



WELCOME!

Public Information Centre #2

Hawkesbury Bridge Replacements (GWP 4203-15-00)
Transportation Environmental Study Report Review and Addendum

October 17, 2024 @ 4:00 PM – 7:00 PM



Project Description

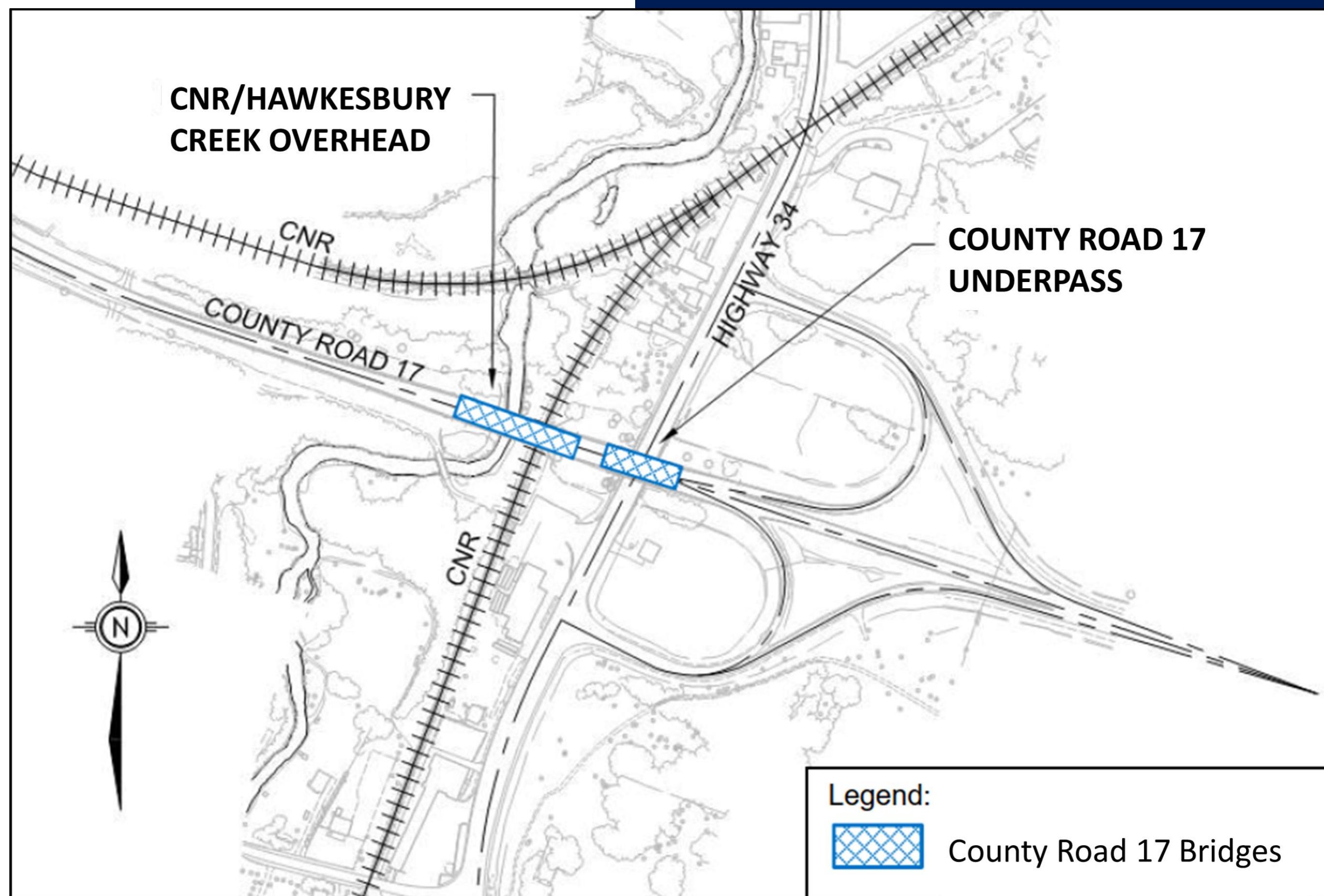
The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) for the replacement of the following two bridges:

- CNR/Hawkesbury Creek Overhead
- County Road 17 Underpass (at Highway 34)

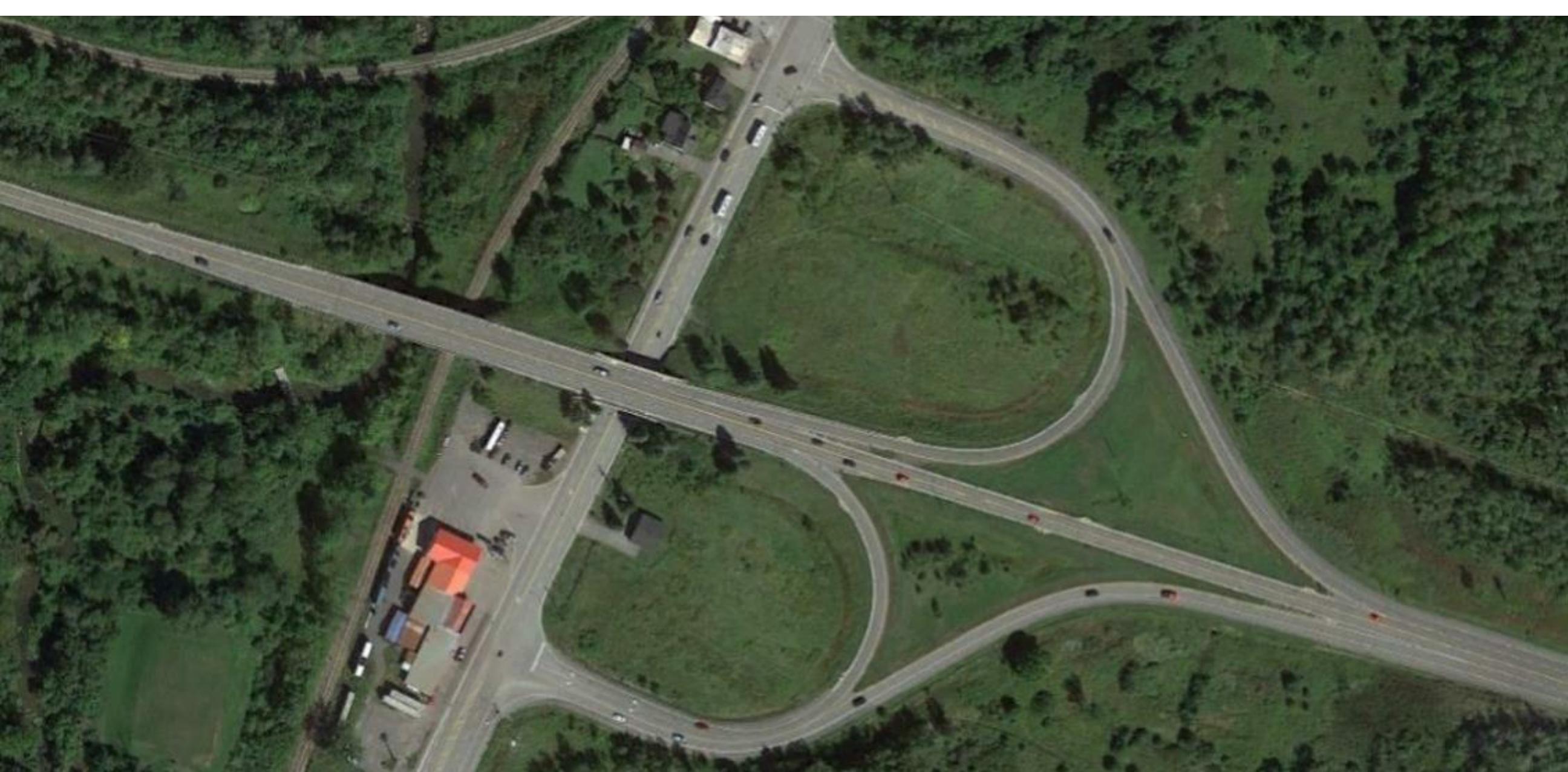
Both bridges are nearing the end of their useful service life and require replacement. Major components of the Project includes:

