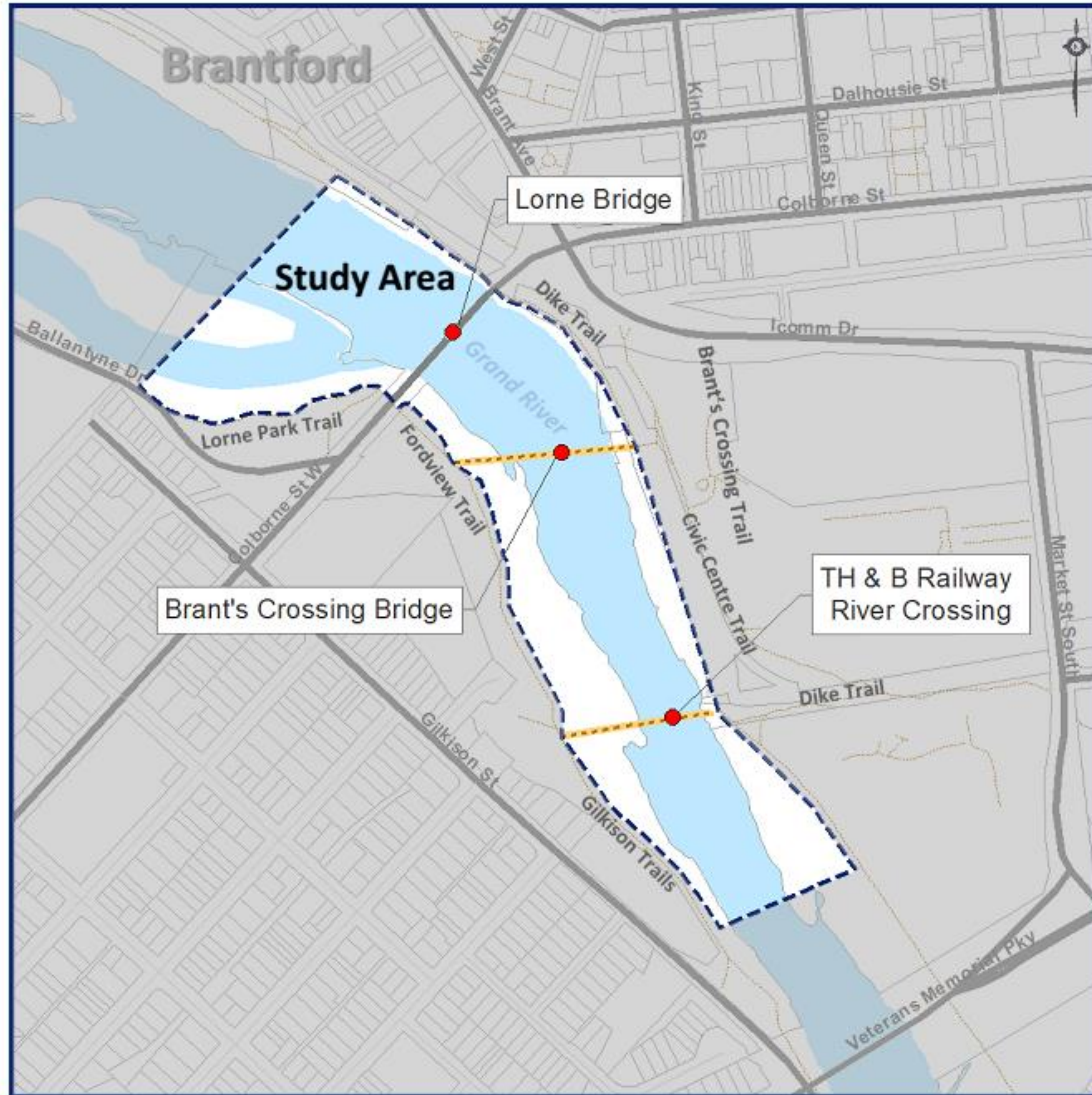


CITY OF BRANTFORD  
**THREE GRAND  
RIVER CROSSINGS**  
MUNICIPAL CLASS EA

# Virtual Public Information Centre

## April 2021

# Project Overview and Background



**The City of Brantford is conducting a Municipal Class Environmental Assessment (MCEA) to review alternatives for three bridges over the Grand River, including the Lorne Bridge, Brant's Crossing Bridge and the TH&B Crossing Bridge.**

**The purpose of this Virtual Public Information Centre (PIC) is to present the existing conditions, evaluation, and recommended solution and offer an opportunity for interested parties to review and provide comments to the Project Team.**

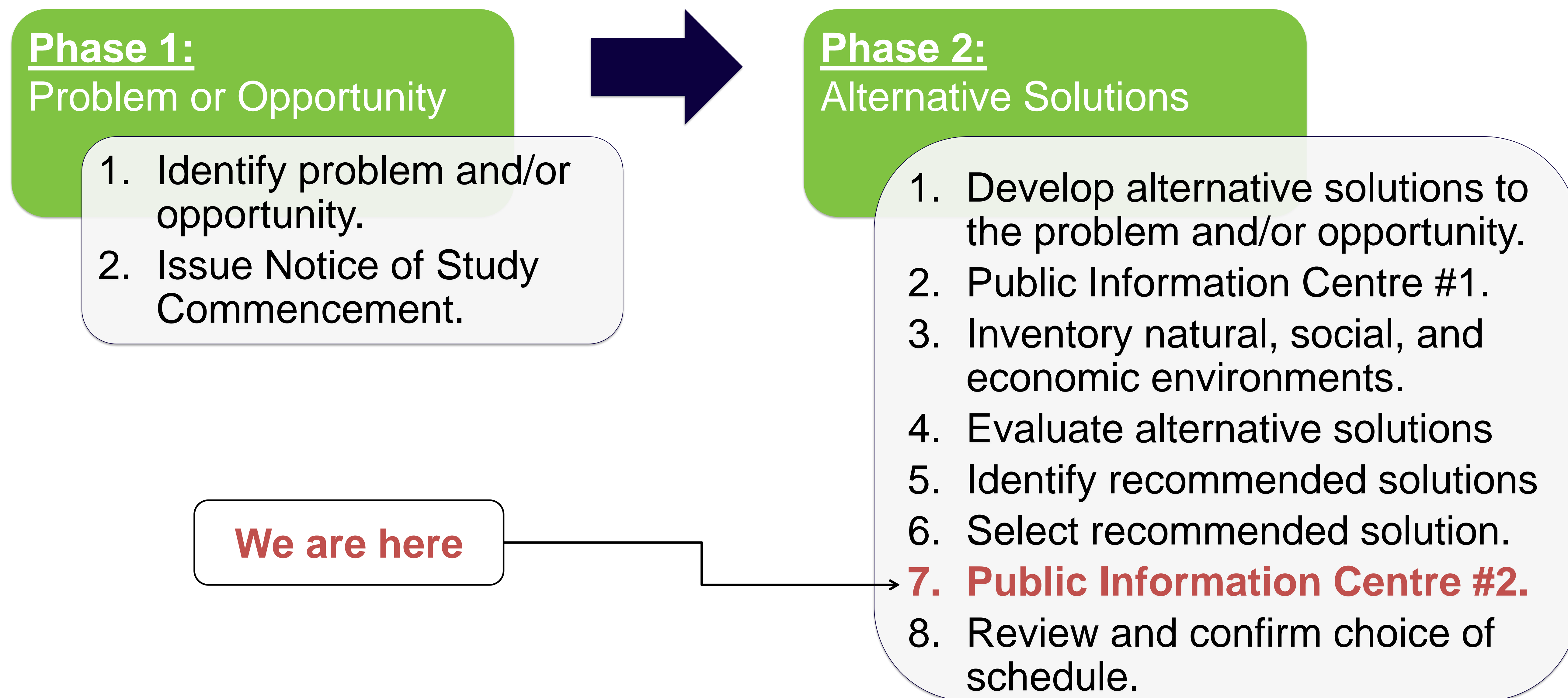
Information of the Project Study Area is available at:

