LITTLE CURRENT

SWING BRIDGE STUDY

Public Information Centre 1

August 22, 2018

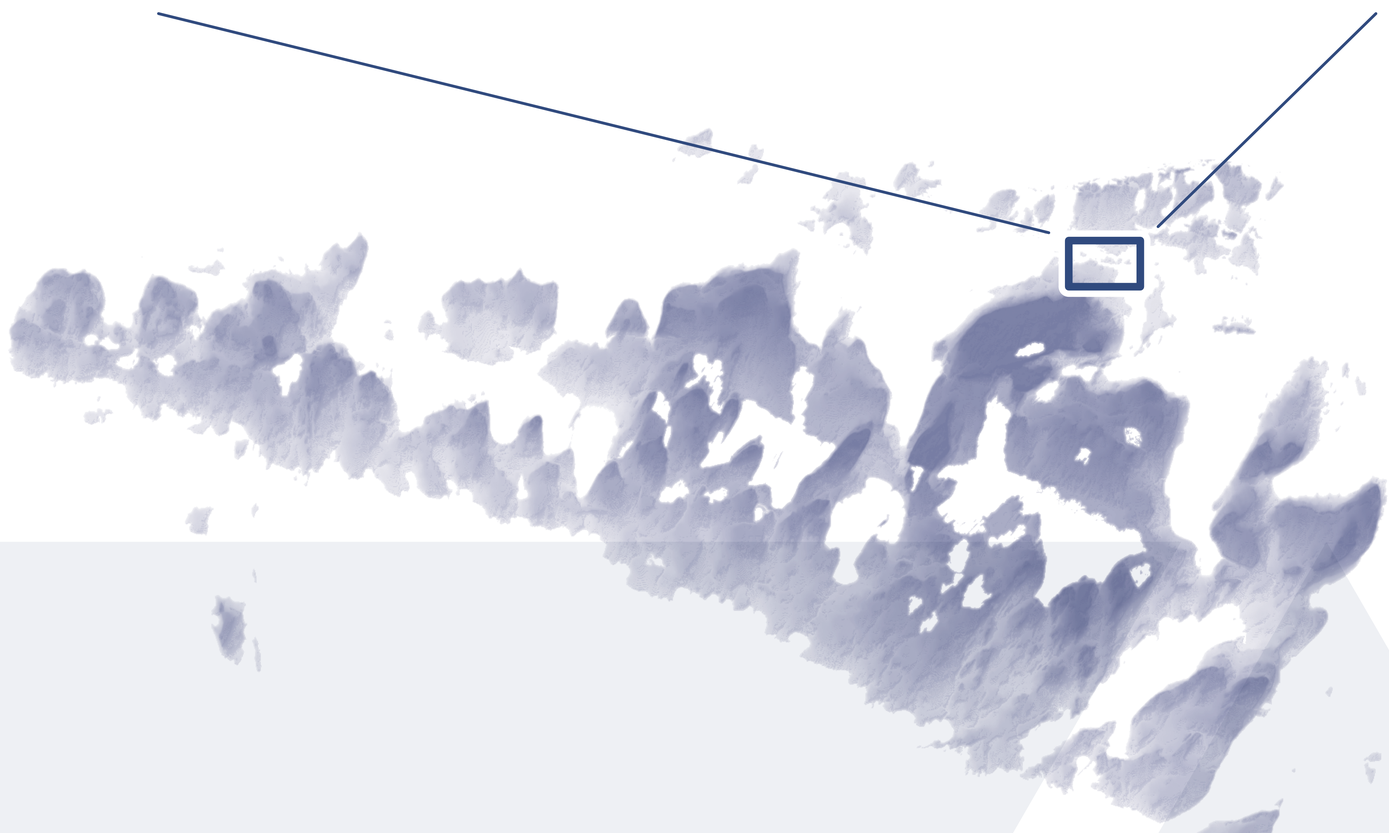
Ontario

Stantec

Welcome

This is the first Public Information Centre (PIC) for the
Highway 6 Little Current Swing Bridge
Planning, Preliminary Design, and Environmental Assessment Study

The bridge is located in the community of Little Current within the Town of Northeastern Manitoulin and the Islands, in Northeastern Ontario.



sign-in

chat
with the project team

accessibility
let us know how we can help

Ontario Stantec

The purpose of this study is to identify a recommended plan

which will address the current and future transportation needs at the bridge crossing. This is part of the MTO's ongoing review of safety and operational needs for the provincial highway network.