- Replacement of the two bridges;
- Modifications to the east bound off-ramp and west bound on-ramp at the County Road 17 and Highway 34 interchange; and
- Temporary road closures of Highway 34 and County Road 17 during construction during which traffic will be detoured

Construction is anticipated to be initiated in 2027 subject to approvals and funding.



Project Background



In November 2020, the TESR for the Hawkesbury Bridge Replacements Class Environmental Assessment Study was completed.

Municipal endorsement of the Technically Preferred Alternative Method for the Project, outlined in the TESR, was not received.

Between 2021 and 2023, additional municipal consultation and feasibility studies were completed. Based on this work, it was determined that a TESR Review and Addendum would be required.

2020

TESR COMPLETION

The TESR was completed, and a Notice of Completion was issued to commence the 30-day public review period.

2021

MUNICIPAL CONSULTATION

Municipal endorsement was not received. The Town of Hawkesbury requested a 'free flow' interchange be provided.

2022

FEASIBILITY STUDIES

As a result of municipal feedback, feasibility studies were undertaken to identify additional interchange configuration alternatives and associated construction staging alternatives.

2023

FEASIBILITY STUDIES

New alternatives were identified, and it was determined that a TESR Addendum would be required to reassess and confirm the Technically Preferred Alternative.

2024

TESR REVIEW AND ADDENDUM

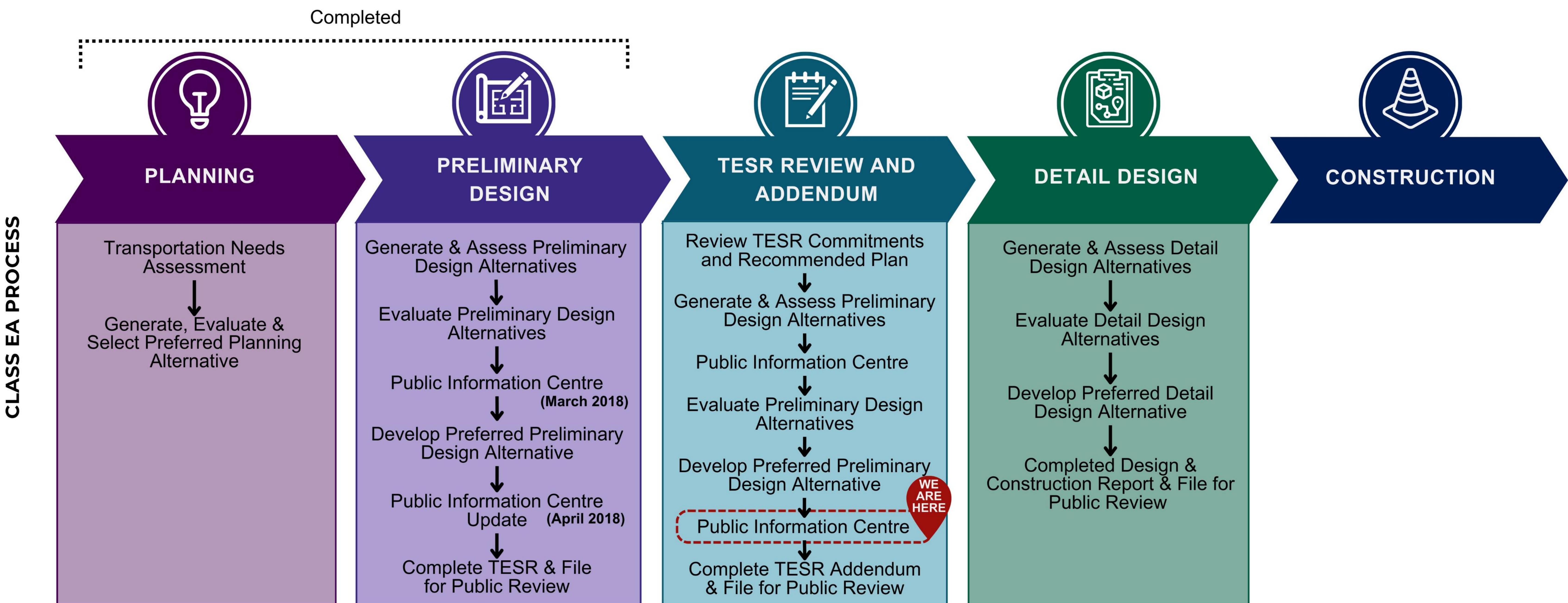
The TESR Review and Addendum has now commenced.