[www.brantford.ca/threegrandrivercrossings](http://www.brantford.ca/threegrandrivercrossings)

# Project Overview and Background

## Municipal Class Environmental Assessment Process

- This study is being undertaken as a Schedule “B” Municipal Class Environmental Assessment.
  - Two phase planning process under the Ontario EA Act.
  - Primary goal is to minimize, mitigate, or avoid impacts on the community and surrounding environment.



# Description of Existing Structures

Lorne Bridge



- Three unique structures, the oldest of which was originally built in 1924
- No formal cycling lane in the roadway and cyclists typically share the sidewalk with pedestrians
- Requires 30 tonne load limit in winter months
- Requires major structural repairs to maintain the crossing

Brant's Crossing Bridge



- Originally built in 1912 to convey railway traffic and has been converted to carry pedestrian traffic
- Closed since February 2018 following a flooding and ice jam event
- Minor rehabilitation required to open the bridge; however, to remain open beyond approximately 3-5 years, major structural repairs are necessary

TH&B Crossing Bridge



- Originally built in 1893 as a rail crossing bridge but has been converted to carry pedestrian and cyclist traffic
- Was temporarily closed following 2018 ice jam event but later reopened following a structural investigation
- For this structure to remain open beyond approximately 5-10 years, major repairs are necessary

**More information about the existing structures is available at:**

[www.brantford.ca/threegrandrivercrossings](http://www.brantford.ca/threegrandrivercrossings)

# Project Triggers and Objectives

**This Class EA study was initiated to identify long-term, holistic solutions to address:**

- Deteriorating condition and age-related concerns of the existing structures; and
- Pedestrian, cyclist and vehicular connectivity needs, including those in the Transportation Master Plan.

**This Class EA study will:**

- Consider a reasonable range of appropriately planned potential solutions;
- Consider potential impacts to social, natural, technical and economic environments;
- Select a preferred solution through a transparent decision-making process; and,
- Encourage public participation throughout the process.

# Problem / Opportunity Statement

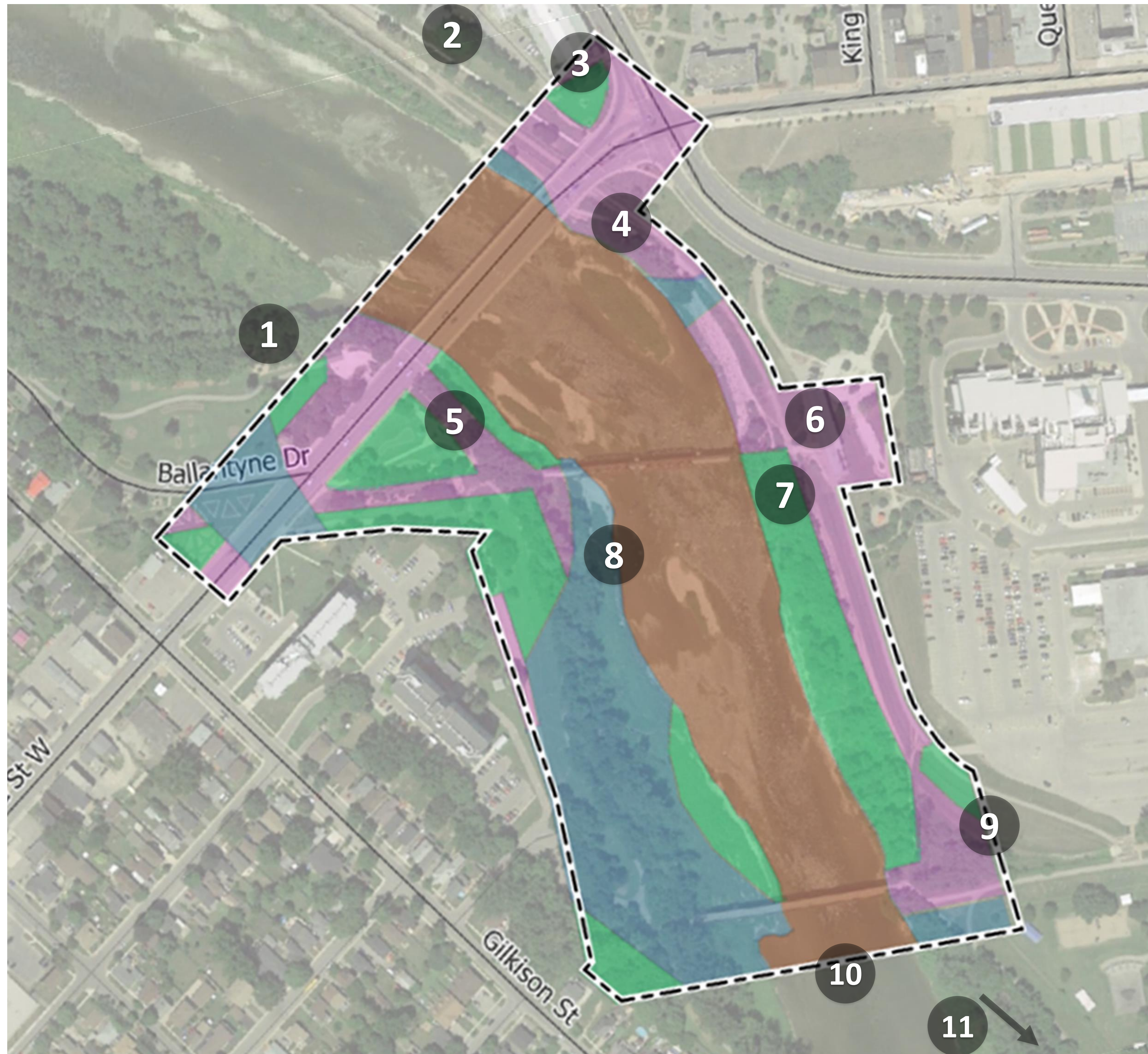
## A) Problem:

- Structural investigations have identified the need for structural repairs to each of the Three Grand River Crossings.





## B) Opportunity:

- The City plans to identify the short and long-term plans for the three Grand River crossings. The study will include determining the feasibility of removing the winter load limit on Lorne Bridge and the need for one or both of the TH&B Crossing Bridge and Brant's Crossing Bridge based on an assessment of the technical, economic, social and natural environmental factors, including impacts to the active transportation network and the risks of future flooding events of the Grand River.