PIC 1 objectives

- seek input on the problem and opportunity statements
- present and seek input on the alternatives to the undertaking
- present and seek input on the existing conditions in the study area (i.e. natural, social, economic, and cultural)
- answer questions about the study

Study Process

The Highway 6 Little Current Swing Bridge Planning, Preliminary Design, and Environmental Assessment Study is being carried out under the requirements of the ***Class Environmental Assessment for Provincial Transportation Facilities*** (MTO, 2000), which has been approved under the Ontario *Environmental Assessment Act* for provincial transportation projects of a defined scope and magnitude.

This study is a Group 'A' project, which requires the submission of a *Study Design Report* (SDR) early in the study process. The SDR identifies the approach for fundamental decision-making processes and the level of detail associated with environmental and engineering work to be carried out during the study. A copy of the draft SDR will be available for review after input has been received from this Public Information Centre.

A *Transportation Environmental Study Report* (TESR) will be prepared and made available for a 30-day public review at the end of the study.

Public, stakeholder and Indigenous community consultation will take place throughout the project and will include, but will not be limited to: Public Information Centres (PIC), Indigenous Community Information Sharing Sessions (CISS), meetings with stakeholders, meetings with business owners, and participation at community events.

Study Phases

1 Transportation needs assessment phase

a. Develop Problem and Opportunity Statements

b. Identify Alternatives to the Undertaking (ie, "Alternatives to")

c. Assess "Alternatives to"
(How well do they address the Problem and Opportunity Statements?)

d. Select "Alternatives to" to carry forward for further development

e. Confirm Class EA Process

Ongoing consultation

Public Information Centre 1
&
Indigenous Community
Information Sharing Sessions

we are here

2 Planning phase

a. Publish Study Design Report (SDR)

b. Develop Planning Alternatives ("Alternative Methods")

c. Develop Evaluation Process

d. Evaluate Planning Alternatives

e. Select Preferred Alternative

SDR 30-day public review

Public Information Centre 2
&
Indigenous Community
Information Sharing Sessions

3 Preliminary design phase

a. Develop Recommended Plan

b. Identify Traffic Management and Staging Requirements

c. Confirm Environmental Impacts and Mitigation

d. Identify Property Requirements

e. Refine and Finalize Recommended Plan

Public Information Centre 3
&
Indigenous Community
Information Sharing Sessions

4 Documentation and environmental clearance phase

a. Publish Transportation Environmental Study Report (TESR)

