

**Rehabilitation of the Long Point Causeway, from
Lakeshore Road to Erie Boulevard, Including the
Replacement of the Long Point Causeway Bridge over
Big Creek, in Norfolk County**

Municipal Class EA Study

**Public Information Centre
Friday, August 11, 2017
1:00 pm – 4:00 pm**

Please sign in so we can keep you updated on this study

Purpose of the Public Information Centre (PIC)

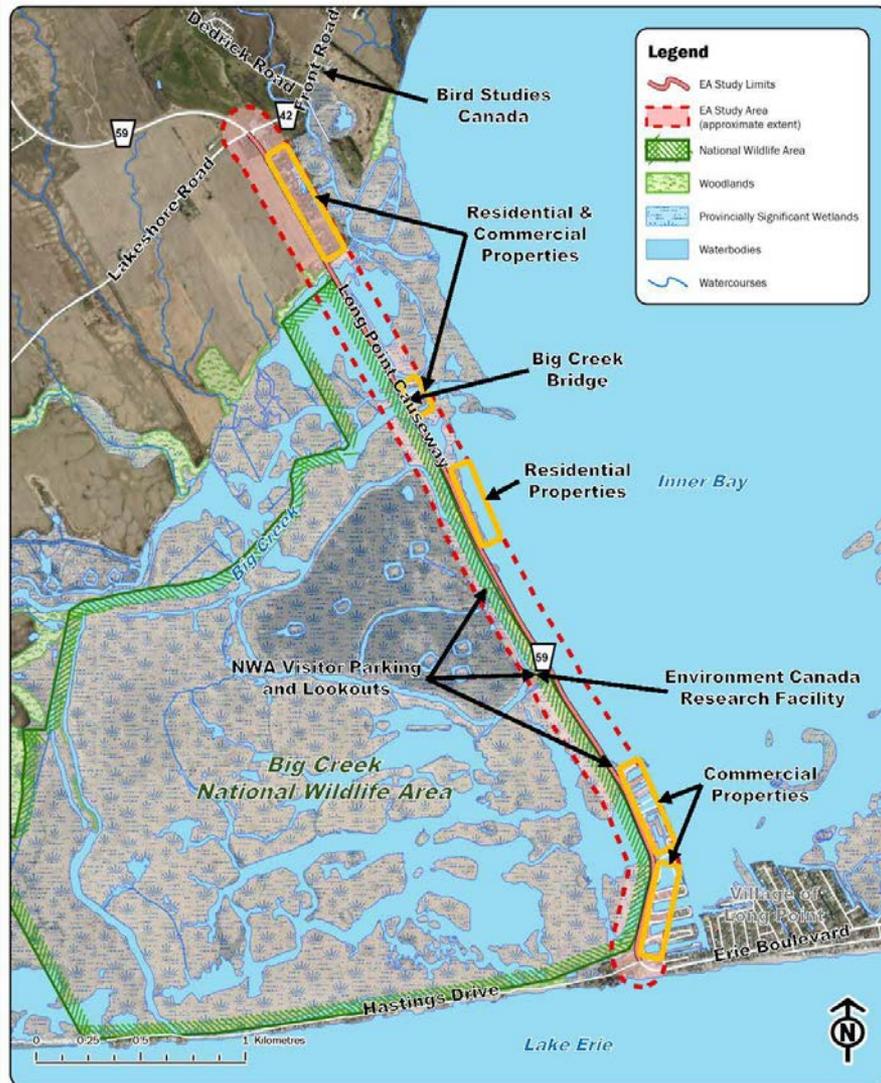
Norfolk County is hosting this PIC to:

- Introduce the study and provide an opportunity for the public to review and comment on the:
 - Study planning process being undertaken
 - Study Problem and Opportunity Statement
 - Existing conditions within the study area, including local issues & constraints affecting the project
 - Alternative & recommended solutions
 - Next steps in the study