# Existing Conditions – Archaeology & Cultural Heritage



## Archaeological Assessment

-  Previously disturbed; no further assessment required
-  Marine Archaeology Assessment recommended prior to development impacts
-  19<sup>th</sup> Century Grand River course; permanently wet; no further assessment required
-  Stage 2 Archaeological Assessment recommended prior to development impacts

## Cultural Heritage Landscape Features

- |   |  |
|---|--|
|  1 Lorne Park with Plaques and interpretive panels                   |  7 Hydro line pylons                                |
|  2 Brantford Canoe Club Clubhouses                                   |  8 Presumed line of Brant's crossing                |
|  3 Brantford Armoury, Boer War Monument, & Brant County War Memorial |  9 TH&B Railway line                                |
|  4 LE&N Railway Station & lines / canal entrance                     |  10 LE&N Bridge abutments                           |
|  5 Dam spillway  |  11 BSAR Bridge (Veteran's Memorial Parkway Bridge) |
|  6 LE&N Rail line  |  |

# Existing Conditions – Natural Environment

## Vegetative Communities



## Summary of Natural Environment Features

Natural Environment Feature	Description
Significant Valleyland / Environmental Control Policy Area	<ul style="list-style-type: none"> <li>Grand River valleyland</li> </ul>
Significant Wildlife Habitat	<ul style="list-style-type: none"> <li>Habitat for monarch and common nighthawk – marsh (MAM-2, MAM2-9)</li> <li>Habitat for eastern wood-pewee – Lowland Deciduous Forest (FOD7)</li> <li>Habitat for snapping turtle – Grand River</li> <li>Regional wildlife corridor – Grand River valleyland</li> <li>Regionally significant Waterfowl Winter Concentration Area – Grand River</li> </ul>
Species at Risk – Endangered or Threatened	<ul style="list-style-type: none"> <li>Habitat for tri-colored bat (endangered) – Lowland Deciduous Forest (FOD7)</li> <li>Habitat for queensnake (endangered) and eastern small-footed myotis (endangered) – Grand River and banks</li> <li>Habitat for little brown myotis (endangered) and chimney swift (threatened) – structures within study area of Lorne Bridge and TH&amp;B Crossing Bridge</li> </ul>
Grand River Conservation Authority (GRCA) Regulated Areas	<ul style="list-style-type: none"> <li>Grand River</li> <li>Unevaluated wetland (MAM2-2)</li> </ul>
Fish Habitat	<ul style="list-style-type: none"> <li>Grand River</li> </ul>



# Existing Conditions – Hydraulic Impact Study

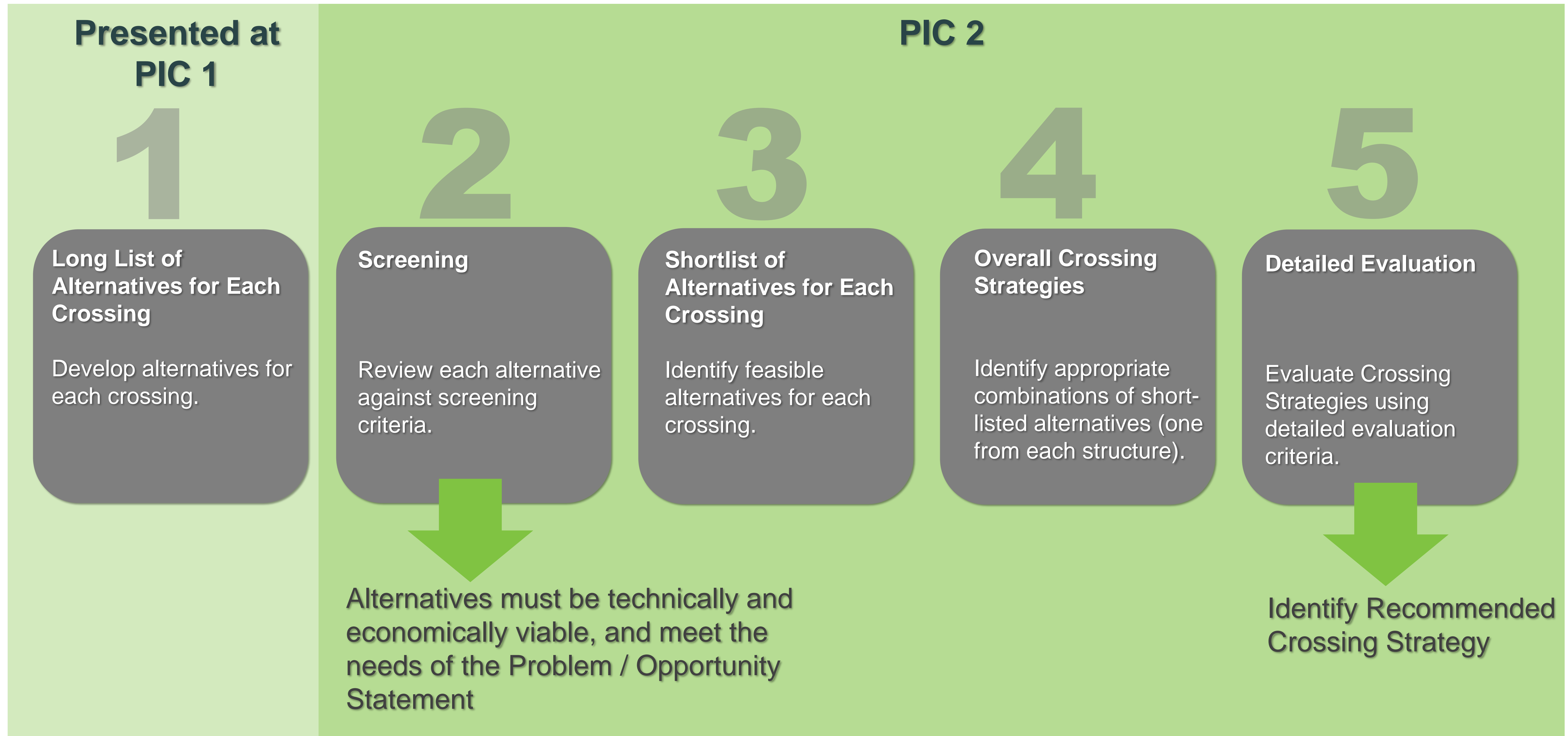
What are the impacts of ice jams and flooding events on each of the crossings?

- A Hydraulic Impact Study was completed to review the flood behaviour of the Grand River in the vicinity of the three existing bridge crossings and to identify opportunities to enhance hydraulic function of each crossing.
- The Hydraulic Impact Study concluded that:
  - The **Lorne Bridge** meets hydraulic evaluation criteria under both 100-year return period for open water flow and ice jam events. No hydraulic improvement opportunities were present.
  - Both **Brant's Crossing and TH&B Crossing Bridges** are acceptable under 10-year return period open flow events, but not under ice jam conditions. Opportunity to enhance hydraulic performance during ice jam events by raising each bridge by approximately 0.8 m.