b. Obtain Environmental Clearance

TESR 30-day public review

5 Future phases...

a. Detail Design of the Recommended Plan

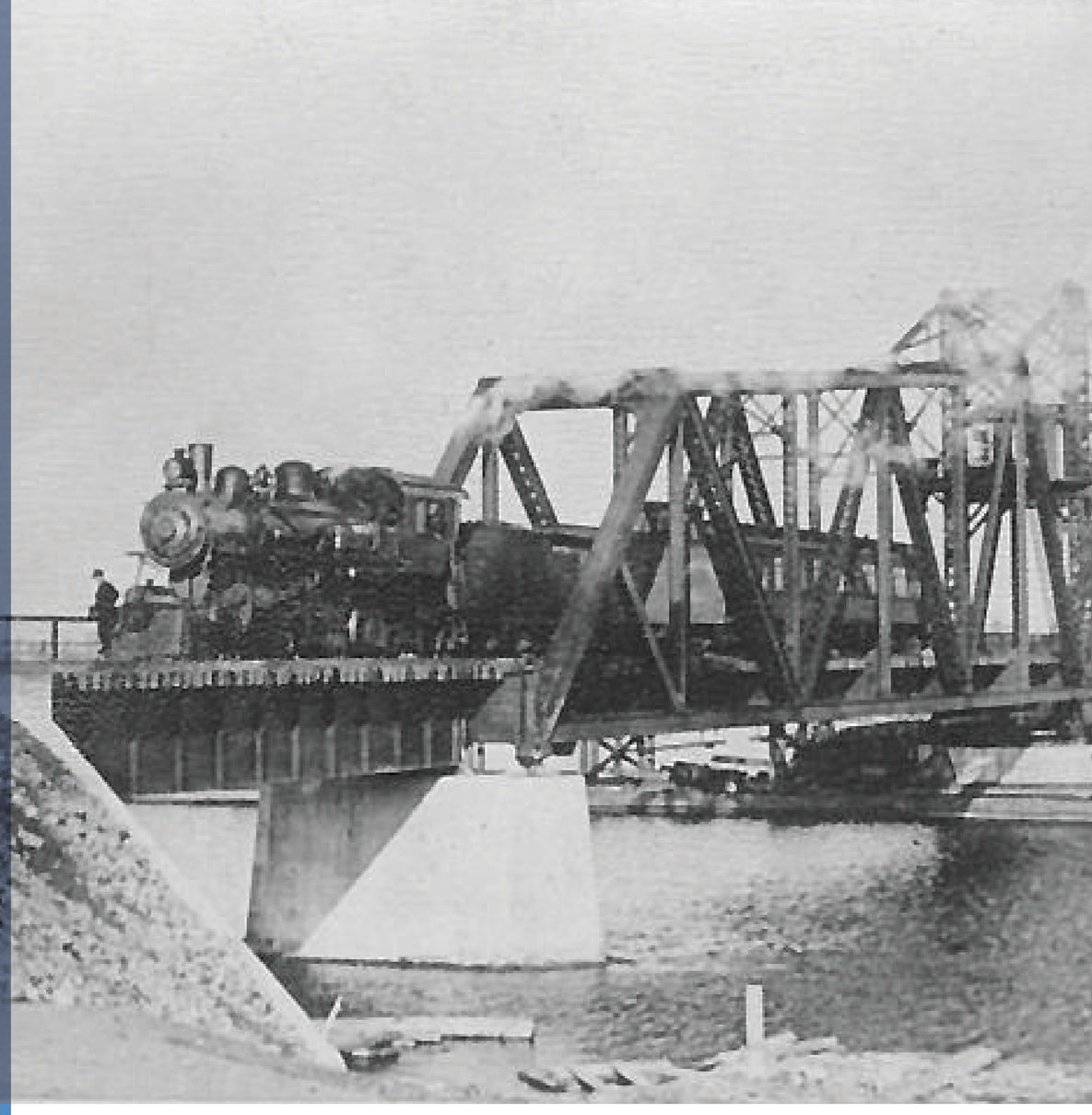
b. Property Acquisition and Utility Relocation

