Included in this Addendum.....	2
2.2 Circumstances Necessitating the Change to the Project.....	2
<b>3. Project Need and Alternatives Considered.....</b>	<b>3</b>
3.1 Garrison Roundabout.....	3
3.2 Petawawa-Doran-Mohns Intersection.....	3
<b>4. Environmental Implications of the Change and Mitigation Measures for any Negative Environmental Impacts.....</b>	<b>6</b>
4.1 Natural Environment.....	6
4.2 Social Environment.....	6
4.3 Economic Environment.....	7
4.4 Cultural Environment.....	7
4.5 Physical Environment.....	7
4.6 Traffic and Transportation.....	7
4.7 Cost.....	8
4.8 Climate Change and Air Quality.....	8
<b>5. Recommended Plan .....</b>	<b>9</b>
<b>6. Filing of this Addendum.....</b>	<b>12</b>
6.1 Consultation.....	12
6.2 Review Period of this Addendum.....	12
6.3 Bill 197: COVID19-Economic Recovery Act, 2020.....	13
6.4 Process for Requesting an Order for a Higher Level of Study.....	13

## List of Figures

Figure 1: Garrison Roundabout.....	10
Figure 2: Petawawa-Doran-Mohns Roundabout.....	11

## List of Tables

Table 1: Assessment of Alternatives.....	3
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# **1. Introduction and Background**

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In the 2014 Environmental Study Report for the widening of Petawawa Boulevard, the recommended plan maintained the existing signalized traffic control at the intersection of Doran-Mohns and replaced the signalized traffic control at the intersection of Petawawa-Paquette-Menin-Festubert with a single lane roundabout (called the Garrison roundabout).

A roundabout at Doran-Mohns had been identified as an alternative during the study and had been identified as preferred at the first Public Information Centre. However, at that time the rail corridor where property would be required did not belong to the County of Renfrew and there was a lack of experience in Petawawa with roundabout operations. As a result, it was not carried forward to the recommended plan.

## **2. Purpose of Addendum**

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Now that the County is progressing to construction, the abandoned rail corridor belongs to the County and the Town of Petawawa and Garrison Petawawa are supportive of the roundabout alternative. There is a roundabout operating within the internal road network of the Garrison and the public have expressed support for using roundabouts in other locations.

During the 2020 re-assessment of traffic operations, it was identified that the roundabouts at the Garrison and at Doran-Mohns would need two lanes to handle future traffic volumes.

### **2.1 What is Included in this Addendum**

This addendum includes a change to the traffic control for the intersection of Petawawa Boulevard, Doran Road, and Mohns Avenue. In addition, this addendum includes the change from a single-lane to two-lane roundabout at the Garrison roundabout. Only the area of the roundabouts included in this addendum, are open for review.

### **2.2 Circumstances Necessitating the Change to the Project**

As noted above, the circumstances with respect to property ownership and experience with roundabouts has changed since the decision regarding the Recommended Plan was made in 2014 and documented in the original Environmental Study Report. The change is an opportunity to improve the project with the support of stakeholders.

## **3. Project Need and Alternatives Considered**

As part of the addendum and detail design study AECOM undertook a transportation analysis of the County Road 51 (Petawawa Boulevard) intersections to assess any changes to the recommended plan from 2014 to improve traffic operations and the safety of vulnerable road users and motorists.

### **3.1 Garrison Roundabout**

The traffic analysis revealed that the single-lane roundabout planned for the Garrison at the intersection of Petawawa-Paquette-Menin-Festubert should be constructed as a two-lane roundabout. This lane arrangement will serve growing traffic volumes in the future.

### **3.2 Petawawa-Doran-Mohns Intersection**

During the transportation study, six alternatives were investigated for this intersection including a single-lane roundabout with four-legs as well as a two-lane roundabout with either four or five legs. Differences between alternatives were based on the traffic analyses required to accommodate traffic.