*Photos from the 2018 Ice Jam Event*

# Alternative Solutions – Evaluation Framework



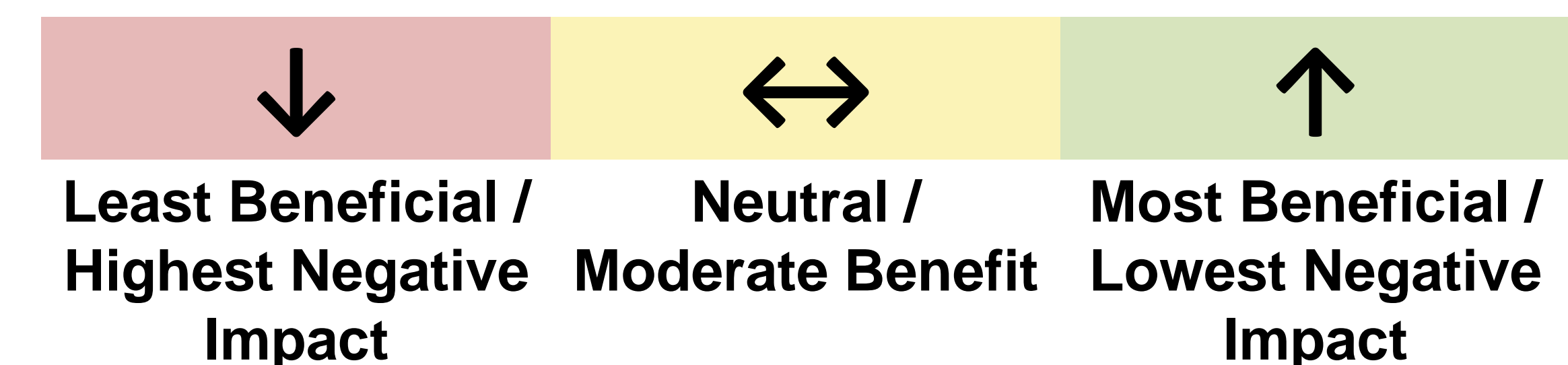
# Shortlisting of Alternatives: Lorne Bridge

Category	Criterion	Rehabilitate	Replace
Social	Property Impacts	↑	↓
	Impacts to Connectivity	↔	↑
	Impacts of Construction	↔	↓
	Public Health & Safety	↔	↑
	Aesthetics	↑	↓
	Cultural Heritage Resources	↑	↓
Natural	Terrestrial Wildlife & Vegetation	↑	↓
	Aquatic Wildlife & Vegetation	↑	↓
Technical	Design	↔	↑
	Transportation	↔	↑
	Constructability	↔	↓
Economic	Initial Capital Cost (2021 Dollars)	\$8.3M	\$19M to \$37M
	Lifecycle Costs (2021 Dollars)	\$33M	\$45M to \$87M
Summary		Shortlisted	Not Shortlisted

## Shortlisted Alternative: *Rehabilitate* Lorne Bridge

- Shorter construction duration and requires a smaller construction footprint than replacement, therefore, rehabilitation would pose fewer potential negative impacts to the natural and social environments since the construction would not disturb new areas.
- Estimated to be less costly than replacement.

Note: Rehabilitation will extend the service life of this structure by approximately 25 years, but it will ultimately need to be replaced beyond that time frame. This has been factored in to the 75-year lifecycle cost.



# Shortlisting of Alternatives: Lorne Bridge

Category	Criterion	Rehabilitate	Replace
<b>Social</b>	<b>Property Impacts</b>	↑	↓
	<b>Impacts to Connectivity</b>		
	<b>Impacts of Construction</b>		
	<b>Public Health &amp; Safety</b>		
	<b>Aesthetics</b>		
	<b>Cultural Heritage Resources</b>		
<b>Natural</b>	<b>Terrestrial Wildlife &amp; Vegetation</b>	↑	↓
	<b>Aquatic Wildlife &amp; Vegetation</b>		
<b>Technical</b>	<b>Design</b>	↔	↑
	<b>Transportation</b>		
	<b>Constructability</b>		
<b>Economic</b>	<b>Initial Capital Cost (2021 Dollars)</b>	\$8.3M	\$19M to \$37M
	<b>Lifecycle Costs (2021 Dollars)</b>	\$33M	\$45M to \$87M
<b>Summary</b>		<b>Shortlisted</b>	<b>Not Shortlisted</b>

# Shortlisting of Alternatives: Brant's Crossing Bridge

## Shortlisted Alternatives: Both *Rehabilitate* Alternatives and *Replace*

- Maintains connectivity
- Maintains views from the crossing
- Improves public health and safety
- Maintains general aesthetics of the area
- Replacement would allow for delineated pedestrian and cycling lanes over bridge
- Decommission has much smaller initial and lifecycle costs

Category	Criterion	Decommission		Rehabilitate		Replace & Raise
		Close	Remove	Rehabilitate	Rehabilitate & Raise	
Social	Property Impacts	↔	↔	↔	↔	↔
	Impacts to Connectivity	↓	↓	↔	↔	↑
	Impacts of Construction	↔	↔	↓	↓	↓
	Public Health & Safety	↓	↑	↑	↑	↑
	Aesthetics	↔	↓	↑	↑	↔
	Cultural Heritage Resources	↔	↓	↑	↑	↔
Natural	Terrestrial Wildlife & Vegetation	↑	↔	↔	↔	↔
	Aquatic Wildlife & Vegetation	↑	↓	↔	↔	↔
Technical	Design	↓	↑	↓	↑	↑
	Transportation	↓	↓	↑	↑	↑
	Constructability	↑	↔	↔	↓	↓
Economic	Initial Capital Cost (2021 Dollars)	\$0.3M	\$0.7M	\$1.0M	\$2.3M	\$3.7M
	Lifecycle Costs (2021 Dollars)	\$1.0M	\$0.7M	\$6.4M	\$7.7M	\$5.5M
Summary		Not Shortlisted	Not Shortlisted	Shortlisted	Shortlisted	Shortlisted

# Shortlisting of Alternatives: Brant's Crossing Bridge

Category	Criterion	Decommission		Rehabilitate		Replace & Raise
		Close	Remove	Rehabilitate	Rehabilitate & Raise	
Social	Property Impacts	↓	↓	↔	↔	↔
	Impacts to Connectivity					
	Impacts of Construction					
	Public Health & Safety					
	Aesthetics					
Cultural Heritage Resources						
Natural	Terrestrial Wildlife & Vegetation	↑	↓	↔	↔	↔
	Aquatic Wildlife & Vegetation					
Technical	Design	↓	↔	↔	↑	↑
	Transportation					
	Constructability					
Economic	Initial Capital Cost (2021 Dollars)	\$0.3M	\$0.7M	\$1.0M	\$2.3M	\$3.7M
	Lifecycle Costs (2021 Dollars)	\$1.0M	\$0.7M	\$6.4M	\$7.7M	\$5.5M
Summary		Not Shortlisted	Not Shortlisted	Shortlisted	Shortlisted	Shortlisted