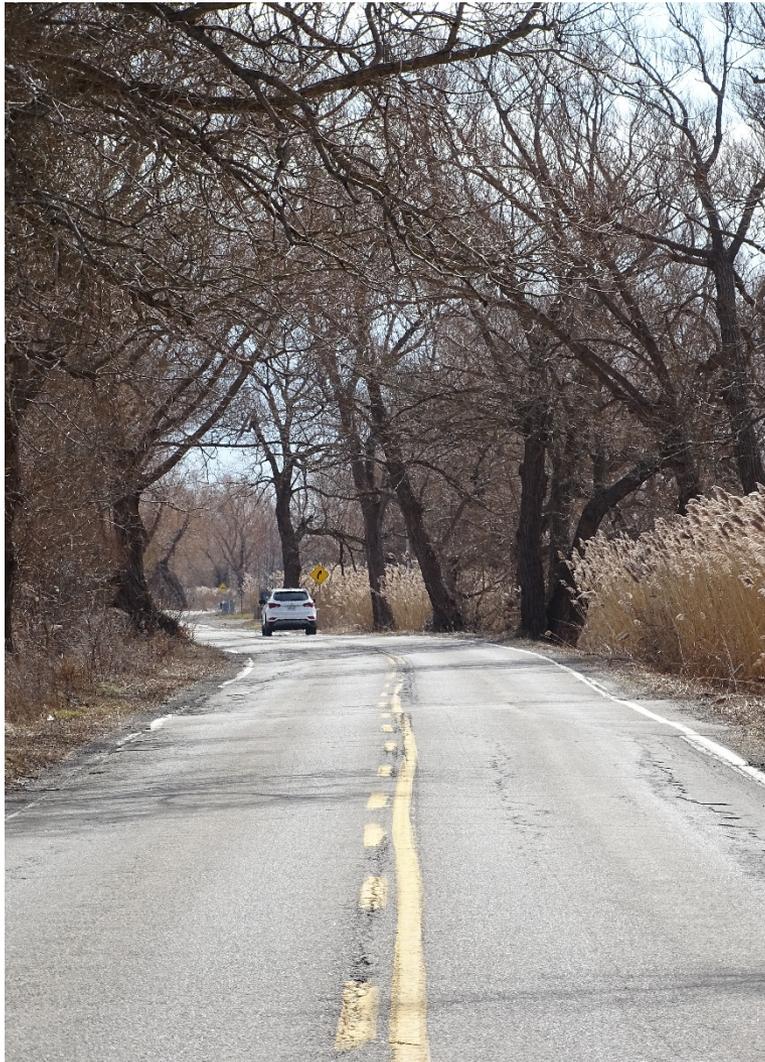
Please submit a **comment sheet** following your review of the display materials and feel free to speak with staff regarding any questions you may have.

Study Area and Background Information



- Two-lane link connecting the mainland and Long Point cottage community:
 - 40 km/h to 70 km/h speed limit
 - 30 to 36 m right of way
 - Part of Ontario's South Coast Scenic Route
 - Key active transportation route as designated in the *Norfolk County Active Transportation Strategy*
 - Average Daily Traffic = 1700 vehicles
 - Recently installed culverts and wildlife passages throughout the corridor
- UNESCO World Biosphere Reserve
 - Globally significant wetland (Big Creek Marsh)
 - Considered a *Canadian Important Bird Area*
 - Big Creek Marsh is a *National Wildlife Area*
- Bridge crossing over Big Creek needs to be replaced, also has potential heritage significance
- Corridor drainage via ditches
- Predominantly rural area with access to residential and commercial properties

Study Problem/Opportunity Statement



The study is being undertaken to address:

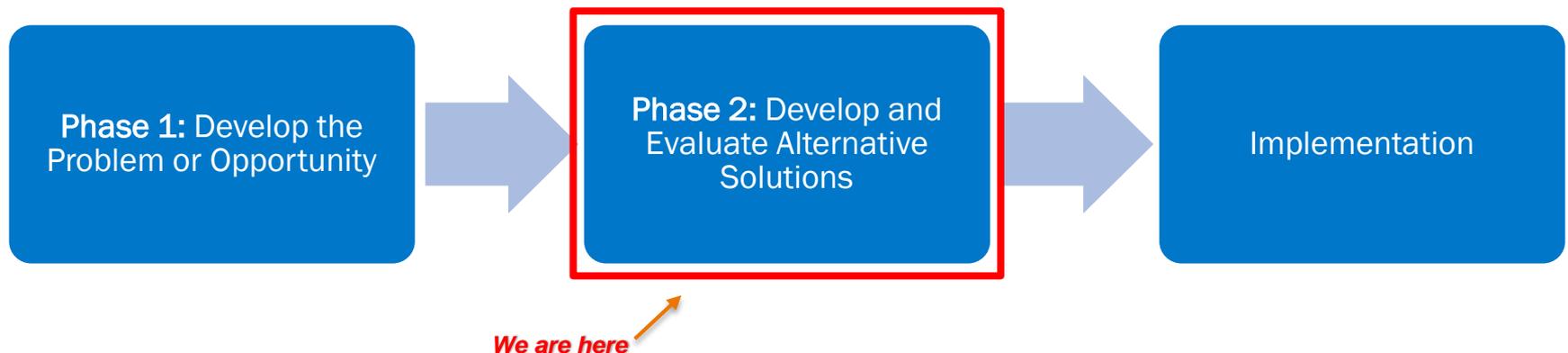
- Existing roadway and pavement deterioration
- Deteriorating condition of the bridge over Big Creek
- Active transportation needs along the corridor

