



WELCOME!

Public Information Centre #1

Hawkesbury Bridge Replacements Transportation Environmental Study Report Review and Addendum

May 16, 2024 @ 4:00 PM – 8:00 PM



Project Description

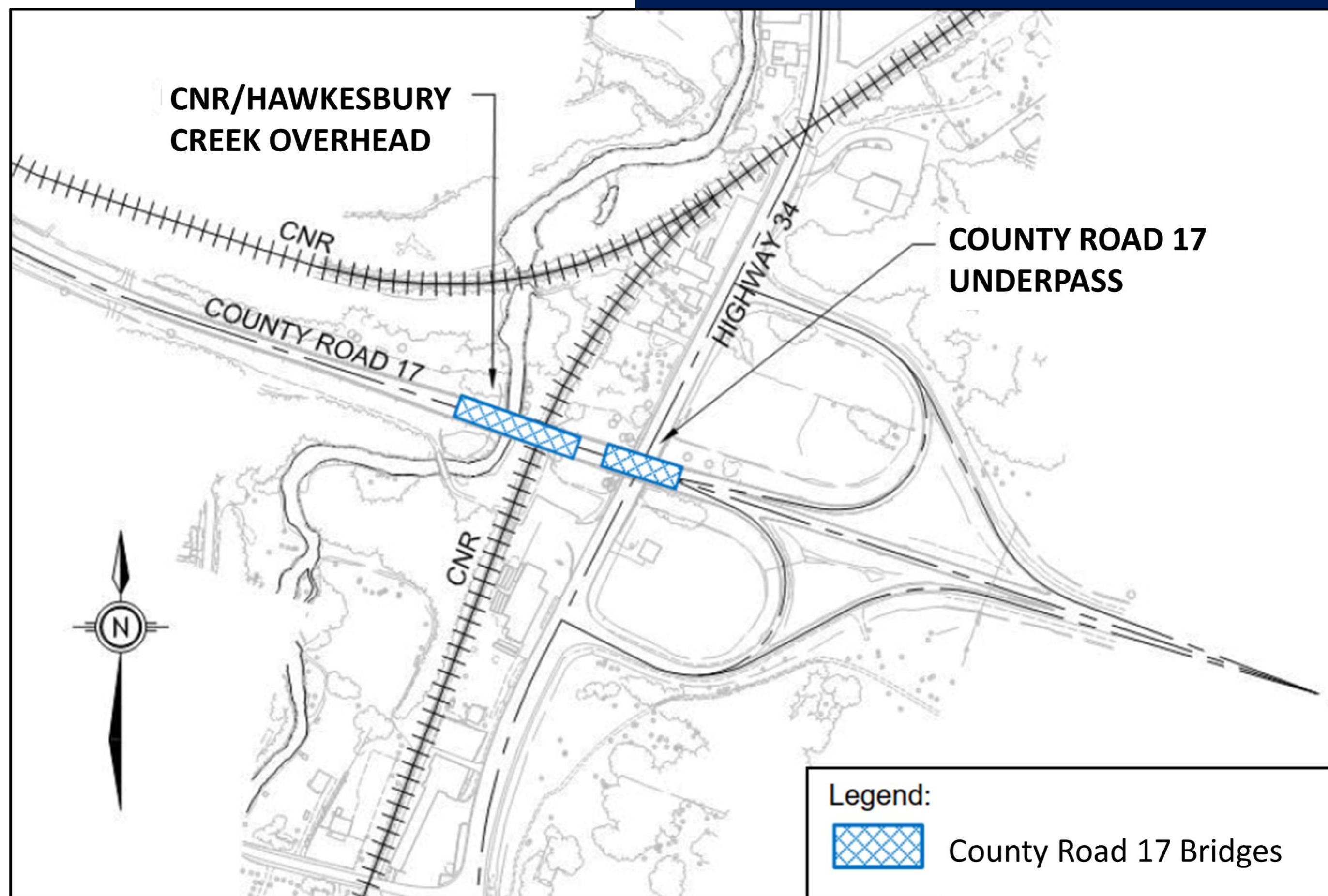
The Ministry of Transportation Ontario (MTO) has retained Dillon Consulting and Jacobs to complete the Preliminary Design and Transportation Environmental Study Report (TESR) for the replacement of the following two bridges:

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

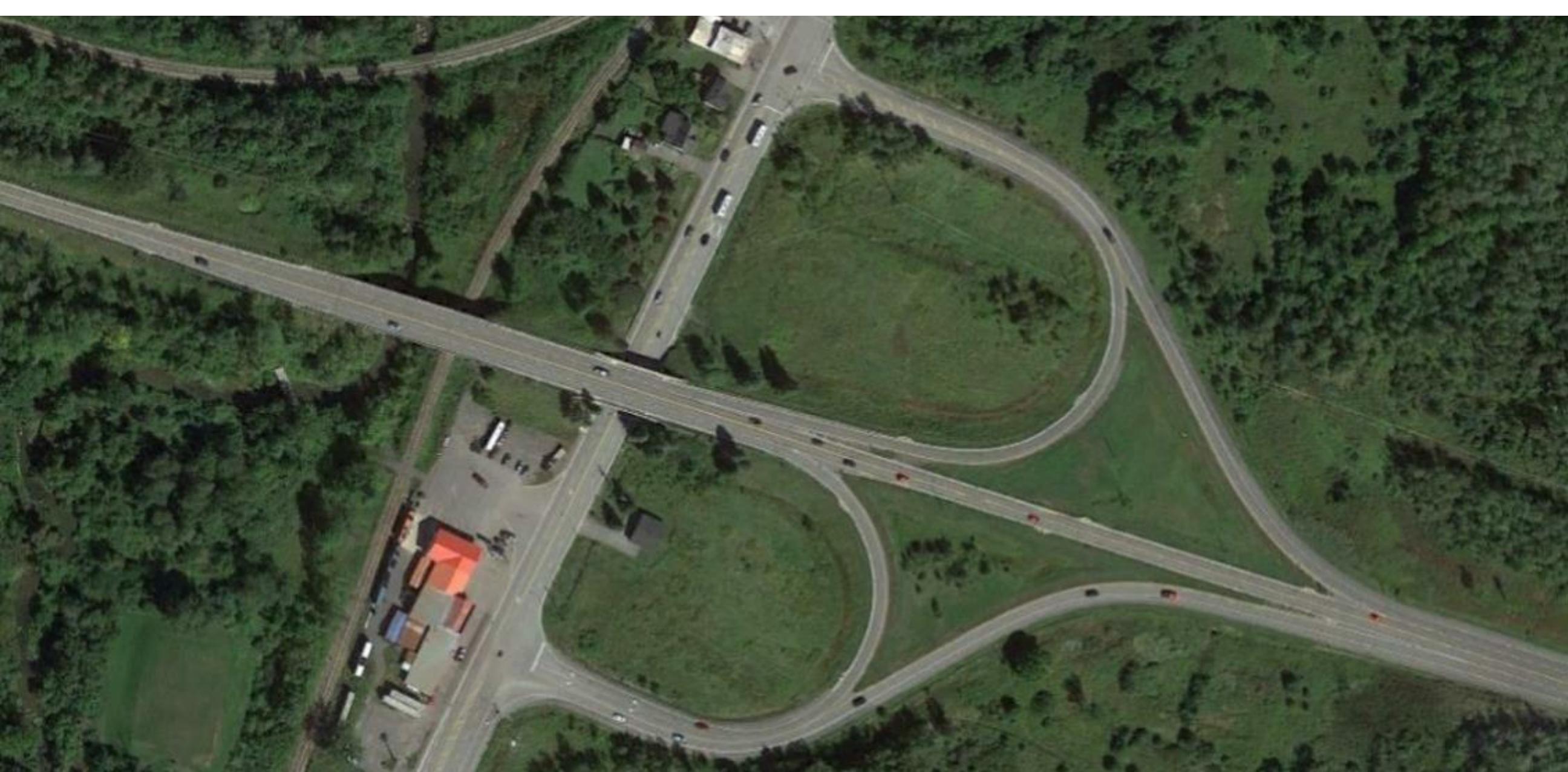
Both bridges are nearing the end of their useful service life and require replacement. Major components of the Project includes:

- 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 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 Preferred Alternative.