Environmental Assessment Process

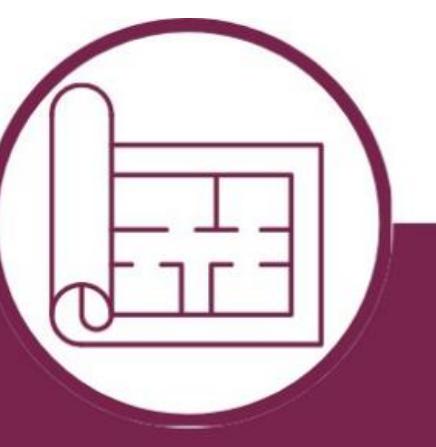
The Project is following the process for Group B undertakings in accordance with MTO's *Class Environmental Assessment for Provincial Transportation Facilities, 2000* (Class EA).

In November 2020, the Class EA Study for the Project was completed. A Transportation Environmental Study Report (TESR) was posted for public review, documenting a Technically Preferred Alternative Method for the Project.

Any significant modification to the Project that occurs after completion of the TESR must be reviewed and a TESR Addendum must be prepared. Once complete, the TESR Addendum will be available on the project website (www.cr17bridges.com).

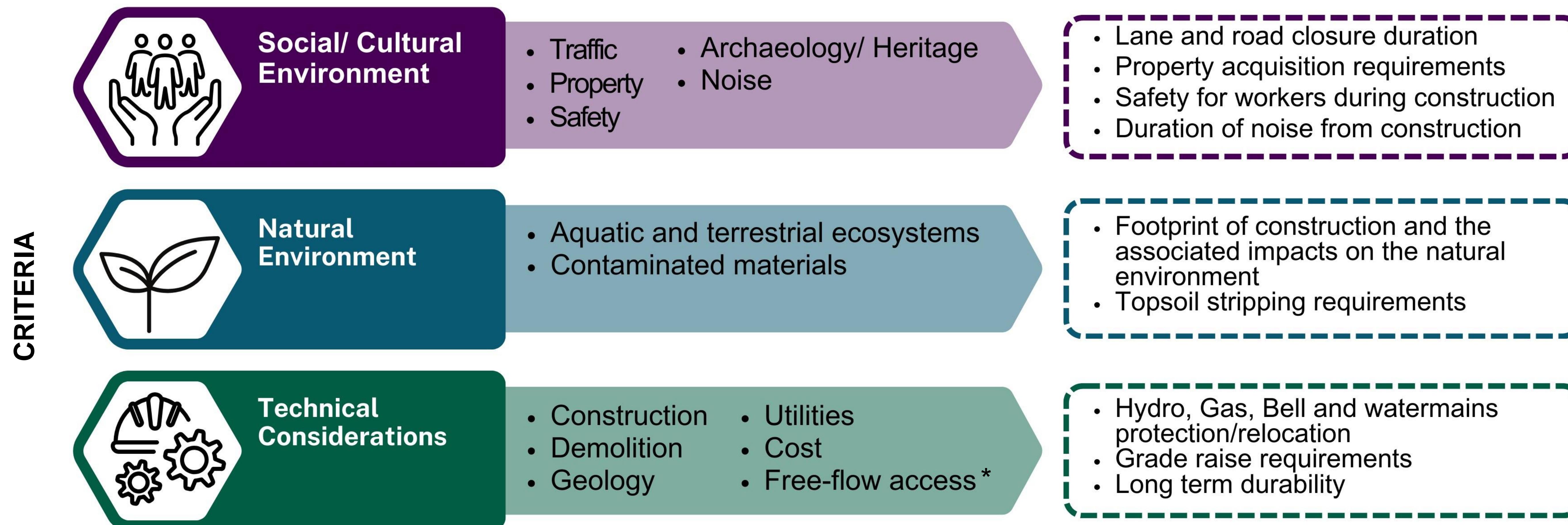


2020 TESR Recommended Plan Features – Currently Under Review

TESR RECOMMENDED PLAN FEATURE	SUMMARY OF TESR RECOMMENDATION	RECOMMENDED PLAN IMPACTED BY TESR ADDENDUM?
	BRIDGE LAYOUT <ul style="list-style-type: none">The new CNR/Hawkesbury Creek Overhead will be a 71 m long, 13 m wide, two-span concrete slab-on-steel I-girder bridge.The new CR 17 Underpass will be a 36 m long, 13 m wide, single span concrete slab-on-steel I-girder bridge.	Alternatives under review and assessment.
	HORIZONTAL AND VERTICAL ALIGNMENTS <ul style="list-style-type: none">The existing alignment of CR 17 will be maintained.The replacement bridges will be raised in order to provide the minimum vertical clearance over the CNR tracks and over Highway 34.	To be confirmed based on alternatives assessment.
	CROSS-SECTION <ul style="list-style-type: none">North Barrier Wall: 0.5 mShoulder: 2.5 mTraffic Lanes: two @ 3.5 mShoulder: 2.5 mSouth Barrier Wall: 0.5 mTotal width: 13 m	Alternatives under review and assessment.
	INTERCHANGE MODIFICATIONS <ul style="list-style-type: none">New intersection of CR 17 and the Highway 34 on-ramp and off-ramp.Off-ramp facilitated via a channelized right turn including a right turn lane.On-ramp facilitated by a stop control T-Intersection, and no acceleration lane provided.	Alternatives under review and assessment.
	UTILITIES <ul style="list-style-type: none">Protection of Enbridge gas main, Hydro One underground conduits, and watermain during construction.Relocation of underground Bell duct.Removal and temporary replacement of guy wire supporting hydro pole; reinstated to existing conditions following construction.	To be confirmed based on alternatives assessment.
	PROPERTY <ul style="list-style-type: none">A standard grade separation reconstruction agreement between CNR and MTO in accordance with the <i>Railway Safety Act</i> is required to replace the existing CNR/Hawkesbury Creek Overhead bridge.	To be confirmed based on alternatives assessment.
	CONSTRUCTION TRAFFIC MANAGEMENT <ul style="list-style-type: none">Closure of CR 17 for 2-4 weeks: traffic detoured along CR 4 heading E-W through Hawkesbury Main St and heading N-S along Tupper St.Closure of Highway 34 near the site for 2-3 weekends: traffic detoured to a temporary bypass east of Highway 34 to maintain N-S traffic movements along Highway 34.	Alternatives under review and assessment.