These improvements are required to maintain a **safe and functional road** that is **suitable for all road users**.

In addressing the identified issues, opportunities for safety improvements along the corridor will be considered, including access modifications, removal of objects in the roadway clearzone and better sightlines.

Schedule 'B' Municipal Class EA

- The Study is being completed in accordance with the **Municipal Class Environmental Assessment** - *a formal planning process that must be undertaken prior to road, water and wastewater construction projects.*
- Ensures that **all reasonable alternatives are considered** and that a selected alternative would have **minimal impact on the surrounding environment.**
- **Schedule 'B' projects** follow the process outlined below. We are currently in Phase 2 and have developed and evaluated alternative solutions.



Existing Conditions: Transportation and Technical

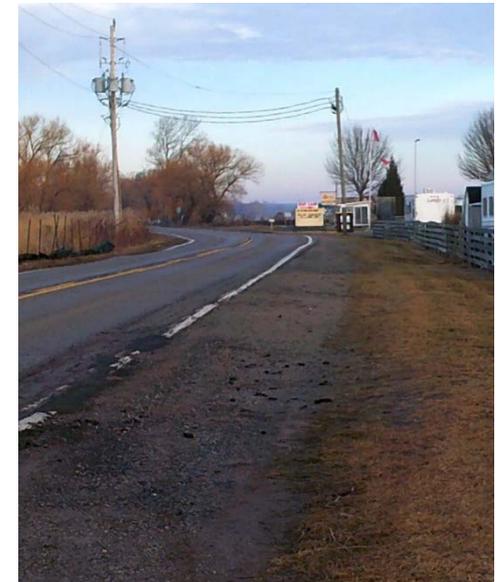
- The Long Point Causeway is a two-lane north-south scenic route with an **Annual Average Daily Traffic (AADT) volume of 1700**. The Causeway is used as the only road connection to the residences and commercial properties on the Long Point community.
- There are several key issues with the roadway, including:



Deteriorating pavement that requires rehabilitation



Substandard shoulder widths and roadside hazards



Lack of adequate active transportation facilities

Existing Conditions: Big Creek Bridge

The Bridge over Big Creek is in poor condition and requires replacement. Its proximity to private properties creates a constraint.



Existing Conditions: Natural Environment

- The wetlands surrounding the Causeway are highly ecologically sensitive and significant.
- This area provides habitat for numerous **Species at Risk (SAR)**, including:
 - Eastern Foxsnake
 - Blanding's Turtle
 - Northern Map Turtle
 - Snapping Turtle
 - Monarch Butterfly
 - Least Bittern
 - Black Tern
 - King Rail
 - Barn Swallow



Existing Conditions: Natural Environment (cont'd)

- Wildlife mortality due to vehicle collisions on the Causeway is a major concern for SAR. Recently, 3 box culverts and 9 wildlife tunnels were installed to provide safe passage for animals beneath the roadway. Existing wildlife passage and habitat connectivity will be maintained in accordance with technical agency requirements.



- Local environmental groups and technical agencies were contacted and encouraged to provide comments for this study.

Existing Conditions: Archaeology & Cultural Heritage

- Several Archaeological sites have been previously identified in lands adjacent to the study corridor
- A Stage 2 Assessment will be undertaken prior to construction to determine if lands at the north and south portions of the corridor exhibit archaeological potential
- The Long Point Bridge over Big Creek was identified as a cultural heritage resource due to historical, design & contextual attributes:
 - Expresses the increased settlement and recreation of the area from the middle of the twentieth century.
 - Features wood, steel, and concrete materials and is possibly rare or unique within the area.
 - Bridge is situated within a bucolic setting at the eastern entry to the Big Creek National Wildlife Area.
- A Cultural Heritage Evaluation Report and Heritage Impact Assessment for the bridge is currently underway to identify appropriate mitigation requirements.