Most alternatives failed due to poor level of service, queues and delays. The traffic analysis revealed that the Petawawa-Doran-Mohns intersection could be served by a two-lane roundabout. The roundabout could incorporate Hilda Street, which currently intersects with Doran Road immediately south of Petawawa Boulevard. This would make five-legs on the roundabout. Alternatively, a cul-de-sac could be constructed on Hilda Street at Doran. The four and five leg alternatives were assessed and presented to the Petawawa Town Council. The assessment is summarized as follows:

**Table 1: Assessment of Alternatives**

<b>Consideration</b>	<b>5-leg roundabout</b>	<b>4-leg roundabout (Hilda cul-de-sac)</b>
<b>Safety for pedestrians, cyclists, ATV's, snowmobiles</b>	Crossings are provided to facilitate movements. Roundabout requires trail users and motorists to reduce speeds through area.	Crossings are provided to facilitate movements. Roundabout requires trail users and motorists to reduce speeds through area. No crossing of Hilda required (one less road crossing for Trail and MUP users).

<b>Consideration</b>	<b>5-leg roundabout</b>	<b>4-leg roundabout (Hilda cul-de-sac)</b>
<b>Safety for Pedestrians and cyclists</b>	Marked crossings provided with rectangular rapid flashing beacons. Existing straight through movement on trail eliminated.	Marked crossings provided with rectangular rapid flashing beacons. Existing straight through movement on trail eliminated. No crossing of Hilda required (one less crossing).
<b>Emergency access to Hilda Street neighbourhood</b>	Hilda remains connected to Doran and Petawawa Boulevard as existing.	Requires out of way travel for EMS vehicles. Low speed crossing into cul-de-sac could be incorporated for EMS vehicles into design if acceptable.
<b>Business access</b>	Better access via roundabout.	Out-of-way travel for existing businesses on Hilda (2 and 7 Hilda)
<b>Municipal operations access</b>	Network flexibility remains for plows, garbage collection and maintenance	New routes required for plowing, garbage and other maintenance vehicles with Hilda cul-de-sac.
<b>Residents affected by out-of-way travel</b>	None	12 properties on north side of Hilda to Florence plus 3 to Audrey. 13 properties on south side to Florence plus 3 to Audrey. Also residents on streets with increased traffic as a result of the Hilda cul-de-sac will be affected.
<b>Vehicular level of service</b>	Maintains all movements LOS A and B at roundabout in peak periods Average per vehicle delay: AM 9.6s; mid-day 12.7s; PM 9.9s	Traffic relocated to Doran (for destinations to the south) and to Portage/Victoria (for destinations to the north). LOS A and B at roundabout in peak periods. Average per vehicle delay: AM 8.5s; mid-day 10.6s; PM 8.8s With 4-leg roundabout, the analysis estimates 1 to 2 seconds less delay per vehicle but there are potential impacts at other intersections due to traffic diversion.
<b>Property requirements</b>	Esso (triangle at existing sidewalk) Dentist (triangle of existing grass)	Esso (triangle at existing sidewalk) Dentist (triangle of existing grass) Insurance (a portion of the parking lot at 7 Hilda Street is needed to construct the cul-de-sac)

<b>Consideration</b>	<b>5-leg roundabout</b>	<b>4-leg roundabout (Hilda cul-de-sac)</b>
<b>Truck movements</b>	Roundabout is designed for large trucks. Trucks can access Hilda Street from Petawawa-Mohns and Doran more easily than existing	Roundabout is designed for large trucks. Hilda cul-de-sac will limit the size of trucks able to turn on that street.
<b>Roundabout way-finding</b>	Five access points	Four access points

Based on the assessment of the four and five leg roundabouts, a five-leg roundabout is preferred. Mitigation measures for safety will include rectangular rapid flashing beacons, tactile walking surface indicators at several crossings, a raised crossing of westbound Mohns Avenue and concrete pavement at trail crossings.

## **4. Environmental Implications of the Change and Mitigation Measures for any Negative Environmental Impacts**

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The environmental implications of the change are generally positive. As was documented in the Environmental Study Report, for a study of this nature, environmental implications may involve a broad definition of natural, social, economic, cultural and physical environments as well as traffic and transportation aspects of the work and costs.

The following discussion reviews each environmental group as noted in the Environmental Study Report.