2024

TESR REVIEW AND ADDENDUM

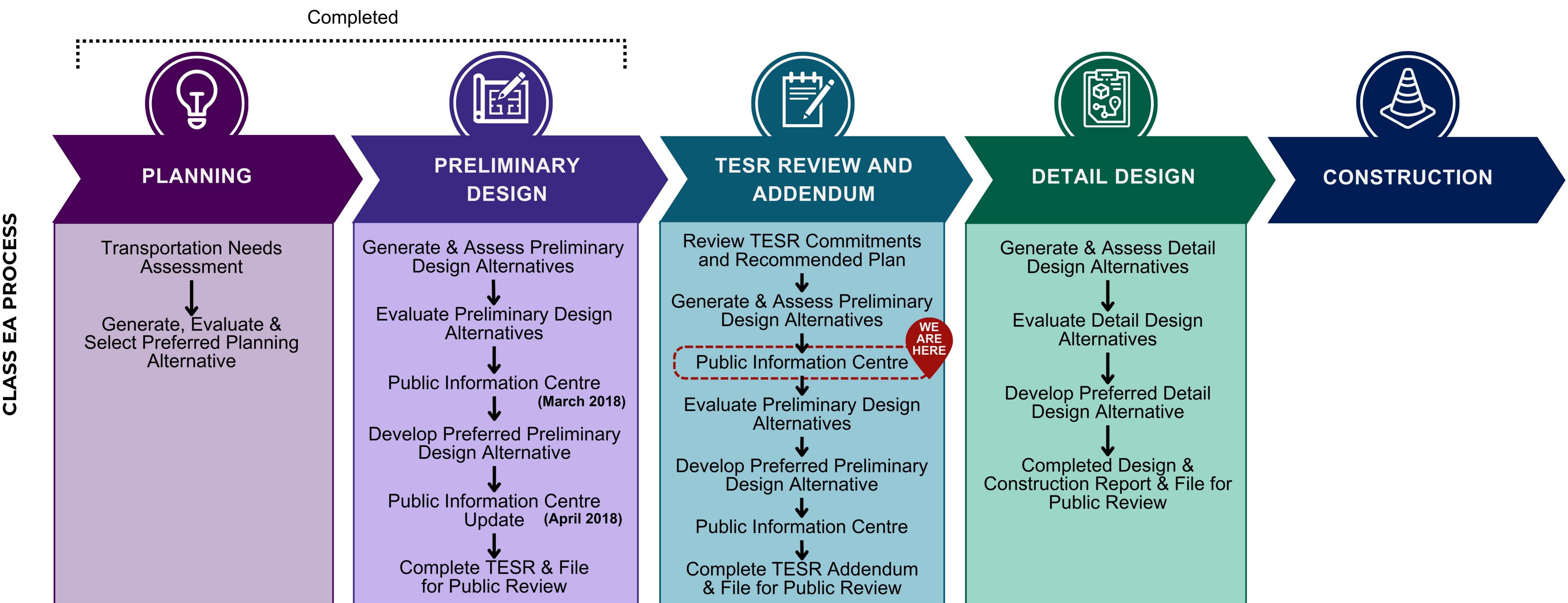
The TESR Review and Addendum has now commenced.

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 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	BRIDGE LAYOUT	HORIZONTAL AND VERTICAL ALIGNMENTS	CROSS-SECTION	INTERCHANGE MODIFICATIONS	UTILITIES	PROPERTY	CONSTRUCTION TRAFFIC MANAGEMENT
SUMMARY OF TESR RECOMMENDATION	<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.	<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.	<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	<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.	<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.	<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.	<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.
RECOMMENDED PLAN IMPACTED BY TESR ADDENDUM?	Alternatives under review and assessment.	To be confirmed based on alternatives assessment.	Alternatives under review and assessment.	Alternatives under review and assessment.	To be confirmed based on alternatives assessment.	To be confirmed based on alternatives assessment.	Alternatives under review and assessment.

Alternative 1 (2020 Preferred Alternative)