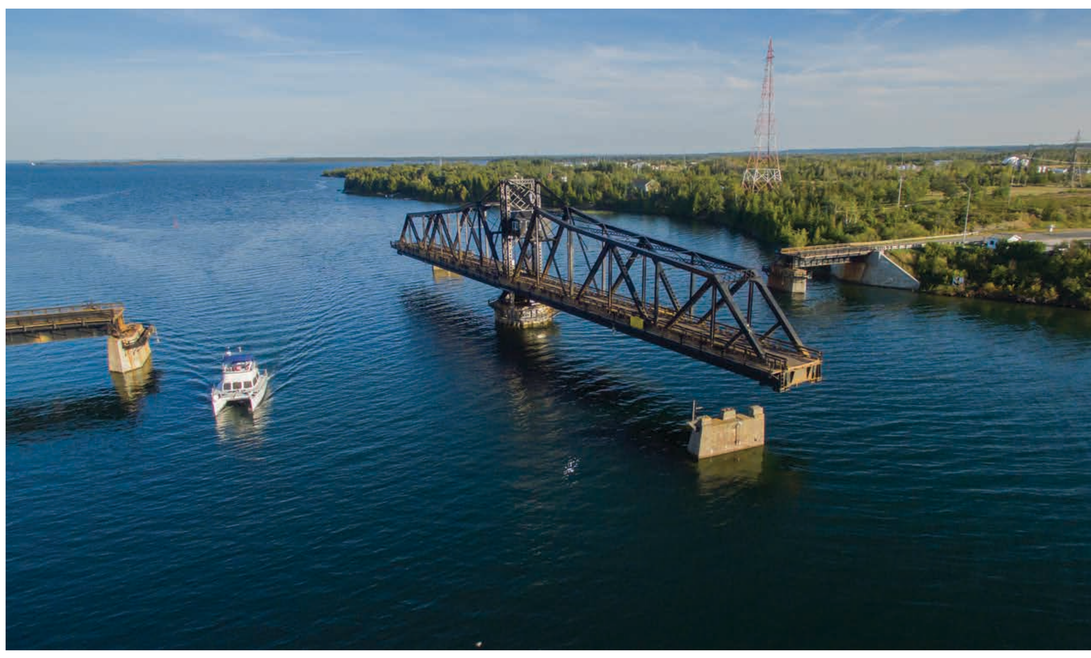
c. Construction

Additional public consultation

History

The Little Current Swing Bridge was built in 1913 and operated as a rail bridge until 1946, when the bridge was modified to allow motor vehicles to cross. Train service to Manitoulin Island was ended in the 1980s and the railway track was removed from the bridge decking. The bridge is a five-span bridge with a centre pivot swing bridge consisting of two 56 m spans. There is a sidewalk on the west side of the bridge. The bridge is listed on the Ontario Heritage Bridge List and MTO recognizes that the bridge has heritage value.





The Ministry of Transportation Ontario *Heritage Bridge Guidelines for Provincially Owned Bridges* provides a process for identifying conservation options for heritage bridges when planning for any rehabilitation, widening or replacement that may be required. The Guidelines provide a process for conservation options that will be considered as part of this study. As part of this study, the project team will complete a *Cultural Heritage Evaluation Report* that will review the heritage value of the existing swing bridge and will document the conservation options and impact assessment of alternatives.