Alternatives Evaluation Criteria

A reason-based decision-making process was applied to identify and determine the Technically Preferred Alternative(s) based on an assessment of the advantages, disadvantages, and associated trade-offs under each of the following criterion:



* New criterion based on municipal feedback.

Summary Evaluation of Interchange Configuration Alternatives

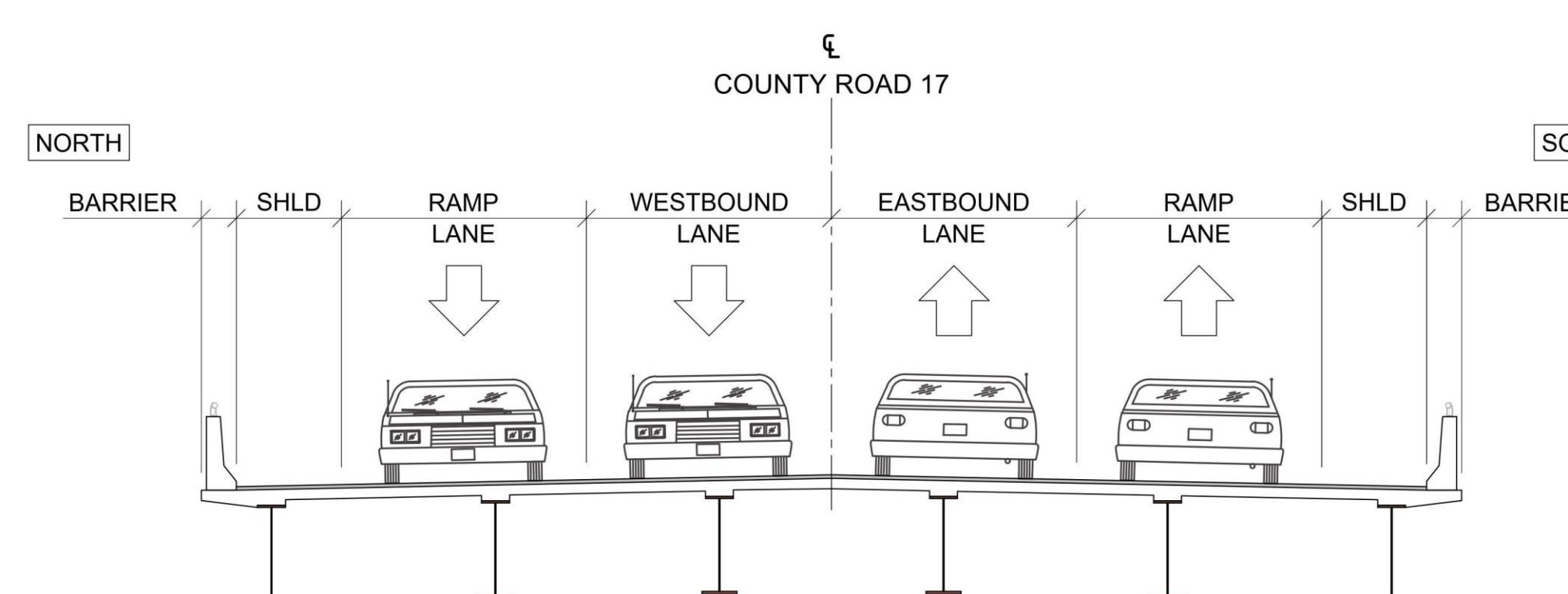
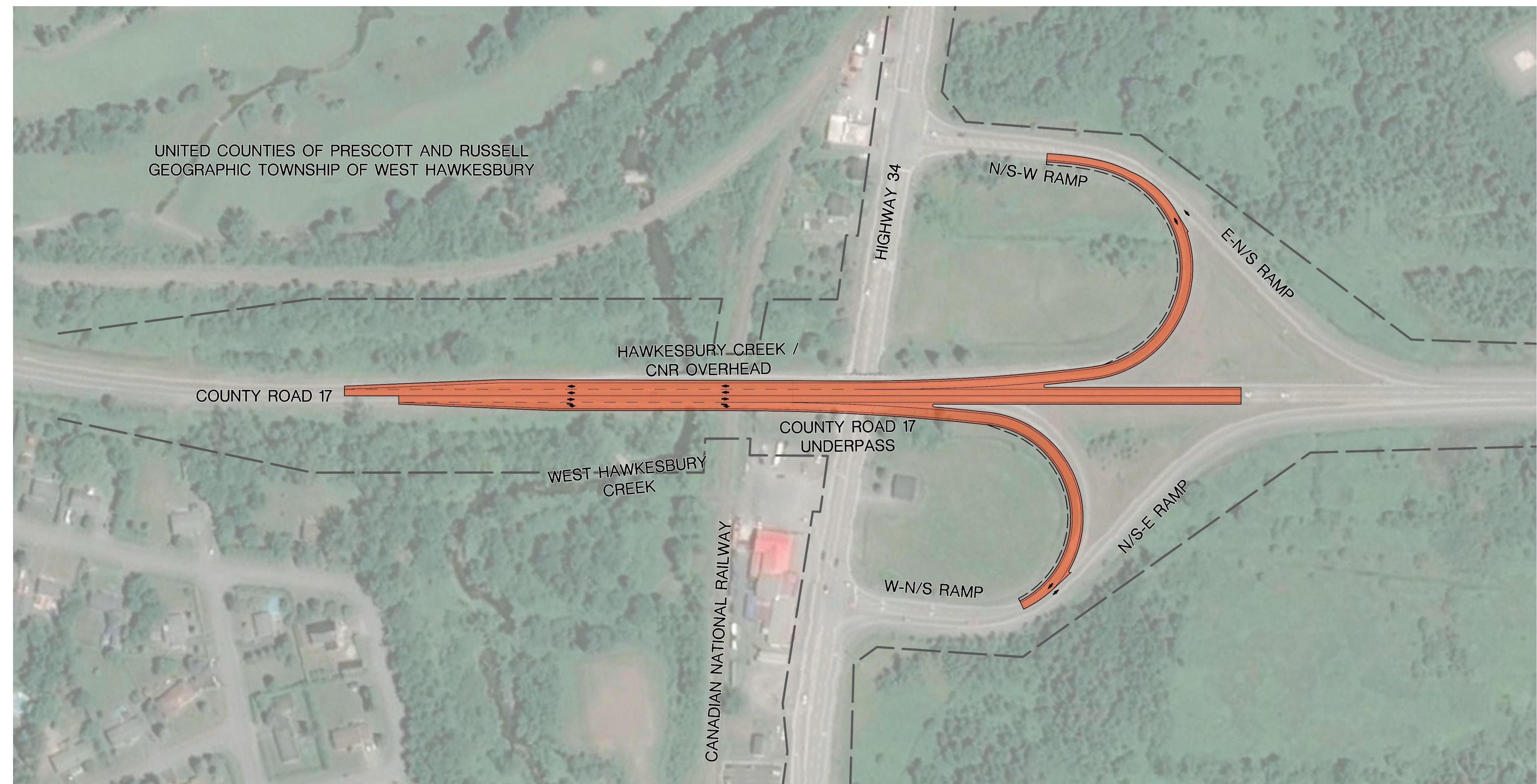
Impacts	Alternative 3 Free-flow access for N/S-W movement; deceleration lane and low-speed right turn for W-N/S movement.	Alternative 4 Like for like replacement of the existing interchange.
Social/Cultural Environment	<ul style="list-style-type: none">Operates at a similar level of service compared to existing conditions. ✓Free-flow movements are not warranted based on highway classification and observed traffic volumes. XAdditional property is not required. ✓No impacts to archaeology and built heritage. ✓No change in noise impacts compared to existing conditions. =Supported but not preferred by the public and Town/Township/County. ✓	<ul style="list-style-type: none">Operates at a similar level of service compared to existing conditions ✓Free-flow movements are not warranted based on highway classification and observed traffic volumes. XAdditional property is not required. ✓No impacts to archaeology and built heritage. ✓No change in noise impacts compared to existing conditions. =Preferred by the public and Town/Township/County. ✓
Natural Environment	<ul style="list-style-type: none">No anticipated impacts to Species at Risk (SAR) habitat. ✓	<ul style="list-style-type: none">No anticipated impacts to SAR habitat. ✓
Technical Considerations	<ul style="list-style-type: none">Not a standard interchange design in Ontario and is inconsistent with driver expectations. XMeets design criteria. ✓Potential for wrong way left turn movements from County Rd 17 onto the W-N/S ramp. X	<ul style="list-style-type: none">Is a standard interchange design in Ontario and is consistent with driver expectations. ✓W-N/S ramp does not meet current design standards. XNo potential for wrong way left turn movements from County Rd 17 onto the W-N/S ramp. ✓
Technically Preferred Alternative	Not Preferred	Preferred