Existing Conditions: Socio-Economic Environment



- The study area is composed of primarily **natural areas / wetlands** and some **residential and commercial areas** adjacent to the Causeway.
- The urban area, **Port Rowan**, is located at the north end of the study. The south end of the study includes the **Long Point community**, which is designated a resort area.
- The **County's Official Plan** designates the surrounding land as **provincially designated wetlands** and **hazard lands** (lands that have inherent environmental hazards and generally opposed to development)

Alternative Solutions ~ Long Point Road



The following alternative solutions were developed to address the issues identified for the Long Point Causeway:

1

Do Nothing

The existing corridor would remain as is (this alternative will form a baseline for comparison of alternative solutions)

2

Reconstruct Road to 2 x 3.5m lanes and 1.5m On-Road Paved Shoulders

- A. Widen Road from the Centreline
- B. Widen Road to the East (Maintain West Shoulder)
- C. Widen Road to the West (Maintain East Shoulder)

3

Reconstruct Road to 2 x 3.5m Lanes and 1.5m On-Road Paved Shoulders with Off Road Multi-Use Path along the West Side

Similar to Alternative 2 but includes a separate 3.0m multi-use path to accommodate recreational cyclists and pedestrians along the west side of the corridor.

This option was introduced following review of initial comments from stakeholders.



Alternative Solutions ~ Big Creek Bridge



The following alternative solutions were developed to address the issues identified for the **Big Creek Bridge**:

1

Do Nothing

The existing structure is not changed (this alternative will form a baseline for comparison of alternative solutions)

2

Rehabilitate the Existing Bridge

Sections of the bridge will be restored to improve the existing condition of the bridge

3

Replace the Existing Bridge with a New Bridge

- A. Maintain Horizontal Alignment
- B. New Horizontal Alignment East of Existing Bridge
- C. New Horizontal Alignment West of Existing Bridge



Evaluation Criteria



To evaluate the alternative solutions, a number of criteria were used (that represent the broad definition of the environment as described in the Environmental Assessment Act)

Transportation & Technical	Cultural Environment	Natural Environment	Socio-Economic Environment	Costs
<ul style="list-style-type: none"> • Traffic operations / performance /safety • Active Transportation • Recreation vehicles • Drainage and Stormwater 	<ul style="list-style-type: none"> • Archaeological Resources • Built Heritage/Cultural Landscape • Aboriginal/First Nations communities 	<ul style="list-style-type: none"> • Terrestrial Wildlife and Habitat • Aquatic Wildlife and Habitat • Ground/Surface Water Quality and Supply 	<ul style="list-style-type: none"> • Construction Impacts • Property Impacts • Noise • Planning Policies & Objectives • Tourism 	<ul style="list-style-type: none"> • Capital (Construction) • Property Cost • Utility Relocation • Operation and Maintenance

The alternative solutions were evaluated by determining each alternative's impacts (i.e. **positive**, **neutral**, **negative**) to these criteria.