Existing Conditions

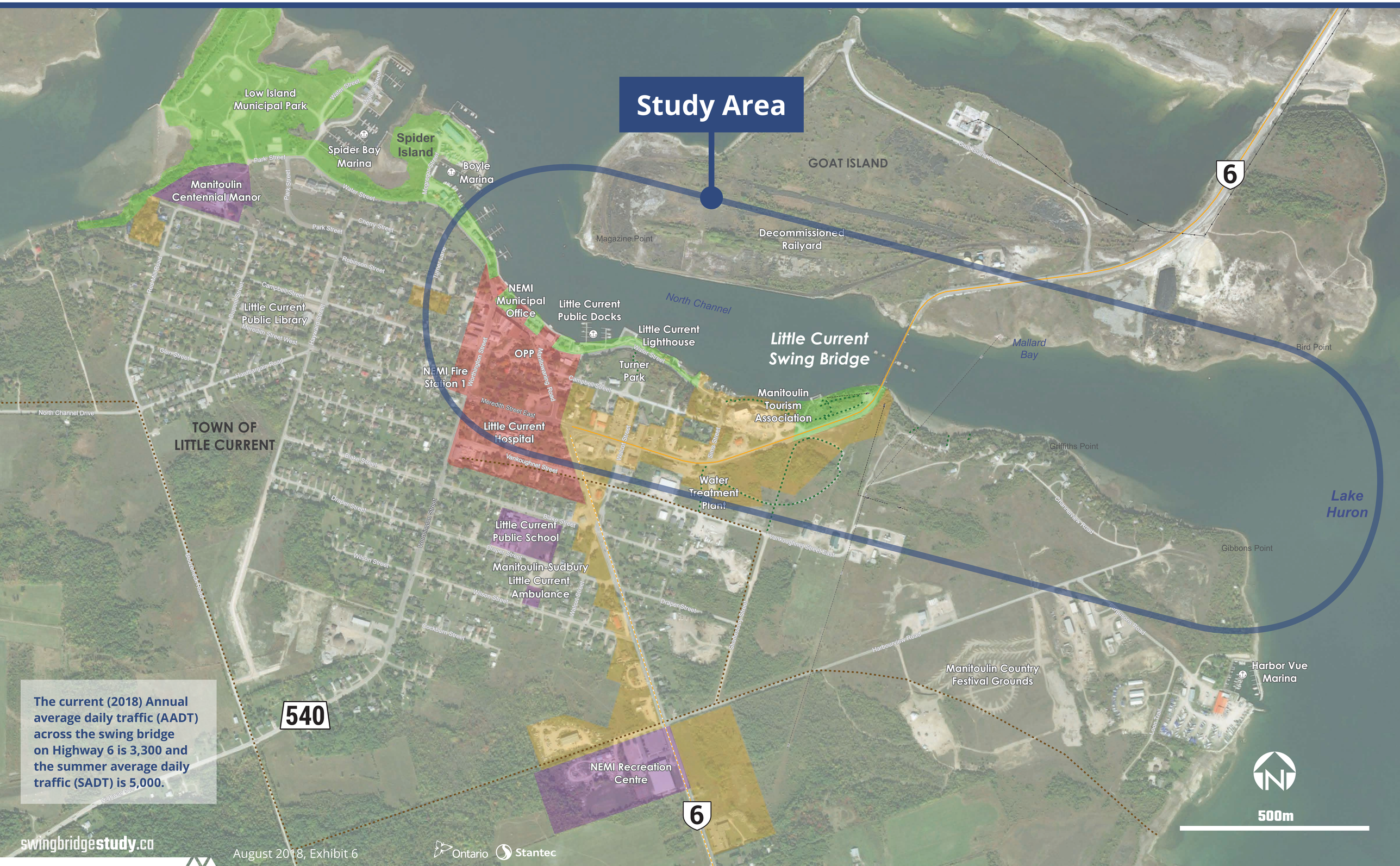
Legend

- Marina

District of Manitoulin Official Plan Land Use

- Core Commercial Area
- Arterial Commercial Area
- Community Facility Area
- Open Space Area

- Province Wide Cycling Network Existing on Road Route
- Province Wide Cycling Network Proposed on Road Route
- Snowmobile Trail
- Walking Trail
- Hydro Line
- Pipeline
- Transmission Line