Ramp Configuration Alternative 4

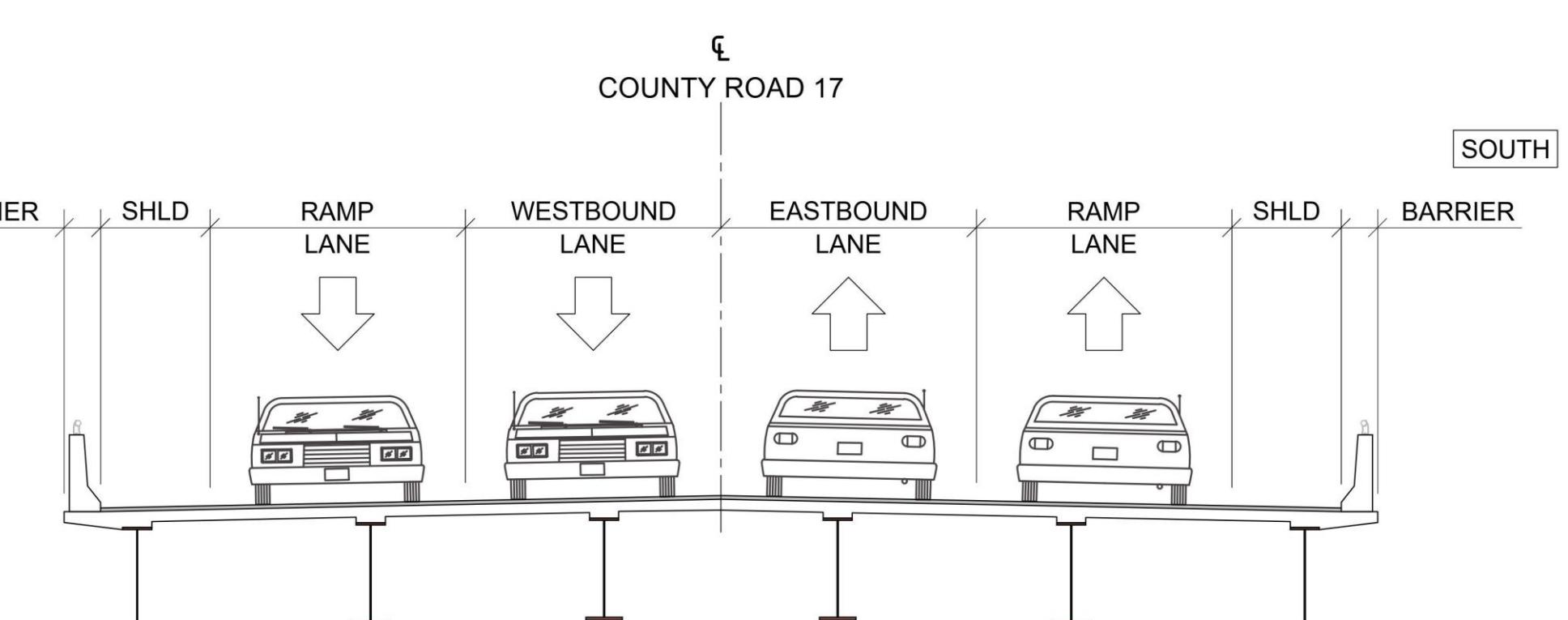
Selected as the Technically Preferred Alternative

This alternative was selected for the following key reasons:

- Maintains free flow traffic for all ramps
- Does not impact private property
- Standard interchange configuration in Ontario
- Similar traffic capacity to the existing interchange configuration
- No opportunities for left-turn movements from County Road 17
- Interchange similar to the existing configuration
- There is limited history of incidents with the small radius W-N/S exit ramp.