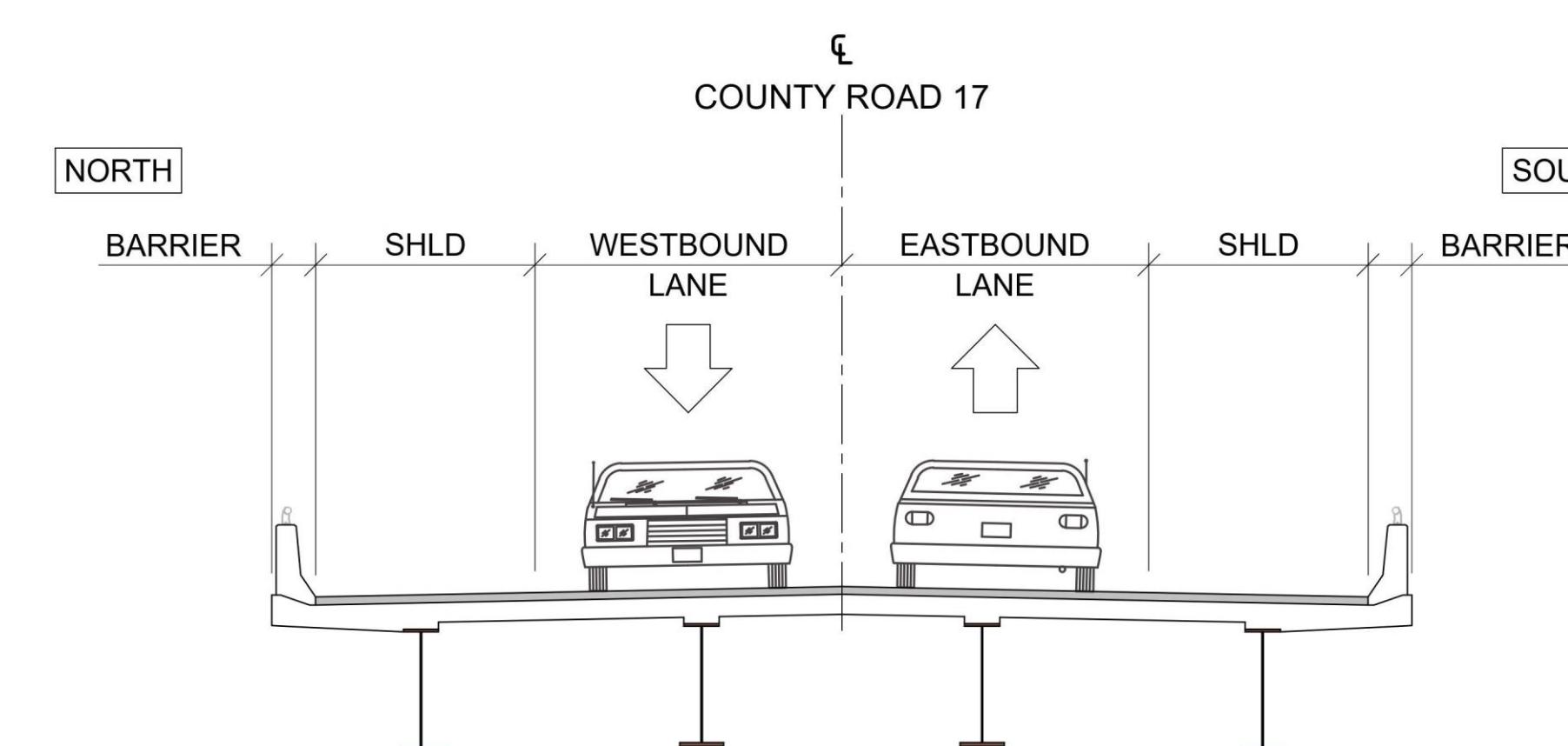
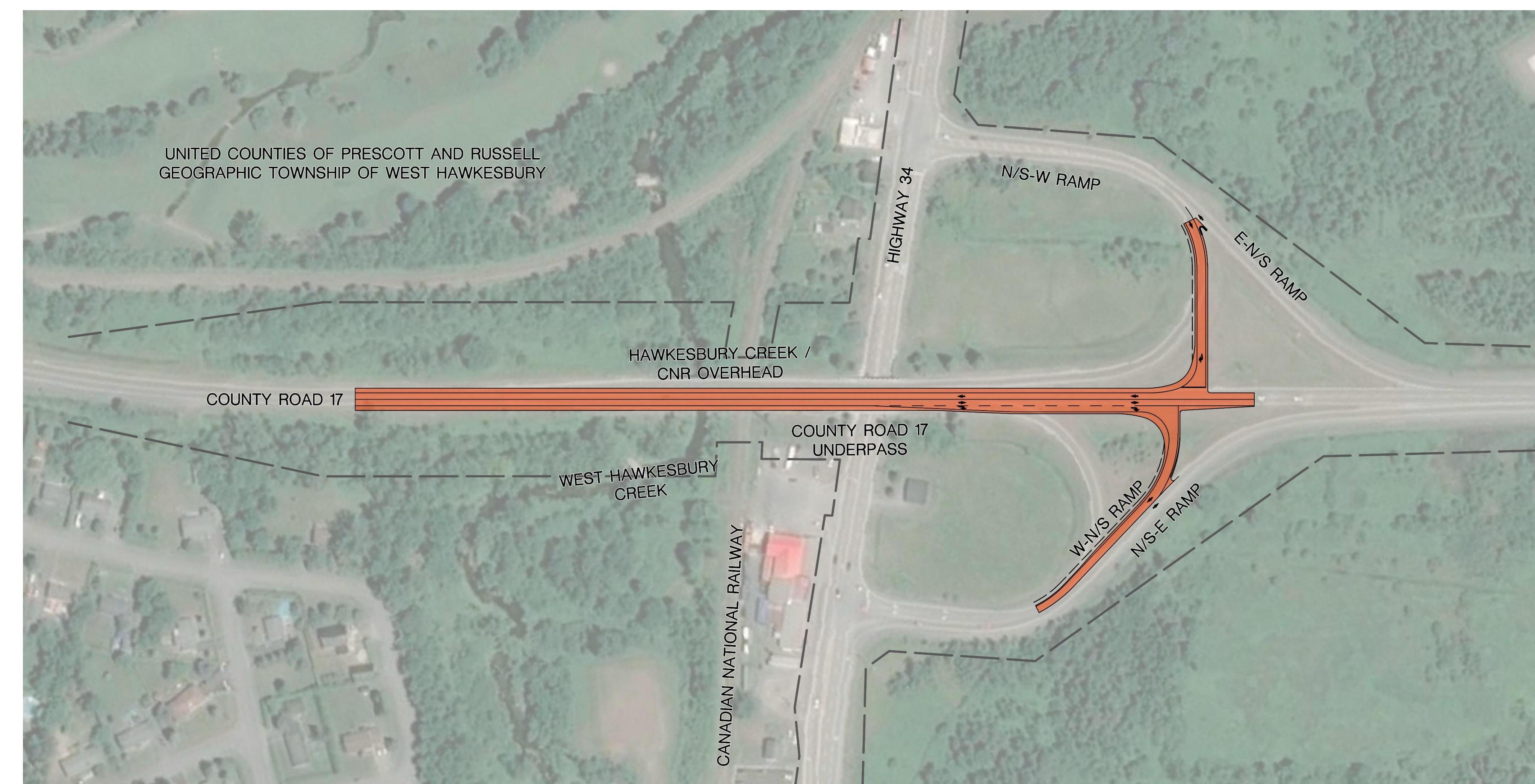
Screened Out for Further Evaluation
Posted Speed Limit: 70 km/h

Advantages

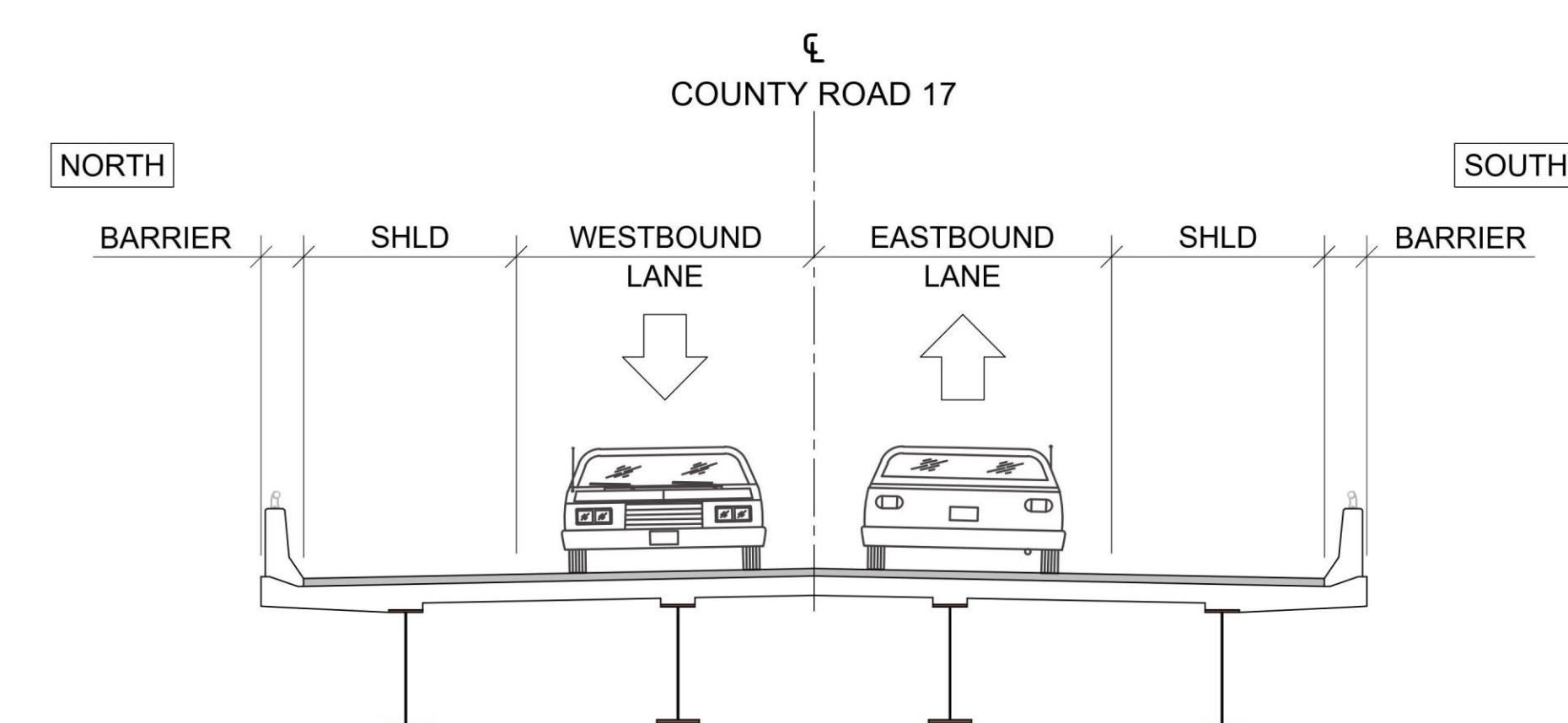
- Does not impact private property
- Reduces new bridges to two lanes – lower cost