# Shortlisting of Alternatives: TH&B Crossing Bridge

Category	Criterion	Decommission		Rehabilitate			Replace & Raise
		Close	Remove	Minor Rehab and Eventual Removal	Rehabilitate	Rehabilitate & Raise	
Social	Property Impacts	↔	↔	↔	↔	↔	↔
	Impacts to Connectivity	↓	↓	↔	↑	↑	↑
	Impacts of Construction	↔	↔	↔	↓	↓	↓
	Public Health & Safety	↓	↑	↑	↑	↑	↑
	Aesthetics	↔	↓	↔	↑	↑	↑
	Cultural Heritage Resources	↔	↓	↔	↑	↑	↓
Natural	Terrestrial Wildlife & Vegetation	↑	↔	↔	↔	↔	↓
	Aquatic Wildlife & Vegetation	↑	↓	↔	↔	↔	↓
Technical	Design	↓	↑	↑	↓	↑	↑
	Transportation	↓	↓	↔	↑	↑	↑
	Constructability	↑	↔	↑	↔	↓	↓
Economic	Initial Capital Cost (2021 Dollars)	\$0.3M	\$0.7M	\$0.3M	\$0.6M	\$1.9M	\$3.2M
	Lifecycle Costs (2021 Dollars)	\$1.0M	\$0.7M	\$1.0M	\$6.4M	\$7.8M	\$8.1M
Summary		Not Shortlisted	Not Shortlisted	Shortlisted	Shortlisted	Shortlisted	Not Shortlisted

## Shortlisted Alternatives: All “Rehabilitate” Alternatives

- Shorter construction duration and a smaller construction footprint than replacement.
- Cultural heritage value retained (until future replacement or decommissioning).
- Fewer potential negative impacts to the natural and social environments since the construction would not disturb new areas.

# Shortlisting of Alternatives: TH&B Crossing Bridge

Category	Criterion	Decommission		Rehabilitate			Replace & Raise
		Close	Remove	Minor Rehab and Eventual Removal	Rehabilitate	Rehabilitate & Raise	
Social	Property Impacts	↓	↓	↑	↑	↑	↔
	Impacts to Connectivity						
	Impacts of Construction						
	Public Health & Safety						
	Aesthetics						
Cultural Heritage Resources							
Natural	Terrestrial Wildlife & Vegetation	↑	↓	↔	↔	↔	↓
	Aquatic Wildlife & Vegetation						
Technical	Design	↓	↔	↑	↔	↑	↑
	Transportation						
	Constructability						
Economic	Initial Capital Cost (2021 Dollars)	\$0.3M	\$0.7M	\$0.3M	\$0.6M	\$1.9M	\$3.2M
	Lifecycle Costs (2021 Dollars)	\$1.0M	\$0.7M	\$1.0M	\$6.4M	\$7.8M	\$8.1M
Summary		Not Shortlisted	Not Shortlisted	Shortlisted	Shortlisted	Shortlisted	Not Shortlisted



# Shortlisting of Alternatives: New Pedestrian & Cyclist Crossing Bridge

Category	Criterion	Do Not Construct New Crossing	Construct New Crossing
Social	Property Impacts	↔	↔
	Impacts to Connectivity	↔	↔
	Impacts of Construction	↔	↔
	Public Health & Safety	↔	↑
	Aesthetics	↔	↔
	Cultural Heritage Resources	↔	↓
Natural	Terrestrial Wildlife & Vegetation	↑	↓
	Aquatic Wildlife & Vegetation	↑	↓
Technical	Design	↔	↑
	Transportation	↔	↔
	Constructability	↔	↓
Economic	Initial Capital Cost (2021 Dollars)	\$0	\$4.5M
	Lifecycle Costs (2021 Dollars)	\$0	\$11M
Summary		Shortlisted	Not Shortlisted