### **4.1 Natural Environment**

The Natural Environment involves impacts on trees and vegetation, erosion and sedimentation, and the need for stormwater management to address the impacts on drainage. A landscaping plan is included in the detail design to replace trees affected by the roundabout design and to enhance the existing landscaping. The County will work with the Town and the Garrison to help ensure that trees and vegetation after construction will be improved without affecting safety. An Environmental Compliance Approval for the stormwater management and drainage system will be obtained from the Ministry of the Environmental, Conservation and Parks.

### **4.2 Social Environment**

The Social Environment involves impacts on property acquisition, streetscaping/ landscaping and noise during construction. The roundabout was designed to minimize the property required, in particular property that was being actively used. Where property acquisition is unavoidable, property will be acquired through a willing buyer – willing seller process. Garrison Petawawa and the Town of Petawawa are supportive. Streetscaping and landscaping are part of the detail design, including the central area of the roundabout and the approaches to the roundabout. Noise during construction will be addressed through the Town's Noise By-law.

### **4.3 Economic Environment**

Economic Environment involves impacts to parking and signage to downtown and attractions. With the design of a roundabout at the intersection of Petawawa Boulevard, Doran Road, Hilda Street and Mohns Avenue, changes to site accesses are necessary. At 1 Doran Road, site redevelopment has been proposed. In discussions between the Town and County, the site access should be to the south of the lot, rather than to the north as in the original site plan. This will allow left turners from Doran to access the location. At 3389 Petawawa Boulevard (Shell Station), the property access closest to the Doran-Mohns intersection will be closed to traffic but will remain as a controlled route for fuel delivery vehicles. At 2 Hilda Street, access will be reconstructed to provide a one-way loop around the building. Site access will be maintained for all locations. The County will work together with the Town to address access for redevelopment of lots in the vicinity of the roundabout.

### **4.4 Cultural Environment**

Cultural Environment involves the potential for impacts to archeological or historical resources. The location of the proposed roundabout at an existing intersection, abandoned railway and urban development has low potential for impact on cultural resources due to its disturbed nature.

### **4.5 Physical Environment**

Physical Environment involves the potential for disturbance of contaminated soils and utility poles. Given historic land use on the Esso property, a Stage 2 Archaeological Assessment and clearance will be required prior to construction. Any relocation of utilities such as power, gas and communications will require coordination with affected utility companies including Hydro One, Enbridge Gas and Bell. This work is usually scheduled in advance of construction.

### **4.6 Traffic and Transportation**

Traffic and Transportation involves the inclusion of sidewalks and bike facilities and design of all transportation facilities to current design standards. The needs of pedestrians and cyclists will be addressed with consideration for the Accessibility for Ontarians with Disabilities Act. The roundabout is expected to improve operations and safety for vehicles, pedestrians, cyclists and trail users.

The Algonquin Trail and existing pathway will be realigned parallel to each other to cross Hilda Street and Doran Road. The trail crossing will be constructed of concrete to

reduce pavement damage from snowmobiles and ATVs. Rectangular rapid flashing beacons will be installed to warn drivers of pedestrians and cyclists waiting to cross the road. These pushbuttons will be located between the trail and pathway to assist users on either facility.

Drivers will be guided through the roundabout using signs and pavement markings to direct them to their destination.

An education program for both children and adults is planned to familiarize them with roundabout operations.

#### **4.7 Cost**

Cost includes construction, permits, property acquisition, operations and maintenance. Capital costs for a roundabout may be higher however, operations and maintenance costs are lower.

#### **4.8 Climate Change and Air Quality**

In addition to the above items discussed in the 2014 Environmental Study Report, climate change and air quality have become important considerations for transportation projects. A climate assessment was completed in 2020 including a climate change resilience assessment and a greenhouse gas mitigation assessment. Measures were identified that could be incorporated into the project to reduce risks and to make the infrastructure resilient to climate change. The greenhouse gas mitigation assessment revealed a reduction in emissions over the lifespan of the project, due to improved traffic operations of a roundabout.

## **5. Recommended Plan**

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Figure 1 and Figure 2 illustrate the recommended configurations for the Garrison Roundabout and for the roundabout at Petawawa-Doran-Mohns, respectively.