Disadvantages

- Does not maintain free flow traffic for N/S-W ramp (on-ramp)
- Non-standard interchange configuration in Ontario
- Potential for wrong way left turn movements from County Road 17 onto both N/S-W ramp and W-N/S ramp
- Lower traffic capacity than the existing interchange configuration



Hawkesbury Creek/CNR Overhead



County Road 17 Underpass

Alternative 2

Screened Out for Further Evaluation

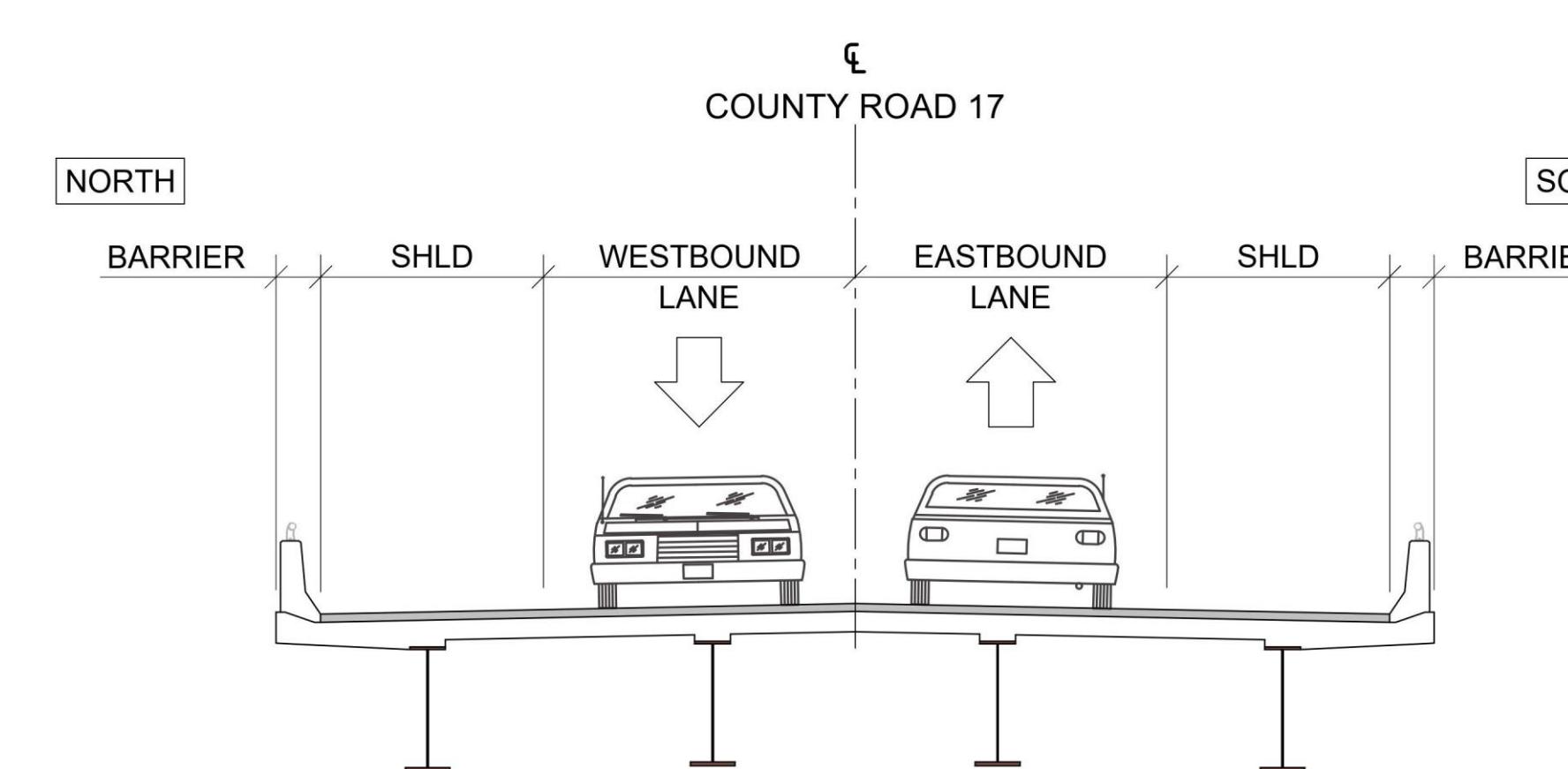
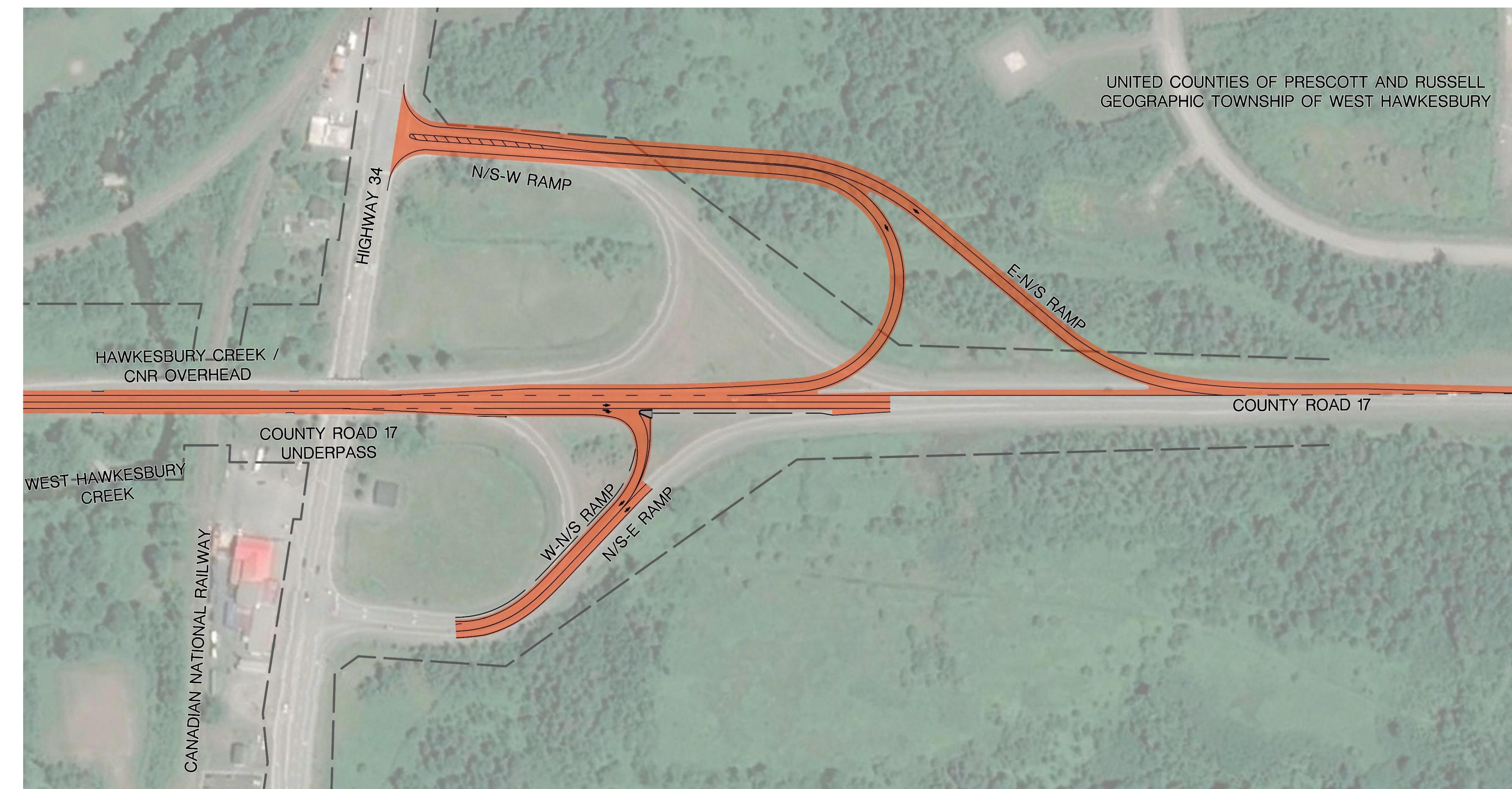
Posted Speed Limit: 70 km/h