Evaluation of Alternatives ~ Long Point Road

Alternatives	1	2 (2 x 3.5m lanes, 1.5m On-Road Paved Shoulders, 1m Gravel Shoulders)			3
Criteria	Do Nothing	A. Widen from Centerline	B. Widen to the East (Maintain West Shoulder)	C. Widen to the West (Maintain East Shoulder)	Two 3.5m Lanes, 1.5m On-Road Paved Shoulders, 4.0m Off-Road Multi-Use Path on West Side, Widen from Centreline
Transportation & Technical	<ul style="list-style-type: none"> * Significant deficiencies of the existing roadway. User safety and lack of facilities for active transportation modes are not addressed through this alternative 	<ul style="list-style-type: none"> ✓ Improved and safer traffic operations via wider lanes and removal of trees in clear zone ✓ Pedestrians and cyclists safely accommodated via paved and gravel shoulders 	<ul style="list-style-type: none"> ✓ Improved and safer traffic operations via wider lanes and removal of trees in clearzone ✓ Pedestrians and cyclists safely accommodated via paved and gravel shoulders 	<ul style="list-style-type: none"> ✓ Improved and safer traffic operations via wider lanes and removal of trees in clearzone ✓ Pedestrians and cyclists safely accommodated via paved and gravel shoulders 	<ul style="list-style-type: none"> ✓ Improved and safer traffic operations via wider lanes and removal of trees in clear zone ✓ Highest level of safety and accommodation for pedestrians and cyclists
Cultural Environment	<ul style="list-style-type: none"> ✓ No impacts to the cultural environment 	<ul style="list-style-type: none"> ✓ No impacts to cultural heritage resources/Aboriginal land claims or treaty rights - Potential impacts to adjacent archaeological resources, additional survey is required 	<ul style="list-style-type: none"> ✓ No impacts to cultural heritage resources/Aboriginal land claims or treaty rights - Potential impacts to adjacent archaeological resources, additional survey is required 	<ul style="list-style-type: none"> ✓ No impacts to cultural heritage resources/Aboriginal land claims or treaty rights - Potential impacts to adjacent archaeological resources, additional survey is required 	<ul style="list-style-type: none"> ✓ No impacts to cultural heritage resources/Aboriginal land claims or treaty rights - Potential impacts to adjacent archaeological resources, additional survey is required
Natural Environment	<ul style="list-style-type: none"> ✓ No impacts to the natural environment 	<ul style="list-style-type: none"> ✓ Minor footprint impacts to wetland and aquatic habitats and wildlife ✓ Minor footprint impacts to SAR habitat - Potential for increase in contaminants due to widened roadway and increase in impervious surface 	<ul style="list-style-type: none"> ✓ Minor footprint impacts to wetland habitat and wildlife and SAR habitat - Moderate footprint impacts to aquatic species and habitat - Potential for increase in contaminants due to widened roadway and increase in impervious surface 	<ul style="list-style-type: none"> ✓ Minor footprint impacts to aquatic habitat and wildlife and SAR habitat - Moderate footprint impacts to wetland habitat and wildlife and SAR habitat due to encroachment into marsh/wetland - Potential for increase in contaminants due to widened roadway and increase in impervious surface 	<ul style="list-style-type: none"> * Moderate – significant footprint impacts to riparian and wetland habitat, SAR habitat, and potential to increase trail mortality ✓ Minor footprint impacts to aquatic habitat and wildlife and SAR habitat - Potential for increase in contaminants due to widened roadway and increase in impervious surface
Socio-Economic Environment	<ul style="list-style-type: none"> ✓ No property acquisition required ✓ Minor disruption from maintenance activities * Does not support local planning policies and objectives nor does it support design standards * Does not adequately support recreational use and does not increase tourism potential of the area 	<ul style="list-style-type: none"> ✓ No direct property impacts to adjacent residents ✓ No increase in noise impacts - Moderate impacts during construction ✓ Supports local planning policies and objectives ✓ Positive effect on tourism potential of the area 	<ul style="list-style-type: none"> - Minor impacts (indirect) to adjacent residents due to shift of road shoulder closer to properties ✓ No increase in noise impacts - Moderate impacts during construction ✓ Supports local planning policies and objectives ✓ Positive effect on tourism potential of the area 	<ul style="list-style-type: none"> ✓ No property impacts to adjacent residents ✓ No increase in noise impacts - Moderate impacts during construction ✓ Supports local planning policies and objectives ✓ Positive effect on tourism potential of the area 	<ul style="list-style-type: none"> * Would most likely require additional property to implement ✓ No increase in noise impacts - Moderate impacts during construction ✓ Generally supports local planning policies and objectives ✓ Greatest positive effect on tourism potential of the area
Costs	<ul style="list-style-type: none"> ✓ No construction, property acquisition, or utility costs * Increasing maintenance costs over time due to deteriorating conditions 	<ul style="list-style-type: none"> - Moderate construction costs ✓ No property acquisition costs ✓ Moderate utility costs - No significant change in maintenance costs 	<ul style="list-style-type: none"> - Moderate construction costs ✓ No property acquisition costs * Significant utility costs - No significant change in maintenance costs 	<ul style="list-style-type: none"> - Moderate construction costs ✓ No property acquisition costs ✓ Moderate utility costs - No significant change in maintenance costs 	<ul style="list-style-type: none"> * Increased construction costs - Potential costs to acquire property * Significant utility costs * Increased maintenance costs
Recommendation	<p style="text-align: center;">Not recommended</p> <p>This alternative does not address the issues identified in the problem/opportunity statement.</p>	<p style="text-align: center;">Recommended</p> <p>This alternative addresses the transportation needs of the Causeway while also maintaining the least overall impacts to the cultural, natural and socio-economic environments.</p>	<p style="text-align: center;">Not Recommended</p> <p>This alternative addresses the transportation needs of the Causeway but has slightly more impacts to the natural and socio-economic environment and higher costs than 2A.</p>	<p style="text-align: center;">Not Recommended</p> <p>This alternative addresses the transportation needs of the Causeway but has more impacts to the natural environment due to its direct encroachment into the wetland.</p>	<p style="text-align: center;">Recommended for Future Consideration, Subject to Available Funding</p> <p>This alternative addresses the transportation needs of the Causeway and has high potential to improve the recreational and tourism use of the area, however it would be accompanied by significant natural environmental impacts and higher costs.</p>