Figure 1: Garrison Roundabout

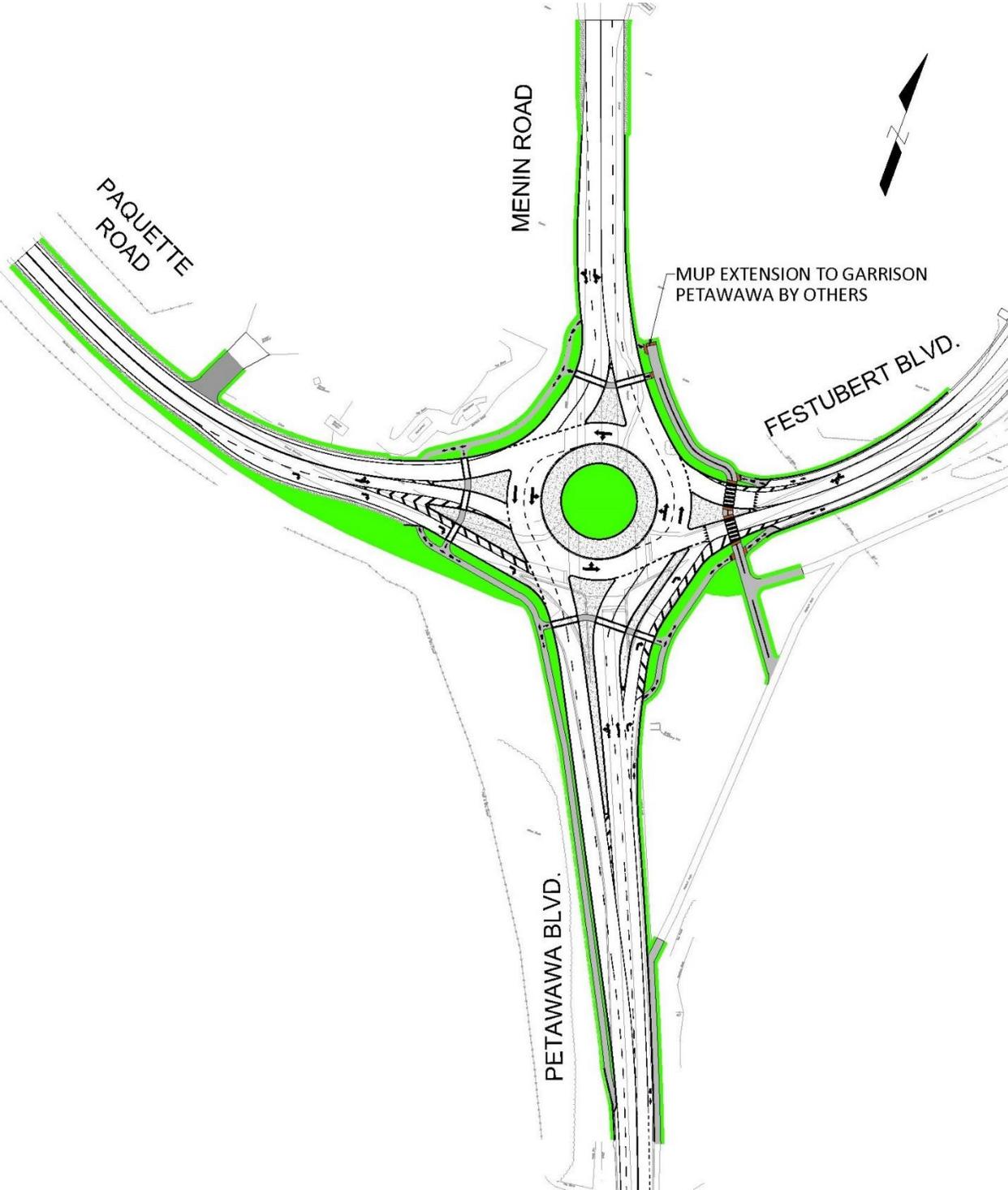