Advantages

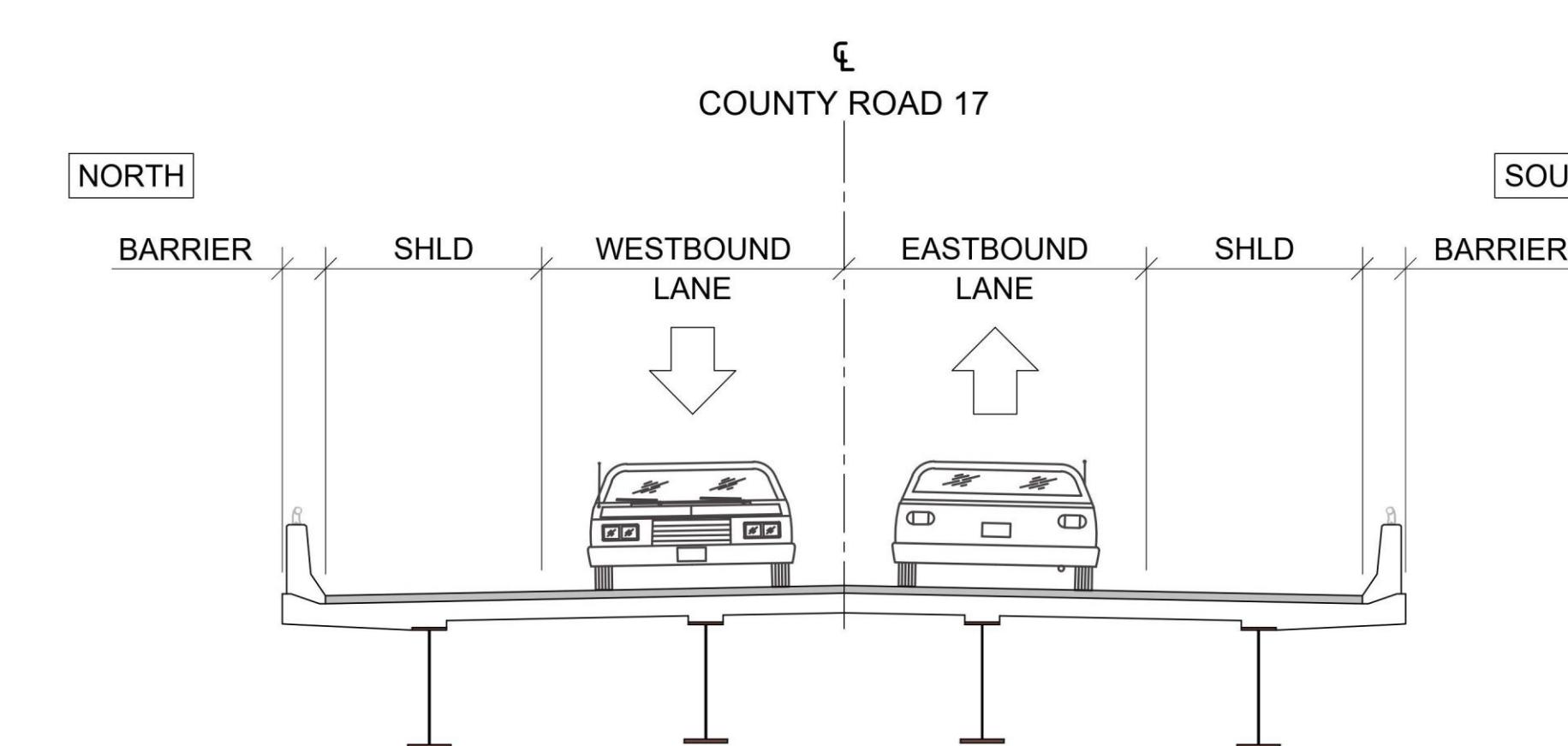
- Maintains free flow traffic for N/S-W ramp
- Similar traffic capacity to the existing interchange configuration
- Reduces new bridges to two lanes – lower cost

Disadvantages

- N/S-W and E-N/S ramps impact private property
- Potential for wrong way left turn movements from County Road 17 onto the W-N/S ramp
- Non-standard interchange configuration in Ontario