Evaluation of Alternatives ~ Long Point Bridge

Alternatives	1	2	3. Replace the Existing Bridge with a New Bridge		
Criteria	Do Nothing	Rehabilitate the Existing Bridge	A. Maintain Horizontal Alignment	B. New Horizontal Alignment East of Existing Bridge	C. New Horizontal Alignment West of Existing Bridge
Transportation & Technical	<ul style="list-style-type: none"> ✗ Bridge structure remains in poor condition ✗ Load limit posting may be required ✗ Navigable waterway clearance is not increased 	<ul style="list-style-type: none"> ✓ Addresses structural and safety requirements. ✗ Navigable waterway clearance is not increased 	<ul style="list-style-type: none"> ✓ Addresses structural and safety requirements ✓ Navigable waterway clearance may be increased - Temporary access bridge required for construction 	<ul style="list-style-type: none"> ✓ Addresses structural and safety requirements ✗ Realignment of horizontal roadway geometry required ✓ Navigable waterway clearance may be increased 	<ul style="list-style-type: none"> ✓ Addresses structural and safety requirements ✗ Realignment of horizontal roadway geometry required ✗ Construction of new bridge occurs on wetlands ✓ Navigable waterway clearance may be increased
Cultural Environment	<ul style="list-style-type: none"> ✓ No impacts to the cultural environment 	<ul style="list-style-type: none"> ✓ No impacts to the cultural environment 	<ul style="list-style-type: none"> - Potential impacts to adjacent archaeological resources 	<ul style="list-style-type: none"> - Potential impacts to adjacent archaeological resources 	<ul style="list-style-type: none"> - Potential impacts to adjacent archaeological resources
Natural Environment	<ul style="list-style-type: none"> ✓ No impacts to the natural environment ✗ No dry-land wildlife passage at the bridge - No changes to hydrological connectivity 	<ul style="list-style-type: none"> - Minimal impacts to the creek and surrounding natural heritage features, mitigation measures may be required ✗ No dry-land wildlife passage at the bridge - No changes to hydrological connectivity 	<ul style="list-style-type: none"> - Potential impacts to the creek and surrounding natural heritage features, mitigation/restoration/compensation measures will be required - Minimal possibility to add dry-land wildlife passage at the bridge ✓ Potential to increase hydrological connectivity 	<ul style="list-style-type: none"> ✗ Significant impacts to the creek and surrounding natural heritage features, mitigation/restoration/compensation measures will be required ✓ Possibility to add dry-land wildlife passage at the bridge ✓ Potential to increase hydrological connectivity 	<ul style="list-style-type: none"> ✗ Significant impacts to the creek and surrounding natural heritage features, mitigation/restoration/compensation measures will be required ✓ Possibility to add dry-land wildlife passage at the bridge ✓ Potential to increase hydrological connectivity
Socio-Economic Environment	<ul style="list-style-type: none"> ✓ No construction impacts ✓ No property acquisition is required ✓ No impact to local side streets or driveways 	<ul style="list-style-type: none"> ✓ Possibility for work to be done in phases and keep the roadway open ✓ No property acquisition is required ✓ Minimal impact to local side streets and driveways 	<ul style="list-style-type: none"> ✓ Minimal property acquisition is required ✗ Significant impact to local side streets and driveways 	<ul style="list-style-type: none"> ✓ Possibility to keep existing bridge open during construction ✗ Significant residential and commercial property acquisition is required ✗ Significant impact to local side streets and driveways 	<ul style="list-style-type: none"> ✓ Possibility to keep existing bridge open during construction ✓ Minimal residential and commercial property acquisition is required ✓ Minimal impact to local side streets and driveways
Costs	<ul style="list-style-type: none"> ✓ No construction costs ✓ No property acquisition costs ✗ Significant ongoing operation and maintenance costs to maintain bridge 	<ul style="list-style-type: none"> - Moderate construction costs ✓ No property acquisition costs ✗ Significant ongoing operation and maintenance costs to maintain bridge 	<ul style="list-style-type: none"> ✗ Significant construction costs ✓ Minimal property acquisition costs ✓ Minimal operation and maintenance costs ✗ Significant temporary access costs 	<ul style="list-style-type: none"> ✗ Significant construction costs ✗ Significant property acquisition costs ✓ Minimal operation and maintenance costs 	<ul style="list-style-type: none"> ✗ Significant construction costs ✗ Significant property acquisition costs ✓ Minimal operation and maintenance costs
Recommendation	<p style="text-align: center;">Not recommended</p> <p>This alternative does not address the bridge's structural requirements.</p>	<p style="text-align: center;">Not recommended</p> <p>This alternative addresses the bridge's structural requirements but would require significant operation and maintenance costs to maintain the bridge.</p>	<p style="text-align: center;">Not Recommended</p> <p>This alternative fully addresses the bridge's structural and safety requirements. However, significant impacts to local side streets and driveways may require purchasing residential property or closing local side streets and driveways. This alternative requires the use of a temporary access bridge during construction.</p>	<p style="text-align: center;">Not Recommended</p> <p>This alternative fully addresses the bridge's structural and safety requirements. However, this alternative requires significant residential/commercial property acquisitions and realignment of the roadway geometry.</p>	<p style="text-align: center;">Recommended</p> <p>This alternative fully addresses the bridge's structural and safety requirements. Although this alternative requires shifting the roadway, accommodations for local side streets and driveways can be addressed.</p>