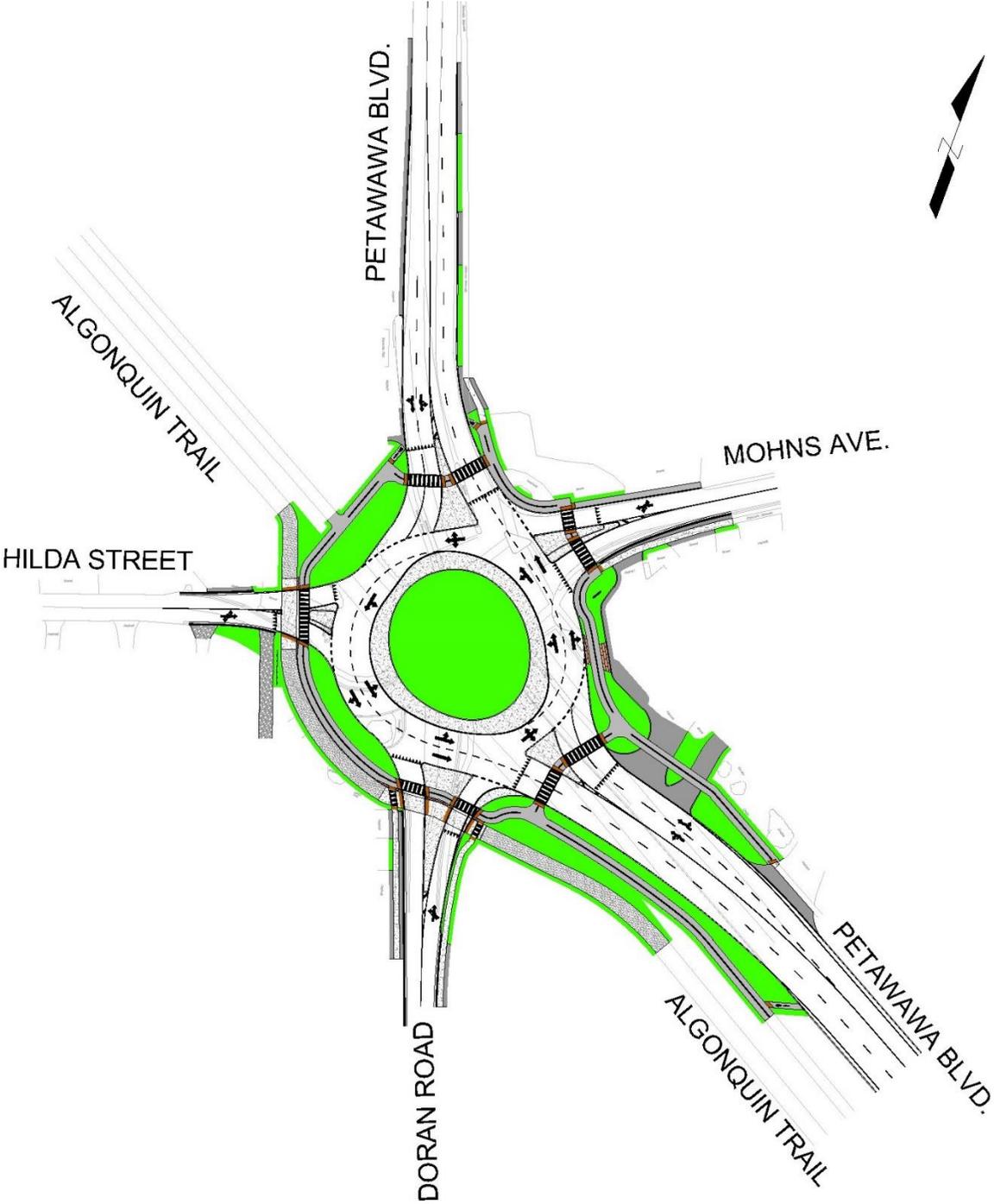