Hawkesbury Creek/CNR Overhead



County Road 17 Underpass

Alternative 3

Carried Forward for Further Evaluation

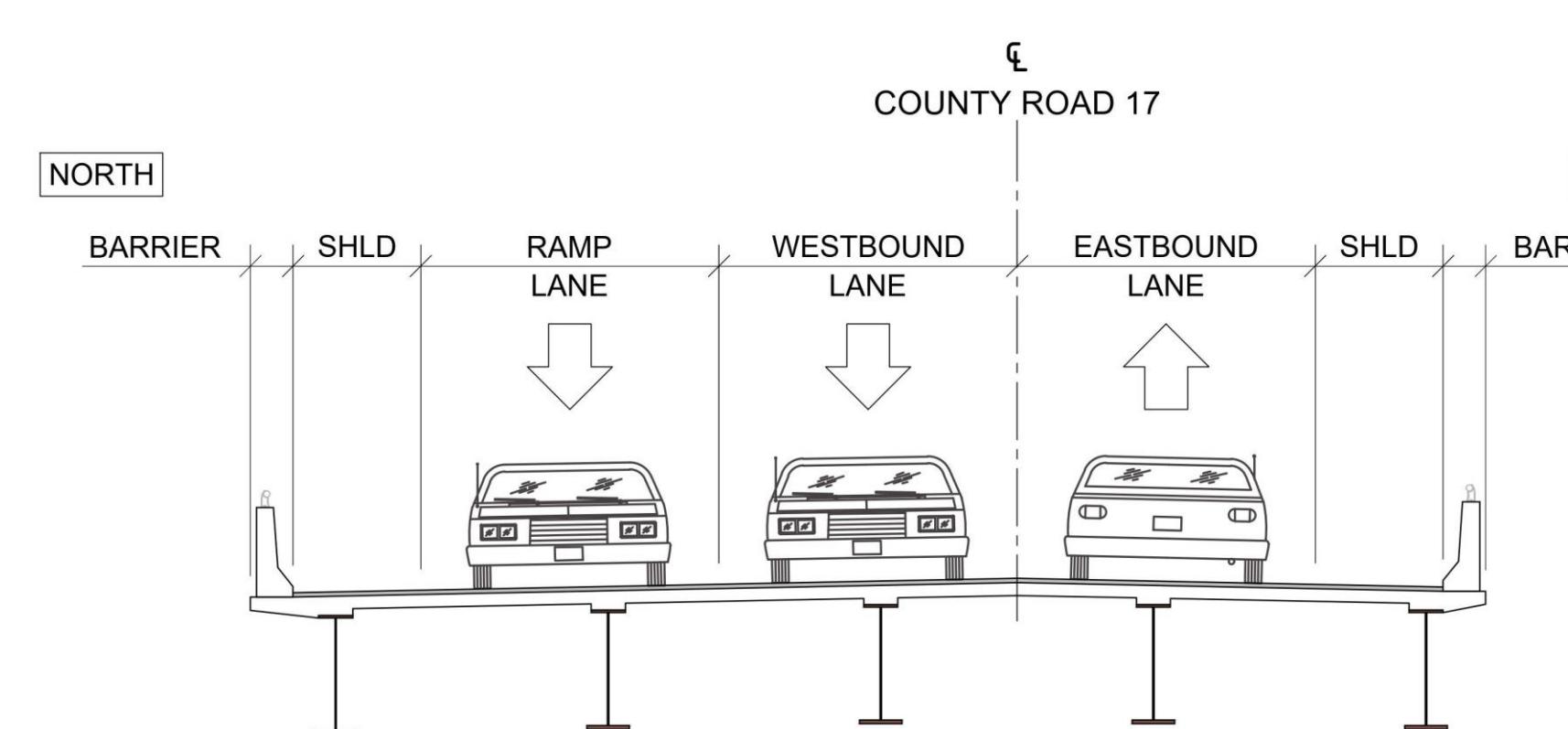
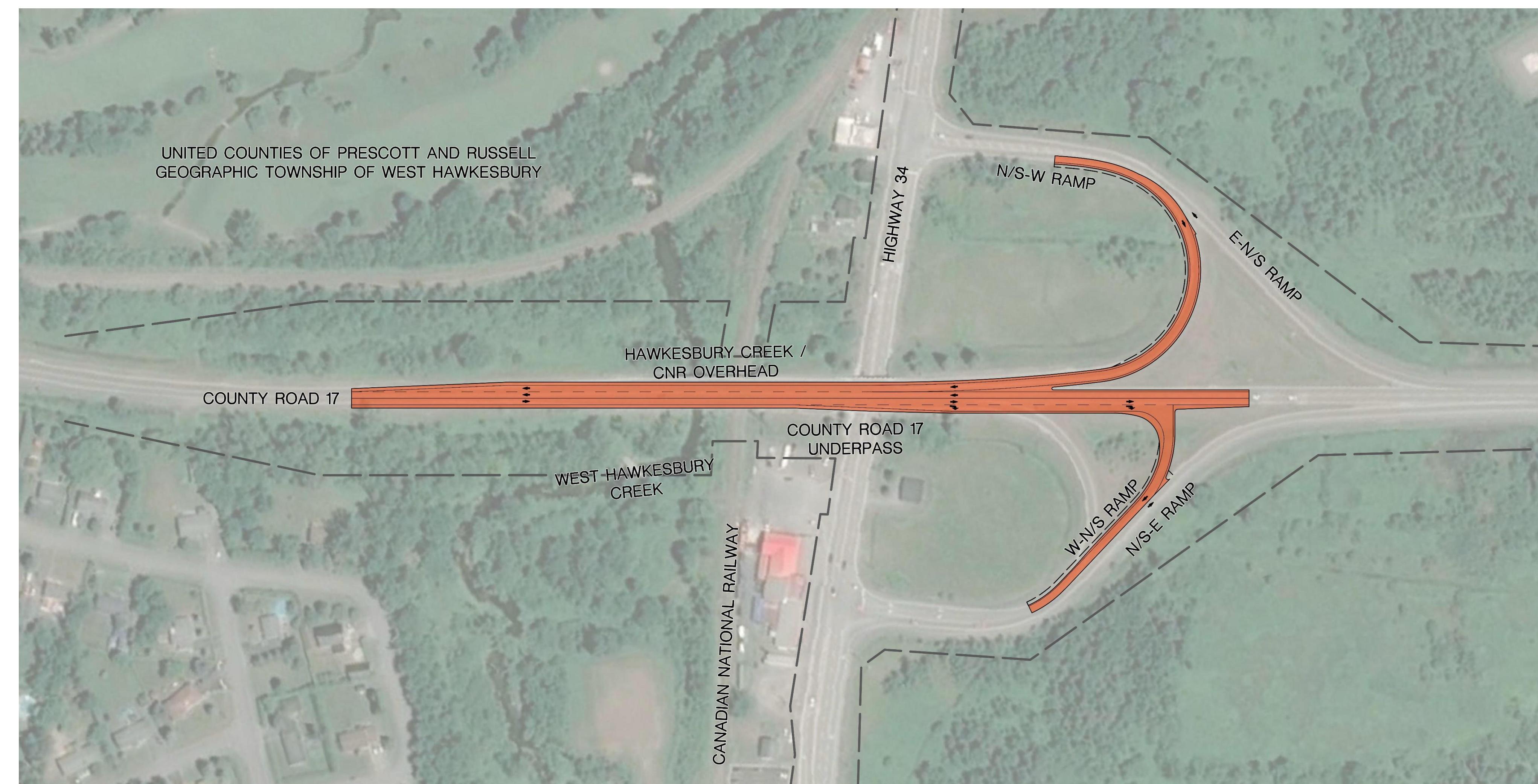
Posted Speed Limit: 90 km/h