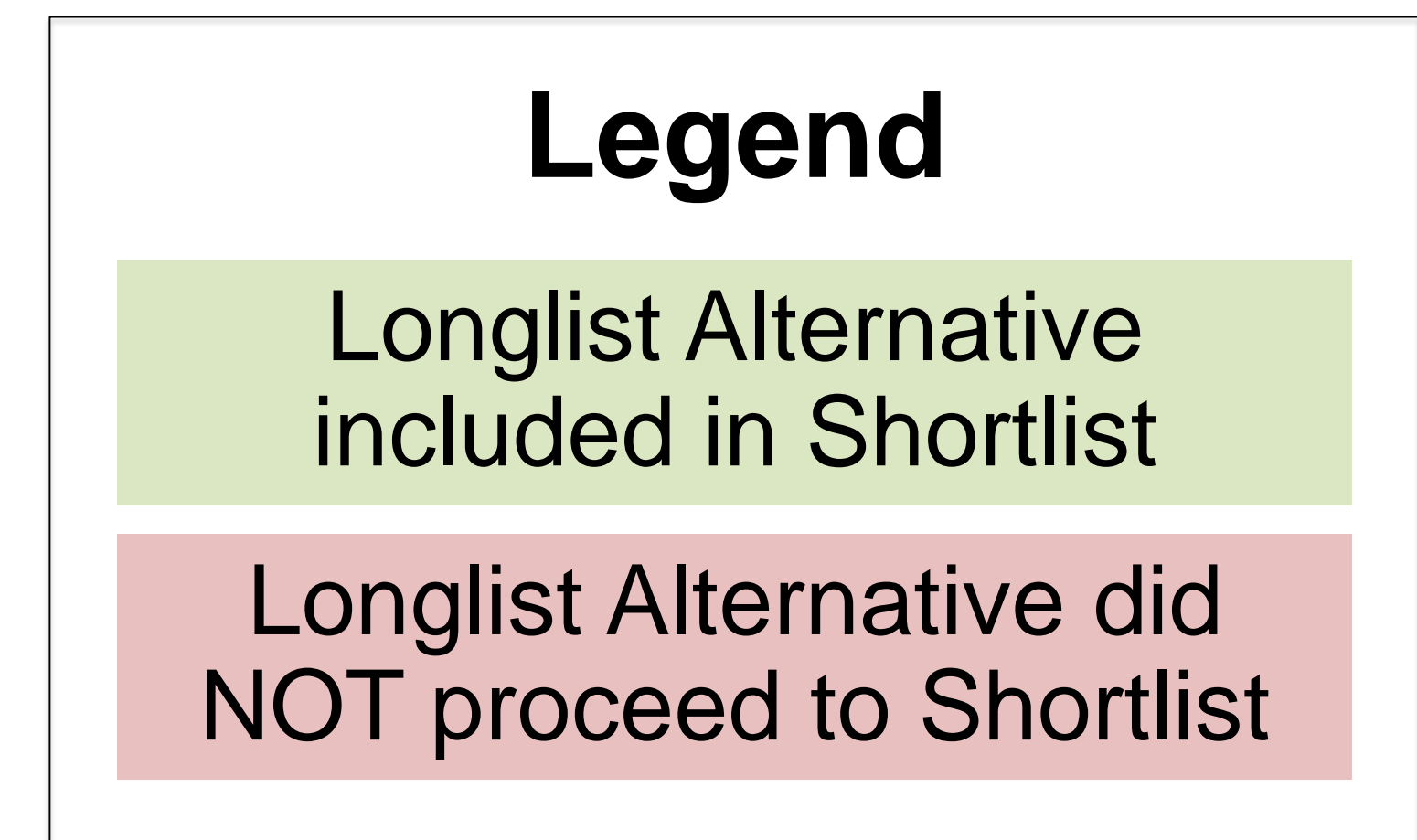
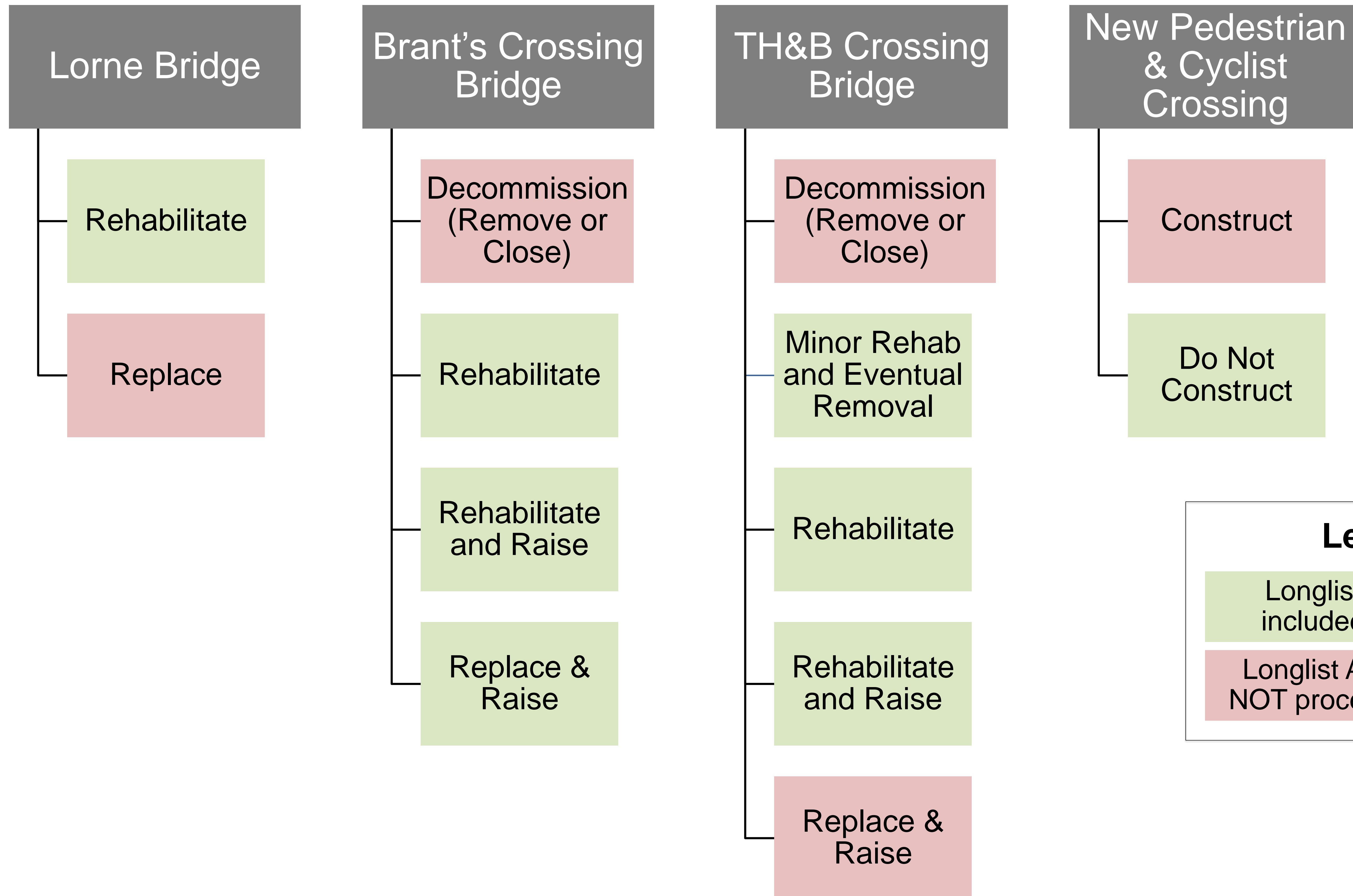
## Shortlisted Alternative: *Do Not Construct New Crossing*

- Lower impacts related to social, natural, technical, and economic considerations compared to constructing a new crossing

# Shortlisting of Alternatives: New Pedestrian & Cyclist Crossing Bridge

Category	Criterion	Do Not Construct New Crossing	Construct New Crossing
Social	Property Impacts	↔	↔
	Impacts to Connectivity		
	Impacts of Construction		
	Public Health & Safety		
	Aesthetics		
	Cultural Heritage Resources		
Natural	Terrestrial Wildlife & Vegetation	↑	↓
	Aquatic Wildlife & Vegetation		
Technical	Design	↔	↔
	Transportation		
	Constructability		
Economic	Initial Capital Cost (2021 Dollars)	\$0	\$4.5M
	Lifecycle Costs (2021 Dollars)	\$0	\$11M
Summary		Shortlisted	Not Shortlisted

# Alternatives for Each Crossing



# Initial Capital and 75-Year Lifecycle Costs for Short-Listed Alternatives

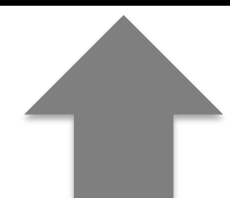
Capital cost estimates listed below are high level, intended to be used for comparison of alternatives only. A more detailed cost estimate will be prepared for the recommended solution toward the end of this Class EA.

Capital Expenditure (2021 \$)	Lorne Bridge	Brant's Crossing Bridge			TH&B Crossing Bridge		
	Rehabilitate	Rehabilitate	Rehabilitate & Raise	Replace & Raise	Minor Rehab and Eventual Removal	Rehabilitate	Rehabilitate & Raise
Year 0 (Initial Capital)	\$8.3M	\$1.0M	\$2.3M	\$3.7M	\$0.3M	\$0.6M	\$1.9M
Year 25	+ \$3.7M (Rehabilitation)	+\$4.5M (Replacement)	+\$4.5M (Replacement)	\$0.3M (Rehabilitation)	+\$0.7M (Removal at Year 15)	+\$1.0M (Rehabilitation)	+\$1.0M (Rehabilitation)
Year 50	+ \$19M or + \$37M* (Replacement)	+\$0.5M	+\$0.5M	\$1.0M (Rehabilitation)	N/A	+\$4.5M (Replacement)	+\$4.5M (Replacement)
Year 75	+ \$2M or + \$4M* (Rehabilitation)	N/A (Maintenance Only)	N/A (Maintenance Only)	\$0.5M (Rehabilitation)	N/A	N/A (Maintenance Only)	N/A (Maintenance Only)

\*The existing structure is estimated to require replacement at approximately year 50; the lower cost option would be to replace with a standard girder bridge, and higher cost option would be to replace with a gateway or arch bridge