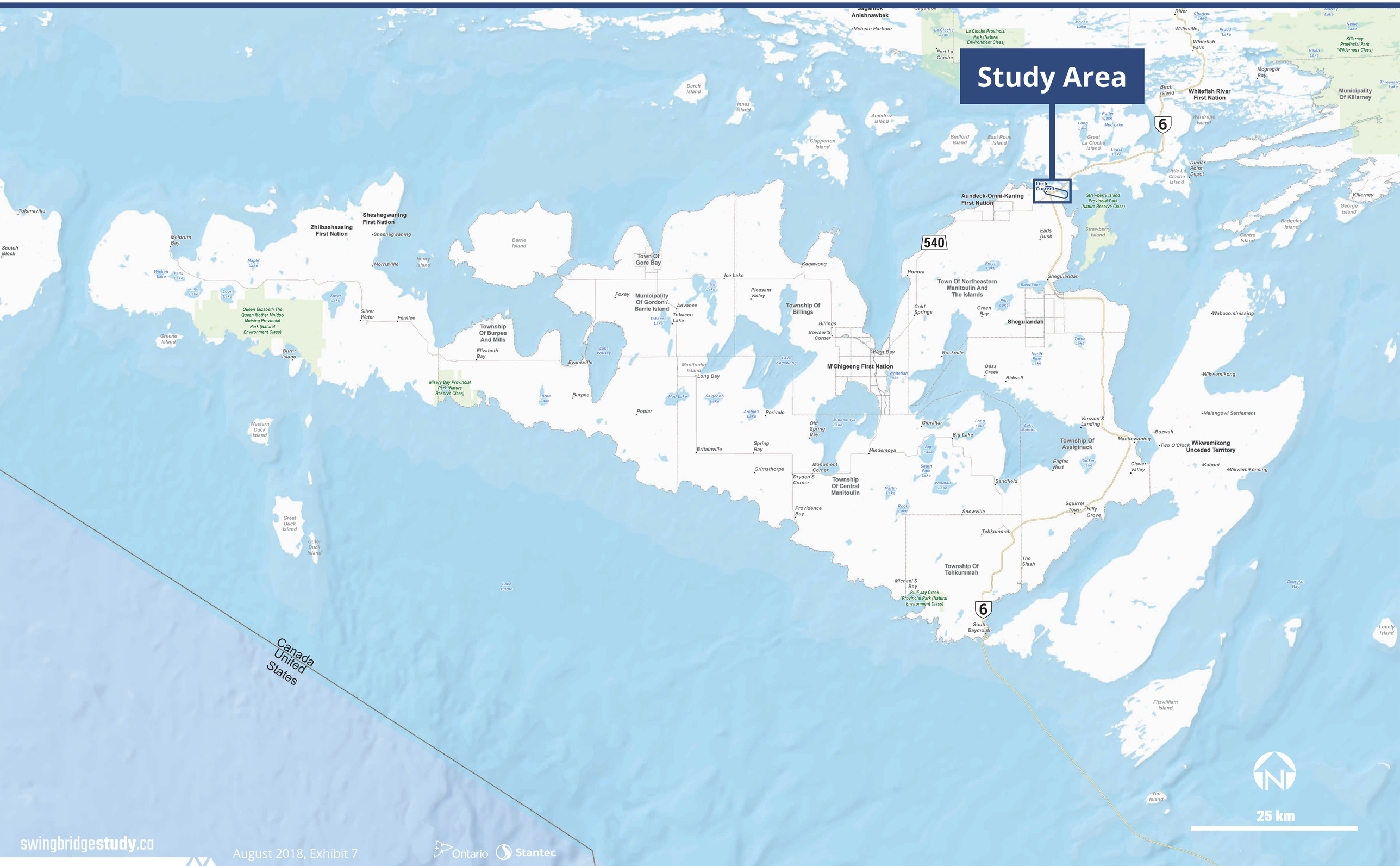


The current (2018) Annual average daily traffic (AADT) across the swing bridge on Highway 6 is 3,300 and the summer average daily traffic (SADT) is 5,000.

Surrounding Communities

Legend

- Town
- Highway
- Major Road
- Municipal Boundary
- Country Boundary
- Provincial Park
- Waterbody



Transportation Needs Assessment

The Transportation Needs Assessment process is part of the ongoing management and administration of the transportation system by the Province and others. Assessment of needs can result in a number of recommendations, including initiating a study, initiating major or minor improvements, initiating routine maintenance, monitoring a situation, or doing nothing. Because of the range of potential outcomes, the transportation needs assessment process includes the following key tasks:

- Identifying transportation problems and opportunities
- Assessing and selecting reasonable alternatives, including 'do nothing'
- Developing potential transportation study objectives
- Initiating the study process

Maintenance and repair history:

repairs to mechanical components	2015	$130k
coat top half of swing spans	2011	$2.1M
replace deck, repair piers and abutments, replace electrical components, repair structural steel, install catwalk	2009	$8.8M
structural steel repairs, coating of bottom half of swing spans	2005	$1.8M
coating of approach spans	2002	$300k
structural steel repairs, replace center bearing	2002	$1.5M
convert swing operation from diesel motor to electric motors, repair structural steel, construct maintenance platforms, replace wedges, coat structural steel	1999	$1.8M
install submarine cable to center pier	1993	$200k
reconstruct top of center pier, refurbish ring gear, tracks and trucks	1988	$500k
replace deck and sidewalk	1985	$500k

Problem and Opportunity

The existing bridge provides year-round, single-lane road access between the community of Little Current and Manitoulin Island and mainland areas of Northern Ontario. Currently, road access is not available for 15 minutes of each daylight hour during the summer months, to provide boat access along the North Channel. Continuous road access is provided at night and during the winter months when the bridge is closed to boat traffic.

The existing bridge is nearing the end of its service life and will require extensive and ongoing maintenance or replacement. Furthermore, there are opportunities to improve traffic operations, emergency and evacuation access, boat access, and active transport facilities; and to reduce operating and maintenance costs.

Alternatives to the Undertaking

The Class EA process requires that 'reasonable alternatives' be considered to address identified problems. This involves two levels of analysis. The ***Alternatives to the Undertaking*** considers a broad range of alternatives that could address the project needs. Once the best alternative is selected, the ***Alternative Methods of Carrying out the Undertaking*** can be studied.

The following ***Alternatives to the Undertaking*** (below) have been developed to address the identified problems and opportunities for this study.

Following PIC 1, an assessment will be completed to evaluate the *Alternatives to the Undertaking* and to select the most reasonable alternatives to carry forward and develop for detailed investigations and further study.

This process allows unreasonable alternatives, or alternatives that do not address the problem and opportunity statements, to be eliminated from consideration in advance of the detailed development and evaluation of alternatives.

All alternatives to the undertaking will accommodate active transportation facilities

Alternatives to the Undertaking

Do Nothing

Maintain the existing single-lane structure and provide on-going maintenance and repairs to the structure, as required.