Advantages

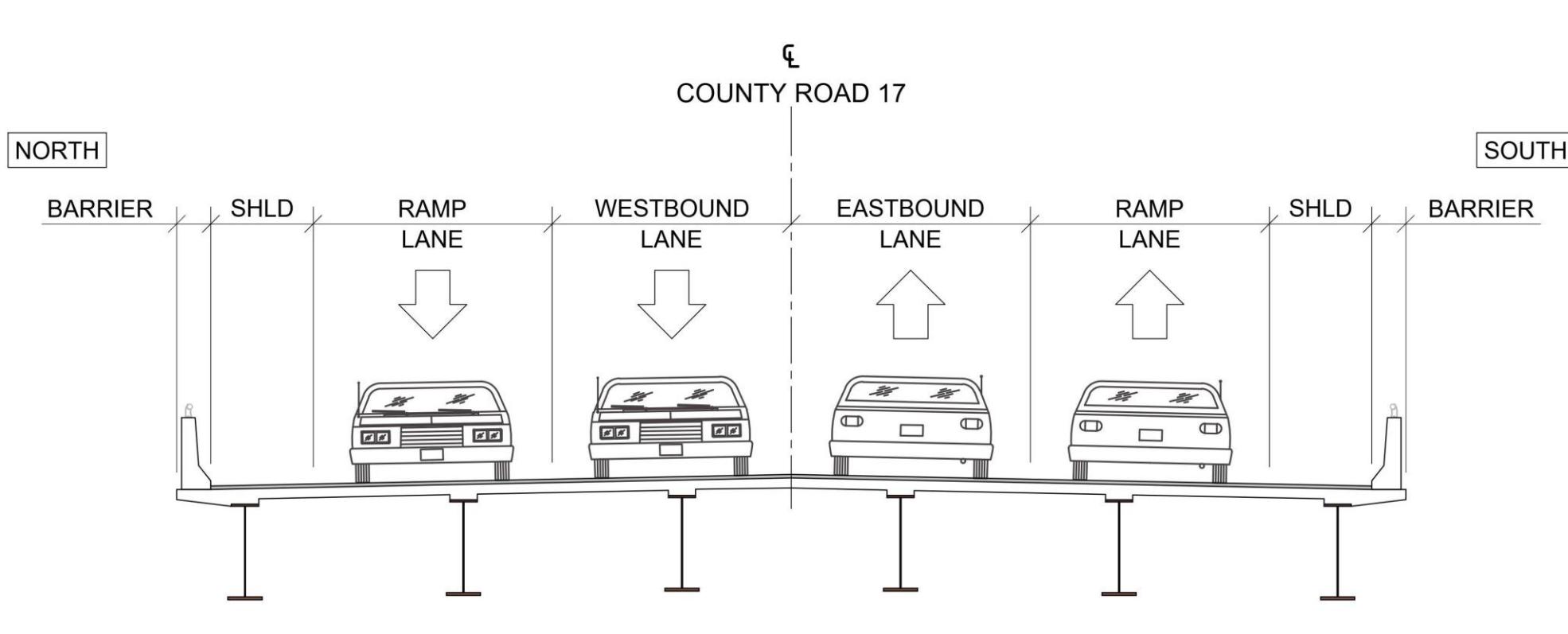
- Maintains free flow traffic for N/S-W ramp
- Does not impact private property
- Meets design standards
- Similar traffic capacity to the existing interchange configuration
- Reduces new Hawkesbury Creek / CNR bridge to three lanes – lower cost

Disadvantages

- Non-standard interchange configuration in Ontario
- Potential for wrong way left turn movements from County Road 17 onto the W-N/S ramp



Hawkesbury Creek/CNR Overhead



County Road 17 Underpass

Alternative 4

Carried Forward for Further Evaluation

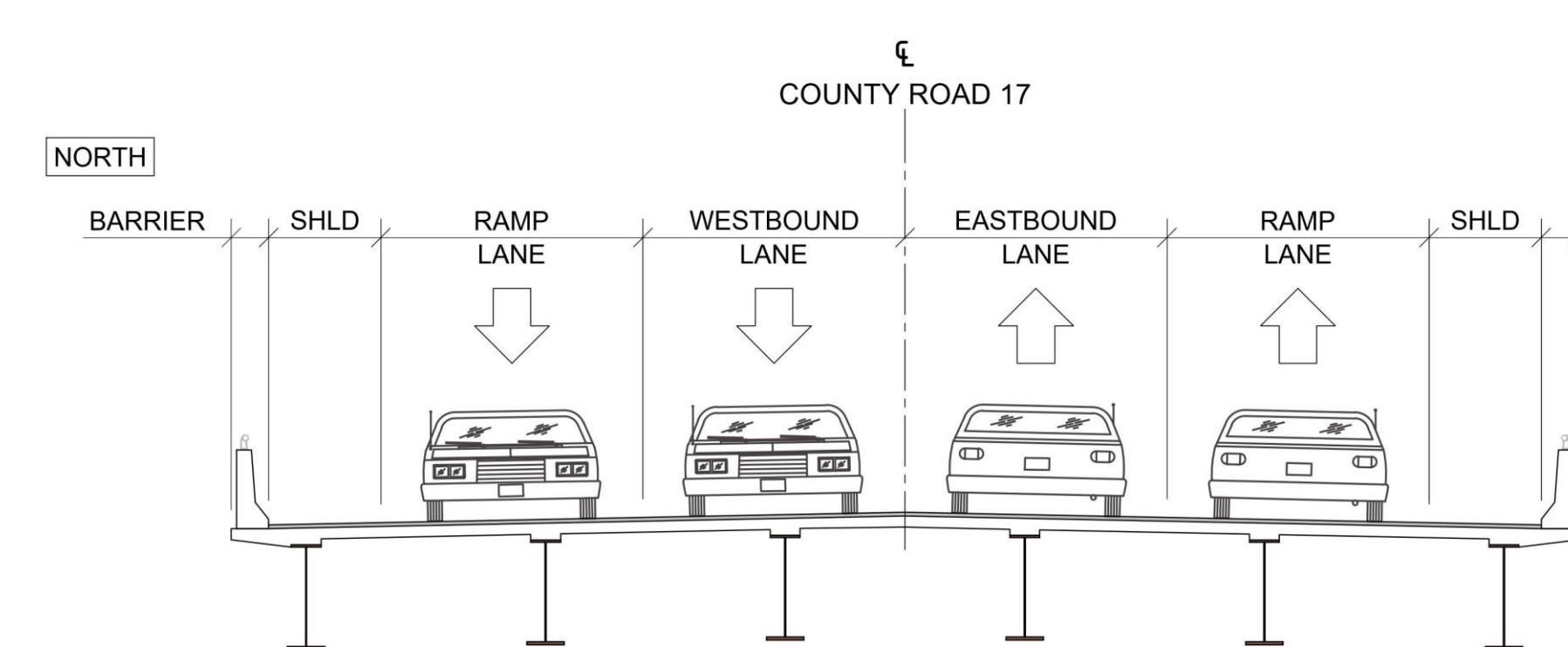
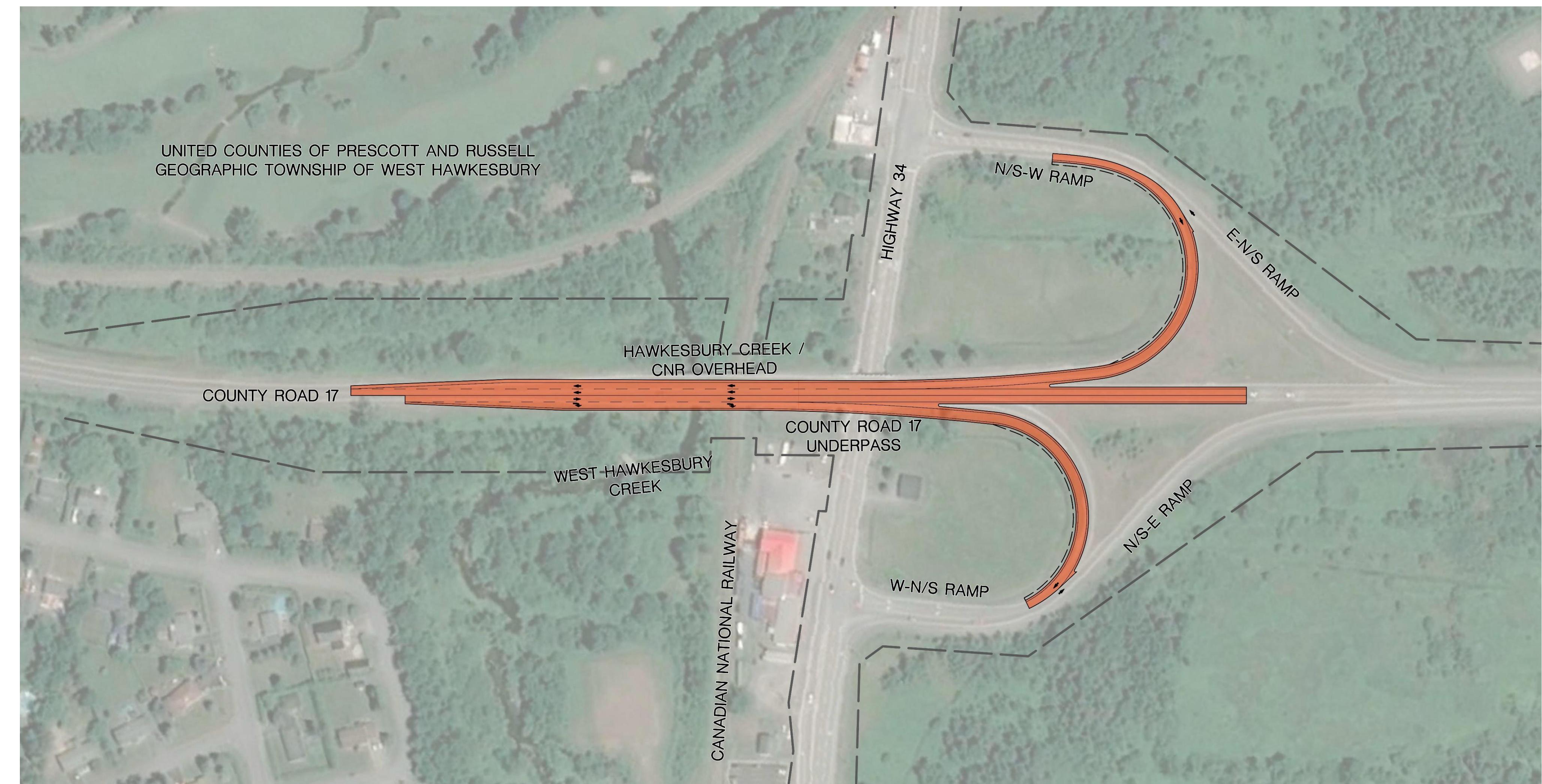
Posted Speed Limit: 90 km/h