Evaluation of Alternatives ~ Long Point Bridge (cont'd)

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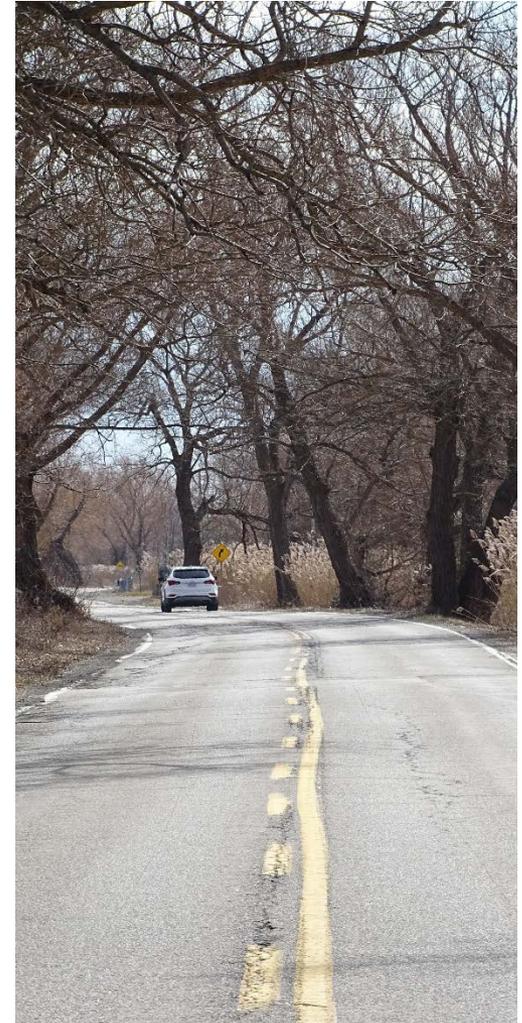
Replace the Existing Bridge with a New Bridge (New Horizontal Alignment West of Existing Bridge)

- A. Single-span Bridge (Adjacent to Existing bridge)
- B. Multi-span Bridge (Adjacent to Existing bridge)
- C. Multi-span Bridge (Staged Construction)