Figure 2: Petawawa-Doran-Mohns Roundabout



## **6. Filing of this Addendum**

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This addendum has been prepared in accordance with the requirements of the Municipal Class Environmental Assessment process as it relates specifically to the addendum process.

This addendum, including the drawings in Figure 1 and 2, is available on the County of Renfrew web site in accessible format with the Notice shown on the Upcoming Events on the Home page. The Notice was also placed in the Petawawa Daily News and sent via email to those on the contact list from the 2014 Environmental Study Report. The contact list has been updated where changes were identified in consultation with stakeholders. The Notice was also mailed to property owners along the corridor and was delivered directly to local businesses. The Algonquin Consultation office in Pembroke was contacted and the addendum provided via email.

### **6.1 Consultation**

The County of Renfrew met with the Town of Petawawa and the Garrison to review the planned addendum. The County, Town and Garrison discussed the proposed changes internally to gauge support for moving forward. Once this was obtained and the preliminary design complete, the County provided a cost estimate to the County ad hoc committee for County Road 51 and obtained support for proceeding with the design and construction of the roundabout. The Committee's advice was then taken forward to the Operations Committee which was in support of moving forward with the Petawawa-Doran-Mohns roundabout. Committee requested staff develop a financing plan and schedule for the roundabout project for their consideration. On March 31, 2021, County Council met and were in support of the roundabout project. The project was presented to Petawawa Town Council on May 17, 2021 where additional details were requested. On October 18, 2021, the project was presented to Petawawa Town Council and they provided their support of the project.

### **6.2 Review Period of this Addendum**

The review period of this addendum is 30 calendar days. This addendum was posted on the county website at the time the Notice was published and distributed. Comments and concerns should be sent by mail or e-mail within 30 days after the issue of notice to:

**Taylor Hanrath**, Acting Manager of Infrastructure for the County of Renfrew, 9 International Drive, Pembroke, Ontario K8A 6W5. Email: thanrath@countyofrenfrew.on.ca

**Valerie McGirr**, Project Manager for AECOM Canada Ltd., 302 - 1150 Morrison Drive Ottawa, Ontario K2H 8S9. Email: valerie.mcgirr@aecom.com

Accessibility is important. If you are a person with a disability and need information in another format, please contact Taylor Hanrath or Valerie McGirr at the above addresses.

### **6.3 Bill 197: COVID19-Economic Recovery Act, 2020**

On July 21, 2020, the Province of Ontario passed the COVID-19 Economic Recovery Act (Bill 197), which included amendments to the Environmental Assessment Act. One of the key amendments associated with Bill 197 is a change in the Part II Order Request process for Municipal Class Environmental Assessment projects.

The former appeal process provided the opportunity for any person to submit a Part II Order request to the Ministry of Environment, Conservation and Parks. In accordance with Bill 197 the Part II Order process is now available only for concerns related to Aboriginal or Treaty Rights. Concerns will no longer be filed with the Ministry but will now be addressed to the proponent. For non-aboriginal concerns the Part II Order process is now replaced with an additional 30-day window for the Ministry of Environment, Conservation and Parks to decide what action should be taken in response to a concern raised by the general public (i.e. disregard, elevate project or approve with conditions).

The new appeal process still requires the proponent to issue a Notice of Completion and place the Environmental Assessment documentation, in this case the Environmental Assessment Addendum to the Environmental Study Report, on the public record for a 30-day public review and comment period. However, following completion of the 30-day public review period, the proponent must wait until the additional 30-day window has passed before implementing the project.

The new appeal process was followed in the filing of this Addendum.

### **6.4 Process for Requesting an Order for a Higher Level of Study**

A request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study (that is, requiring an individual/comprehensive

Environmental Assessment approval before being able to proceed), or that conditions be imposed (such as requiring further studies), 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 requester's contact information and full name for the Ministry.

Requests should specify what kind of order is being requested (request for additional conditions or a request for an individual/comprehensive environmental assessment), how an order may prevent, mitigate or remedy those potential adverse impacts, and any information in support of the statements made in the request. This will help ensure that the Ministry is able to efficiently begin reviewing the request.

The request should be sent in writing or by email to both addresses below:

**Minister of Environment, Conservation and Parks**, 777 Bay Street, 5th Floor,  
Toronto, Ontario M7A 2J3. Email: [minister.mecp@ontario.ca](mailto:minister.mecp@ontario.ca).

**Director, Environmental Assessment Branch, Ministry of Environment,  
Conservation and Parks**, 135 St. Clair Avenue West, 1st Floor, Toronto, Ontario M4V  
1P5. Email: [EABDirector@ontario.ca](mailto:EABDirector@ontario.ca).

A copy of the request should also be sent to Taylor Hanrath at the County of Renfrew (contact information provided above).

Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.