- ⊕ provides year-round road access
- ⊕ maintains existing traffic operations
- ⊕ maintains emergency response and evacuation access
- ⊕ maintains 15-minute/hour boat access
- ⊖ requires extensive and ongoing operating and maintenance costs
- ⊖ reliability of the existing bridge is an increasing concern
- ⊖ does not provide a permanent long-term solution (will require eventual replacement)

Replace with a Ferry

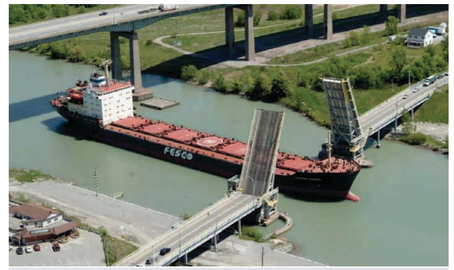
A ferry that will carry traffic from Goat Island to Little Current; will require docking terminals on both sides of the shore, and loading and queuing areas for vehicles.

- ⊕ provides vehicle access
- ⊖ intermittent access
- ⊖ increases traffic delays
- ⊖ reduces emergency response and evacuation access
- ⊕ provides unrestricted boat access
- ⊖ requires ongoing operating and maintenance costs
- ⊖ requires large traffic queuing areas
- ⊖ requires large docking facilities

Replace with a 2-lane Tunnel

The tunnel alternative will provide year-round vehicular access via a two-lane tunnel.

- ⊕ provides year-round road access
- ⊕ improves traffic operations and reduces traffic delays
- ⊕ improves emergency response and evacuation access
- ⊕ provides unrestricted boat access
- ⊖ requires a new roadway alignment to provide sufficient clearance under the existing shipping channel
- ⊖ typically very expensive compared to a bridge crossing (approximate cost is between $250-$300 million, depending on location, profile and final design)



Replace with a 2-lane Moveable Bridge

A two-lane structure with pedestrian and vehicular facilities that could be a lift bridge, a swing bridge, or a bascule bridge.

- ⊕ provides year-round road access
- ⊕ improves traffic operations and reduces traffic delays (two-lane structure)
- ⊕ maintains emergency response and evacuation access
- ⊕ maintains current boat access
- ⊕ provides a modern moveable bridge with lower operating and maintenance costs than the existing bridge
- ⊕ typically less expensive than a tunnel crossing (approximate cost for a moveable bridge is between $25-$50 million, depending on location, profile and final design)
- ⊖ requires ongoing operating and maintenance costs

Replace with a 2-lane Fixed Bridge

A fixed structure with a higher vertical clearance to provide clearance for boat navigation and will require long approaches to meet safety and geometric standards.

- ⊕ provides year-round road access
- ⊕ improves traffic operations and reduces traffic delays
- ⊕ improves emergency response and evacuation access
- ⊕ provides unrestricted boat access
- ⊕ typically less expensive than a tunnel crossing (approximate cost for a fixed bridge is between $50-$100 million, depending on location, profile and final design)
- ⊖ requires a new roadway alignment to provide sufficient clearance over the existing shipping channel

Investigations

In accordance with the MTO class environmental assessment process, this study includes engineering and environmental specialists who are carrying out background studies and site-specific investigations to support the development and the evaluation of alternatives, and identify potential impacts and mitigation measures.

The investigations for this study include, but are not limited to, the following:

Engineering investigations

- Traffic and safety
- Bridge
- Foundations
- Drainage and hydrology
- Highway
- Electrical
- Active transportation

Natural environment investigations

- Terrestrial
- Aquatic
- Species at risk

Socio-economic investigations

- Heritage
- Archaeology
- Business Impact Assessment
- Noise
- Air Quality and Greenhouse Gas Assessment

Let us know what's important to you

Use the iPads provided

The project team would like to know which project factors are important to you. Your feedback will assist the project team in developing evaluation criteria for the preliminary design alternatives. The evaluation criteria will be developed and then presented at Public Information Centre 2 (PIC 2) for additional input and comments from the public. Following PIC 2, the evaluation criteria will be refined and then used to evaluate the preliminary design alternatives and select a preferred plan.

Staff members are on hand to guide you through the online survey.

How would you rank the importance of the following factors?

- property
- heritage
- active transportation
- access and traffic
- aesthetics and viewscapes
- natural environment
- access to businesses
- other

Thank you for attending

Your input is important

3 ways to provide your comments:

Fill out a comment sheet and place it in the box

Send an email to ProjectTeam@swingbridgestudy.ca

Or, mail your comments to:

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We would appreciate receiving your comments by September 28, 2018

Freedom of Information and Protection of Privacy
Comments and information regarding this study are being collected to satisfy the requirements of the *Ontario Environmental Assessment Act*, and in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.