Hawkesbury Creek/CNR Overhead



County Road 17 Underpass

Summary Evaluation of Construction Staging Alternatives

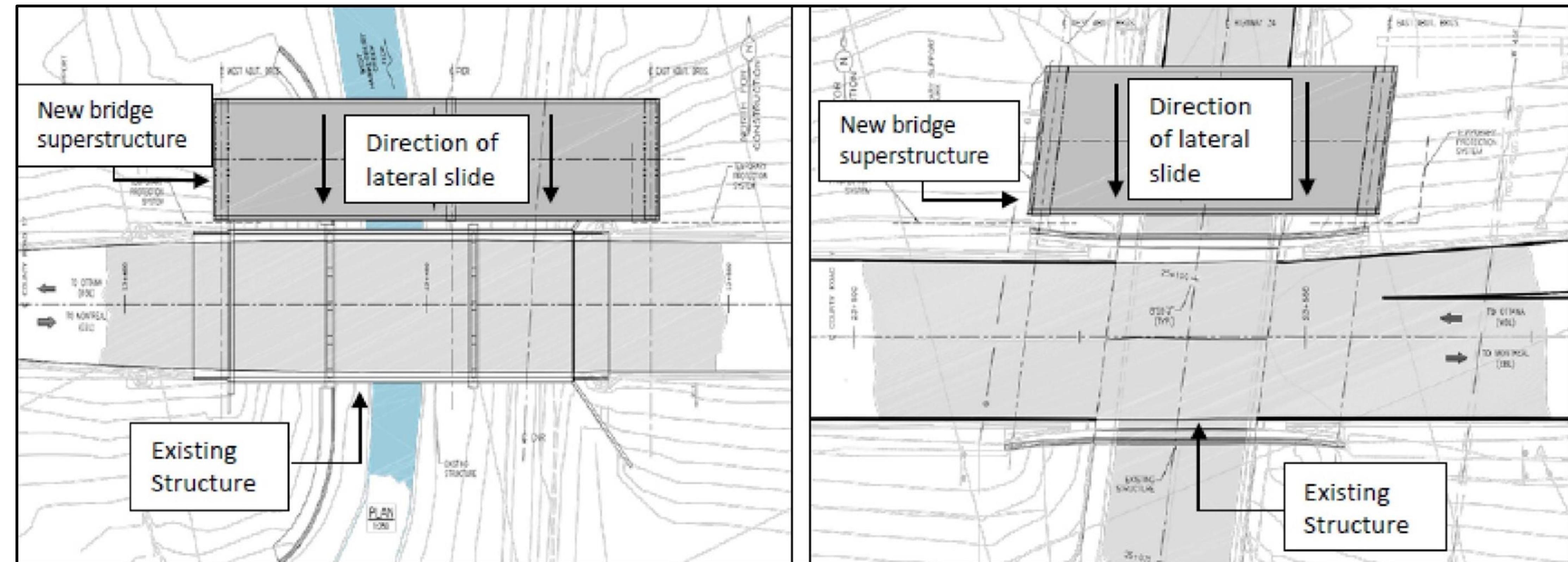
Impacts	Alternative 1: Lateral Slide	Alternative 2a: Single-Lane Staged Construction	Alternative 2b: Two Lane Staged Construction
Social/Cultural Environment	<ul style="list-style-type: none"> Requires full closure of CR 17 for 3-5 weeks. X Requires minimum 3 overnight closures of Highway 34 near the bridges. X No expected delays on CR 17. ✓ Construction off-line increases safety for traffic and construction workers. ✓ Shortest construction duration resulting in the fewest temporary noise impacts. ✓ 	<ul style="list-style-type: none"> Requires 2 overnight closures or lane reductions of CR 17 and a 2-week closure. ✓ Requires a minimum of 4 overnight closures of Highway 34. X Expected delays of 3-4 minutes on CR 17 during single lane phase. X Increased exposure to safety risks due to working adjacent to CR 17 traffic. X Longer construction duration than Alternative 1. X 	<ul style="list-style-type: none"> Requires 2 overnight closures or lane reductions of CR 17 and a 2-week closure. ✓ Requires a minimum of 4 overnight closures of Highway 34. X No delays expected on CR 17. ✓ Increased exposure to safety risk due to working adjacent to CR 17 traffic. X Longer construction duration than Alternative 1. X
Natural Environment	<ul style="list-style-type: none"> Impacts potential SAR habitat for Black Ash, Butternut and bats. X 	<ul style="list-style-type: none"> Impacts potential SAR habitat for Black Ash, Butternut and bats. X 	<ul style="list-style-type: none"> Impacts potential SAR habitat for Black Ash, Butternut and bats. X
Technical Considerations	<ul style="list-style-type: none"> Maintains existing configuration during winter shutdown. ✓ Fewer contractors have experience with lateral slide. Increased constructability risks. X Temporary support of existing structure during construction is not required. ✓ 	<ul style="list-style-type: none"> CR 17 access provided through a temporary intersection and roadway width reduced during winter shutdown. X Construction industry has more experience with conventional construction. ✓ Temporary support will be required at Hawkesbury Creek / CNR Overhead. X 	<ul style="list-style-type: none"> CR 17 access provided through a temporary intersection and roadway width reduced during winter shutdown. X Construction industry has more experience with conventional construction. ✓ Temporary support of existing structure during construction is not required. ✓
Technically Preferred Alternative	Preferred	Not Preferred	Not Preferred

Staging Alternative 1

Selected as the Technically Preferred Alternative

This staging method was selected for the following key reasons:

- Maintains acceleration and deceleration lanes during the winter shutdown period
- Maintains 3.5 m lanes and full shoulders during the winter shutdown period
- Has a shorter construction duration
- Maintains two lanes of traffic on County Road 17, except during full closures
- Does not require temporary support of the existing structure



County Road 17 Closure

To accommodate the rapid demolition and lateral slide, County Road 17 will be closed completely for 3 to 5 weeks.