# Detailed Evaluation of Overall Crossing Strategy Alternatives

Overall Crossing Strategy Alternative	Lorne Bridge	Brant's Crossing Bridge	TH&B Crossing Bridge	New Bridge Crossing	Cost (2021\$)		Is the Overall Crossing Strategy Alternative Feasible?	
					Initial Capital	Lifecycle		
1	Rehabilitate	Rehabilitate	Minor Rehab and Eventual Removal	Do Nothing	\$9.6M	\$40M	YES	Carried forward to evaluation.
2	Rehabilitate	Rehabilitate	Rehabilitate	Do Nothing	\$9.9M	\$46M	YES	Carried forward to evaluation.
3	Rehabilitate	Rehabilitate	Rehab & Raise	Do Nothing	\$11M	\$47M	NO	Not carried forward to evaluation due to issues with hydraulics*.
4	Rehabilitate	Rehab & Raise	Minor Rehab and Eventual Removal	Do Nothing	\$11M	\$41M	YES	Carried forward to evaluation.
5	Rehabilitate	Rehab & Raise	Rehabilitate	Do Nothing	\$11M	\$47M	NO	Not carried forward to evaluation due to issues with hydraulics*.
6	Rehabilitate	Rehab & Raise	Rehab & Raise	Do Nothing	\$12M	\$48M	YES	Carried forward to evaluation.
7	Rehabilitate	Replace & Raise	Minor Rehab and Eventual Removal	Do Nothing	\$12M	\$39M	YES	Carried forward to evaluation.
8	Rehabilitate	Replace & Raise	Rehabilitate	Do Nothing	\$13M	\$45M	NO	Not carried forward to evaluation due to issues with hydraulics*.
9	Rehabilitate	Replace & Raise	Rehab & Raise	Do Nothing	\$14M	\$46M	NO	Not carried forward to evaluation due to high cost considerations.



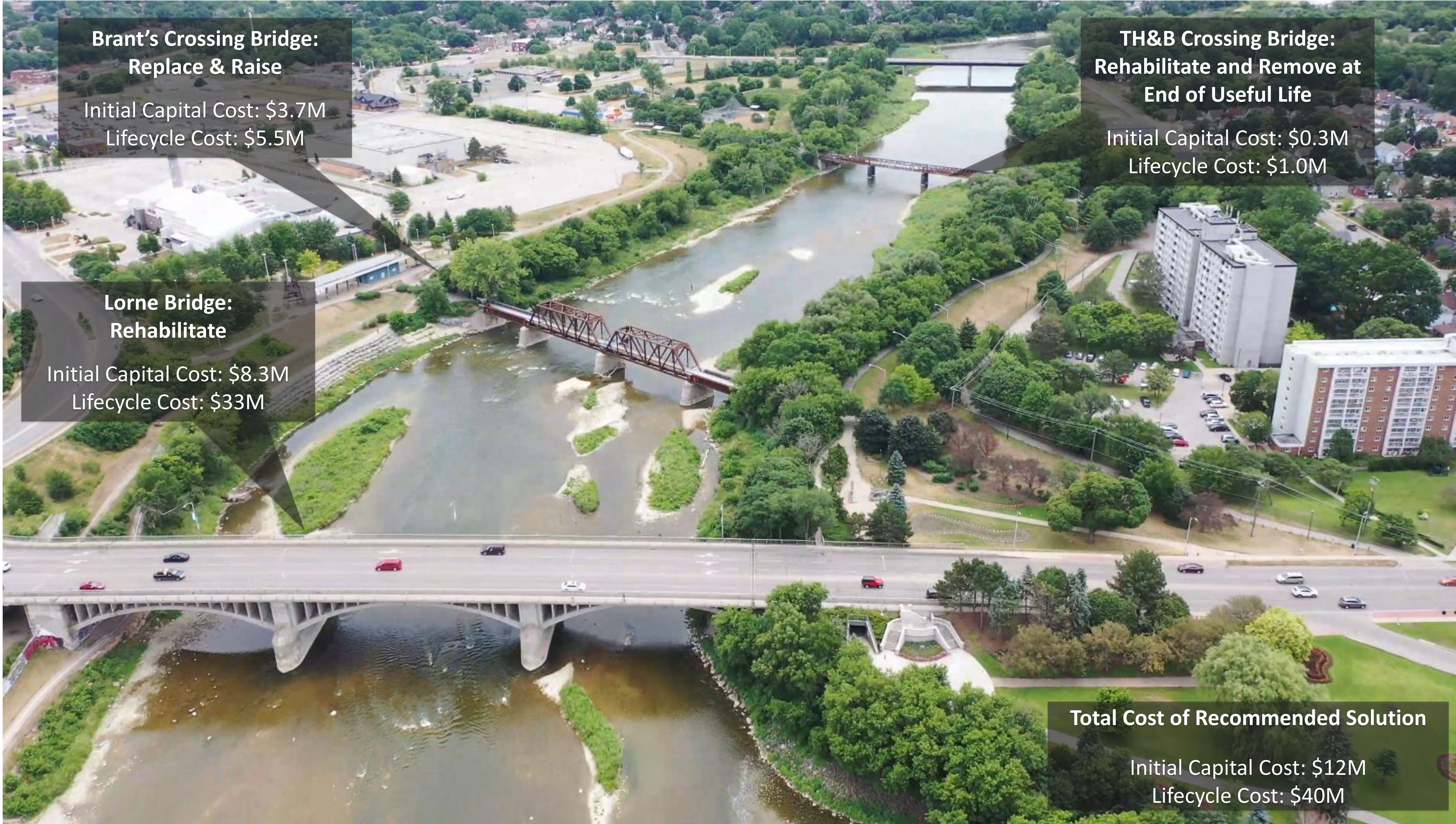
**Rehabilitating Lorne Bridge is common among all Crossing Strategy Alternatives and, therefore, the comparative evaluation of strategies will focus on Brant's and TH&B Crossing Bridges.**

\* Keeping one of the pedestrian bridges at its existing elevation but raising the other would not reduce concerns related to ice jamming since the lower of the two bridges would continue to limit the flow.