Alternatives	4A	4B	4C
Criteria	Single-span Bridge (Adjacent to Existing bridge)	Multi-span Bridge (Adjacent to Existing bridge)	Multi-span Bridge (Staged Construction)
Transportation & Technical	<ul style="list-style-type: none"> ✘ Significant approach roadway works required – Moderate in-water work required – New access road required for driveways and local side streets 	<ul style="list-style-type: none"> ✘ Significant approach roadway works required ✘ Significant in-water work required to construct bridge piers – New access road required for driveways and local side streets 	<ul style="list-style-type: none"> – Moderate approach roadway works required ✘ Significant in-water work required to construct bridge piers ✓ Access to driveways and local side streets from Long Point Rd. is maintained
Cultural Environment	– Potential for impacts to adjacent archaeological resources (to be determined via Stage 2 Archaeological Assessment)	– Potential for impacts to adjacent archaeological resources (to be determined via Stage 2 Archaeological Assessment)	– Potential for impacts to adjacent archaeological resources (to be determined via Stage 2 Archaeological Assessment)
Natural Environment	<ul style="list-style-type: none"> ✘ Significant horizontal encroachment into wetlands ✓ Minimal impact on aquatic habitat (no permanent piers in the water; reduced requirement for in-water works) 	<ul style="list-style-type: none"> ✘ Significant horizontal encroachment into wetlands – Moderate impact on aquatic habitat (reduction of piers; in-water works required) 	<ul style="list-style-type: none"> – Moderate horizontal encroachment into wetlands – Moderate impact on aquatic habitat (reduction of piers; in-water works required)
Socio-Economic Environment	– Moderate construction time	– Moderate construction time	✘ Significant construction time
Costs	<ul style="list-style-type: none"> ✘ Additional costs for larger girders ✘ Significant wetland property acquisition costs ✘ Significant additional costs for approach roadway works ✓ No additional costs for bridge piers 	<ul style="list-style-type: none"> – Smaller girders reduce additional costs for the superstructure ✘ Significant wetland property acquisition costs ✘ Significant additional costs for approach roadway works ✘ Additional costs for bridge piers 	<ul style="list-style-type: none"> – Smaller girders reduce additional costs for the superstructure – Moderate wetland property acquisition costs – Moderate additional costs for approach roadway works ✘ Additional costs for bridge piers
Recommendation	<p style="text-align: center;">Not Recommended</p> <p>This alternative allows for a clear span over Big Creek with minimal in-water works. However, this alternative has significant impacts to the environment, significant horizontal encroachment on the wetlands, and significant costs for approach roadway works.</p>	<p style="text-align: center;">Not Recommended</p> <p>This alternative allows for a minimal increase in the existing roadway elevation. However, this alternative has significant impacts to the environment, significant horizontal encroachment on the wetlands, and significant costs for approach roadway works.</p>	<p style="text-align: center;">Recommended</p> <p>This alternative allows for a minimal increase in the existing roadway elevation while accommodating driveways and local side streets. Although there is a significant construction time, this alternative has the least impacts to the environment and least horizontal encroachment on the wetlands.</p>

Study Recommendations ~ Key Features

- Long Point Road is to be reconstructed to:
 - **2 x 3.5m lanes**
 - **1.5m on-road paved shoulders**
 - **1.0m gravel shoulders**
- Cycling and pedestrians accommodated via **1.5m on-road paved shoulders and 1.0m gravel shoulders** (based on recommendations of the County's 2016 *Active Transportation Strategy*)
- Replacement of the Bridge over Big Creek with a new **multi-span bridge to the west of the existing bridge**
- Recently constructed **box culverts and wildlife tunnels** for safe wildlife passage beneath the roadway will be maintained
- Safety improvements including **access modifications, removal of objects** in the roadway clear zone and **improved sightlines**



Support for a Future Off Road Multi-Use Trail/Path

- Several comments received have indicated **support for a multi-use path or trail** to the west of the roadway.
- Based on the comparative evaluation, it was determined that an off-road multi-use path would provide an **additional degree of safety and comfort for recreational cyclists and pedestrians**, but have **increased impacts on the natural environment** and be **costlier to implement**.
- In addition to the proposed active transportation improvements via 1.5m on-road paved shoulders and 1.0m gravel shoulders, it is recommended that **an off road multi-use trail/path**, or similar undertaking (e.g. boardwalk), be investigated **in the future as a separate initiative**, subject to available funding.
- The recommended option of adding paved and granular shoulders **would not preclude the implementation of a future multi-use path**.



Next Steps



Following this PIC, the project team will:

- Review the comments submitted at the PIC and confirm the study recommendations
- Complete ongoing studies, confirm impacts (e.g. utilities) and undertake modifications as required
- Contact key technical agencies and obtain approvals *in principle*
- Prepare a Project File Report and submit for 30-day public review
- Proceed to detail design and construction (anticipated 2018).

Thank You for Attending!

- Please provide your comments on the study by completing a comment sheet and depositing it in the provided comment dropbox. Alternatively, please email, mail or fax your comments by **August 25, 2017** to the one of the contacts below.
- For further information on the study, please contact:

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