Highway 34 Closure

A minimum of three overnight closures of Highway 34 are required for three weekends to erect the new girders, demolish the existing structure, and jack and slide the new structure into place.

Summary Evaluation of Detour Route Alternatives

Impacts	Option 1 Tupper Street/Main Street Detour Route	Option 2 Highway 34/McGill Street Detour Route
Social/Cultural Environment	<ul style="list-style-type: none">Anticipated 8 min out of way travel time. X	<ul style="list-style-type: none">Anticipated 7 min out of way travel time. ✓
Natural Environment	<ul style="list-style-type: none">No anticipated impacts to Species at Risk (SAR) habitat. ✓	<ul style="list-style-type: none">No anticipated impacts to SAR habitat. ✓
Technical Considerations	<ul style="list-style-type: none">Main Street East is impacted by the detour route. XRequires a portion of parking to be removed on Main Street East to accommodate trucks. XRequires temporary signals at Tupper Street/Main Street intersection and modifications to four existing intersections (only applicable to Lateral Slide construction staging alternative). X	<ul style="list-style-type: none">Main Street East is not impacted by the detour route. ✓No impacts to parking on Main Street East. ✓No additional roadway improvements required beyond existing municipal plans. ✓
Technically Preferred Alternative	Not Preferred	Preferred

Note:

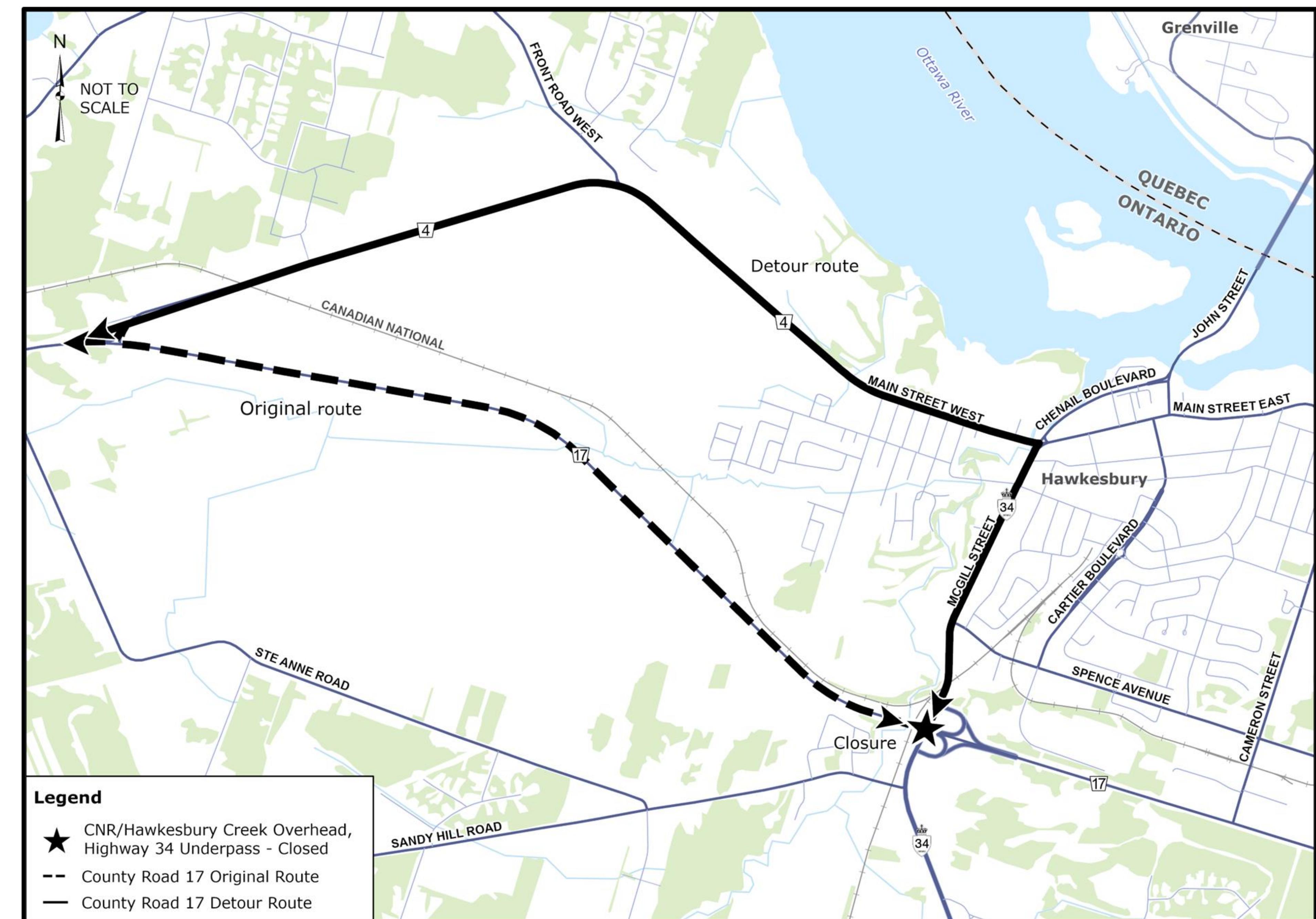
County Road 17 will require a detour of 3-5 weeks for the Lateral Slide construction staging alternative.