# Detailed Evaluation of Crossing Strategy Alternatives

	Strategy 1	Strategy 2	Strategy 4	Strategy 6	Strategy 7	
<b>Brant's</b>	Rehabilitate without Raising	Rehabilitate without Raising	Rehabilitate & Raise	Rehabilitate & Raise	Replace & Raise	
<b>TH&amp;B</b>	Rehabilitate without Raising and Eventual Removal	Rehabilitate without Raising	Rehabilitate without Raising and Eventual Removal	Rehabilitate & Raise	Rehabilitate without Raising and Eventual Removal	
<b>Category</b>	<b>Social</b>	<ul style="list-style-type: none"> <li>Cultural Heritage impacts following removal of TH&amp;B.</li> <li>Eventual removal of crossing over the Grand River.</li> <li>Unable to accommodate dedicated cyclist lane on Brant's and existing TH&amp;B cyclist crossing would ultimately be removed.</li> </ul>	<ul style="list-style-type: none"> <li>Less disruption of historical/cultural heritage features.</li> <li>Maintain two pedestrian crossings over the Grand River.</li> <li>Unable to accommodate dedicated cyclist lane on Brant's.</li> </ul>	<ul style="list-style-type: none"> <li>Cultural Heritage impacts following removal of TH&amp;B.</li> <li>Eventual removal of pedestrian crossing over the Grand River.</li> <li>Unable to accommodate dedicated cyclist lane on Brant's and existing TH&amp;B cyclist crossing would ultimately be removed.</li> </ul>	<ul style="list-style-type: none"> <li>Less disruption of historical/cultural heritage features.</li> <li>Maintain two pedestrian crossings over the Grand River.</li> <li>Unable to accommodate dedicated cyclist lane on Brant's.</li> </ul>	<ul style="list-style-type: none"> <li>Cultural Heritage impacts following removal of TH&amp;B.</li> <li>Eventual removal of pedestrian crossing over the Grand River.</li> <li>Incorporate dedicated cycling lane on Brant's Crossing.</li> <li>Cultural Heritage effects of removing existing Brant's Crossing Bridge to be mitigated.</li> </ul>
		↓	↑	↓	↔	↔
	<b>Natural</b>	<ul style="list-style-type: none"> <li>Temporary impacts can be mitigated.</li> </ul>	<ul style="list-style-type: none"> <li>Temporary impacts can be mitigated.</li> </ul>	<ul style="list-style-type: none"> <li>Temporary impacts can be mitigated.</li> </ul>	<ul style="list-style-type: none"> <li>Temporary impacts can be mitigated.</li> </ul>	<ul style="list-style-type: none"> <li>Temporary impacts can be mitigated.</li> </ul>
		↔	↔	↔	↔	↔
	<b>Technical</b>	<ul style="list-style-type: none"> <li>Increased risk as crossings would not be raised to meet MTO Design Criteria for the evaluated ice jam events.</li> <li>Less intensive rehabilitation required for TH&amp;B.</li> </ul>	<ul style="list-style-type: none"> <li>Increased risk as crossings would not be raised to meet MTO Design Criteria for the evaluated ice jam events.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced risk as Brant's would be raised to meet MTO Design Criteria for the evaluated ice jam events. Short term risk of TH&amp;B not being raised.</li> <li>Increased constructability challenges with raising Brant's, but less intensive rehabilitation required for TH&amp;B.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced risk as crossings would be raised to meet MTO Design Criteria for the evaluated ice jam events.</li> <li>Increased constructability challenges with raising bridge.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced risk as Brant's would be raised to meet MTO Design Criteria for the evaluated ice jam events. Short term risk of TH&amp;B not being raised.</li> <li>Increased constructability challenges with replacing Brant's, but less intensive rehabilitation required for TH&amp;B.</li> </ul>
		↔	↓	↑	↔	↑
	<b>Economic</b> <small>(for comparison, costs exclude Lorne Bridge)</small>	<ul style="list-style-type: none"> <li>Low initial capital cost.</li> <li>Low lifecycle cost.</li> </ul>	<ul style="list-style-type: none"> <li>Low initial capital cost.</li> <li>High lifecycle cost.</li> </ul>	<ul style="list-style-type: none"> <li>Average initial capital cost.</li> <li>Low lifecycle cost.</li> </ul>	<ul style="list-style-type: none"> <li>Highest initial capital cost.</li> <li>Highest lifecycle cost.</li> </ul>	<ul style="list-style-type: none"> <li>High initial capital cost.</li> <li>Low lifecycle cost.</li> </ul>
		Initial Capital Cost: \$1.3M Lifecycle Cost: \$7.1M	Initial Capital Cost: \$1.6M Lifecycle Cost: \$13M	Initial Capital Cost: \$2.6M Lifecycle Cost: \$8.4M	Initial Capital Cost: \$4.1M Lifecycle Cost: \$15M	Initial Capital Cost: \$4.0M Lifecycle Cost: \$6.3M
	<b>Summary</b>	↔	↔	↔	↓	↑

# Recommended Solution: Strategy 7



# Summary of Select Frequently Asked Questions

## Can Brant's Crossing Bridge be re-opened soon?

- A minor rehabilitation is required in order to re-open the Brant's Crossing Bridge in the short term and could occur following the outcome of this Environmental Assessment. However, more extensive work is required in order to have the bridge remain open beyond approximately 3 to 5 years.





# Summary of Select Frequently Asked Questions

What is this history of water or ice levels rising to the underside of the Brant's and TH&B Crossing Bridges?



- According to records back to 1965, river water gauges indicate that in February of 1996 and February 2018 the underside of the bridges were submerged. Additionally, an event in February 1984 was very close to or may actually have risen to the undersides of the bridges.

# Summary of Select Frequently Asked Questions

What is a 100-year return period event (or 100-year storm or 100-year flood)? Do they occur only once in 100 years?

- A return period represents the likelihood of a storm event occurring, in any given year. A 100-year return period event has a 1 in 100 chance of occurring, regardless of what happened in the previous year.
- An example would be the chance of pulling the single red jellybean from jar of white jellybeans. The number of total jellybeans in the jar is equal to the return period event referenced. i.e., for a 100-year storm there would be 100 jellybeans in the jar.



*Photos from the 2018 Ice Jam Event*



# Summary of Select Frequently Asked Questions

Would raising Brant's Crossing Bridge and TH&B Crossing Bridge eliminate ice jam issues and risks?

- Raising the two crossings by approximately 0.8 metres reduces the probability of an ice jam event occurring at the bridges to less than 1% in any given year (100-year event).



# Summary of Select Frequently Asked Questions

There are concerns with the existing cycling facilities on Lorne Bridge. Can Lorne Bridge accommodate dedicated cycling lanes without reducing vehicular capacity?

- The bridge deck was widened during the construction works in the 1980's and cannot be further widened. Adding dedicated cycling lanes to the bridge would come at the expense of reduced vehicular capacity.



# Summary of Select Frequently Asked Questions

There are concerns with the existing shared-use trail under Lorne Bridge, on the east riverbank. Will the trail be improved or realigned?

- Trail alignment and connectivity is being investigated by the City of Brantford, outside of this Class EA. For questions related to the trail, please contact the City of Brantford.



# PIC #2 Process

- |    |   |                          |
|----|---|--------------------------|
| 1) | Notice of Public Information Centre #2 first published        | March 18, 2021           |
| 2) | PIC Presentation posted to project webpage                    | March 18, 2021           |
| 3) | Live Public Information Centre #2 Presentation                | April 1, 2021            |
| 4) | Public Comment Period   | April 1 – April 15, 2021 |
| 5) | Question List and FAQs with answers posted to project webpage | April 22, 2021           |

# Next Steps in MCEA Study

## Points of Contact

- |  |                              |                |
|--|------------------------------|----------------|
| <input checked="" type="checkbox"/> 1) | Notice of Study Commencement | March 5, 2020  |
| <input checked="" type="checkbox"/> 2) | Public Information Centre #1 | May-July, 2020 |
| <input checked="" type="checkbox"/> 3) | Public Information Centre #2 | April 2021     |
| 4)                                     | Notice of Study Completion   | Summer 2021    |

# We Want to Hear from You!

**Thank you for participating in the Virtual Public Information Centre.**

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**IF YOU WISH TO SUBMIT COMMENTS OR WOULD LIKE TO BE ADDED TO THE PROJECT MAILING LIST, PLEASE CONTACT:**

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Comment Sheets are available at the Three Grand River Crossings website:  
[www.brantford.ca/threegrandrivercrossings](http://www.brantford.ca/threegrandrivercrossings)

Comments submitted by **April 15<sup>th</sup>, 2021** will be considered for the FAQ list posted on April 22, 2021