County Road 17 Detour Route Option 2

Selected as the Technically Preferred Alternative

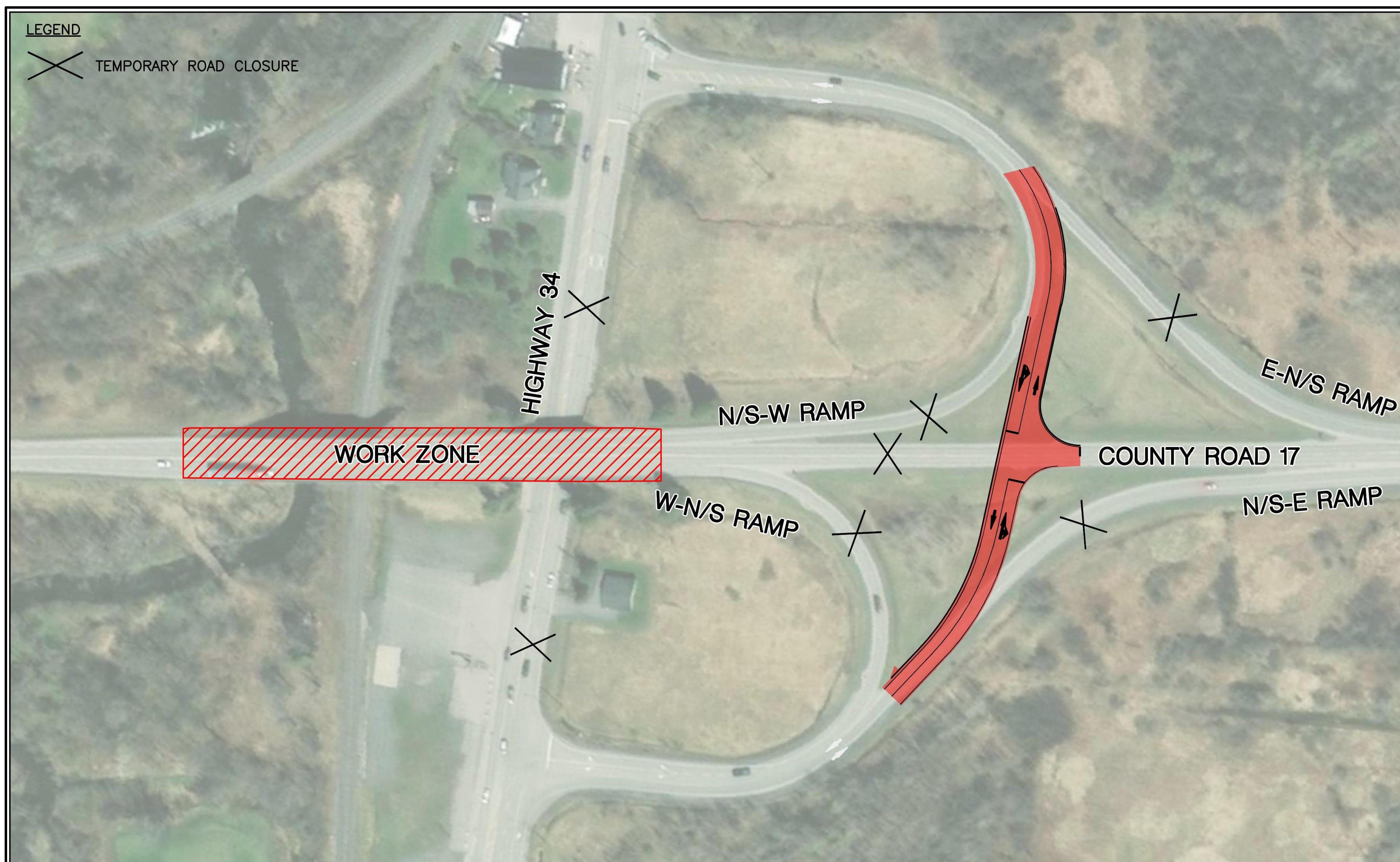
This detour was selected for the following key reasons:

- It has the shortest anticipated out of way travel time
- Does not impact Main Street East
- It does not impact parking on Main Street East
- No additional roadway improvements required beyond existing municipal plans



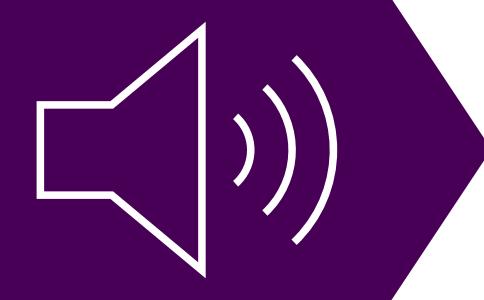
County Road 17 traffic will be detoured for 3-5 weeks along Main Street heading north-south along McGill Street.

Highway 34 Detour Route



Highway 34 traffic will be detoured via a temporary north-south bypass through the interchange. This detour is required for approximately three overnight closures while Highway 34 is closed.

Environmental Impacts and Mitigation

Environment/ Element	Potential Impacts	Change from the TESR Recommended Plan	Mitigated by Standard Mitigation Measures?
Vegetation and Wildlife 	<ul style="list-style-type: none">Temporary loss and/or disruption to wildlife and/or wildlife habitat, including migratory birds and Species at Risk (SAR)	<ul style="list-style-type: none">Slight change in area of disturbed vegetationBlack Ash have potential to occur in the Study Area and have now been listed as a SAR	<input checked="" type="checkbox"/>
Fish and Fish Habitat 	<ul style="list-style-type: none">Mortality, entrapment or entrainment of fishContamination of the watercourseLoss and/or disruption of aquatic habitat	<ul style="list-style-type: none">No change.	<input checked="" type="checkbox"/>
Archaeology 	<ul style="list-style-type: none">Potential to encounter previously undocumented archaeological resources during construction	<ul style="list-style-type: none">No change.	<input checked="" type="checkbox"/>
Noise 	<ul style="list-style-type: none">Temporary disturbance to nearby residents and businesses during construction	<ul style="list-style-type: none">No change.	<input checked="" type="checkbox"/>
Traffic 	<ul style="list-style-type: none">Lane and road closures will cause temporary disruptions to traffic	<ul style="list-style-type: none">Full closure of CR 17 for 3-5 weeksMinimum of 3 overnight closures of Highway 34	<input checked="" type="checkbox"/>

Next Steps

We welcome your feedback on the information provided.

Following this PIC, the Project Team will:



1. Review all comments received from stakeholders and the public.



2. Confirm the Recommended Plan based on comments received.



3. Prepare the TESR Addendum.



4. File the TESR Addendum on the project website (www.cr17bridges.ca) for a 30-day public review period.

Project Team Contacts:

Brad Craig, P.Eng.
Consultant Project Manager

Dillon Consulting Limited
130 Dufferin Avenue, Suite 1210
London, ON N6A 5R2
Phone: (519) 438-1288 ext. 1318
Email: BCraig@dillon.ca

Joanna Zhang, P.Eng.
Senior Project Engineer

Ministry of Transportation Ontario
1355 John Counter Boulevard, P.O. Box 4000
Kingston, ON K7L 5A3
Phone: (613) 539-7564
Email: Joanna.Zhang2@ontario.ca