Advantages

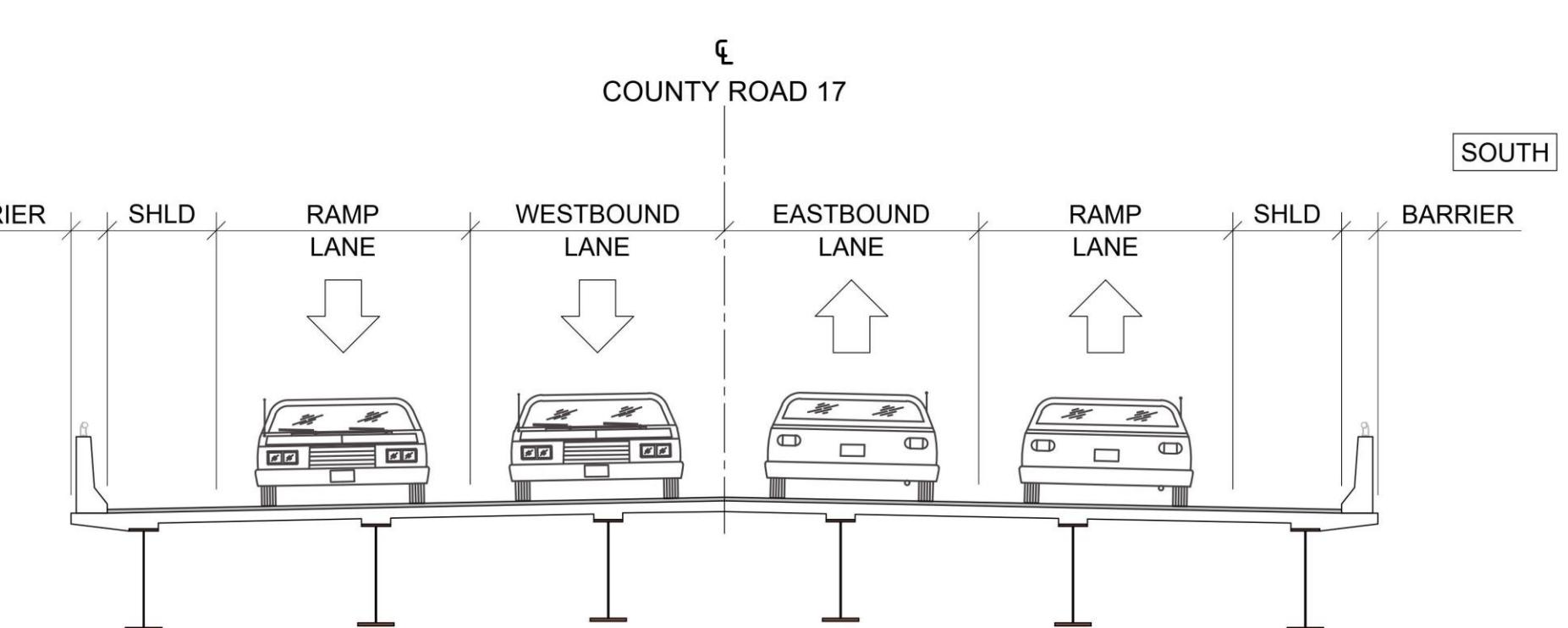
- Maintains free flow traffic for all ramps
- Does not impact private property
- Standard interchange configuration in Ontario
- Similar traffic capacity to the existing interchange configuration
- No opportunities for left-turn movements from County Road 17
- Interchange similar to the existing configuration

Disadvantages

- W-N/S ramp maintains existing radii but does not meet current design standards. There is limited history of accidents at this location.



Hawkesbury Creek/CNR Overhead



County Road 17 Underpass

Construction Staging

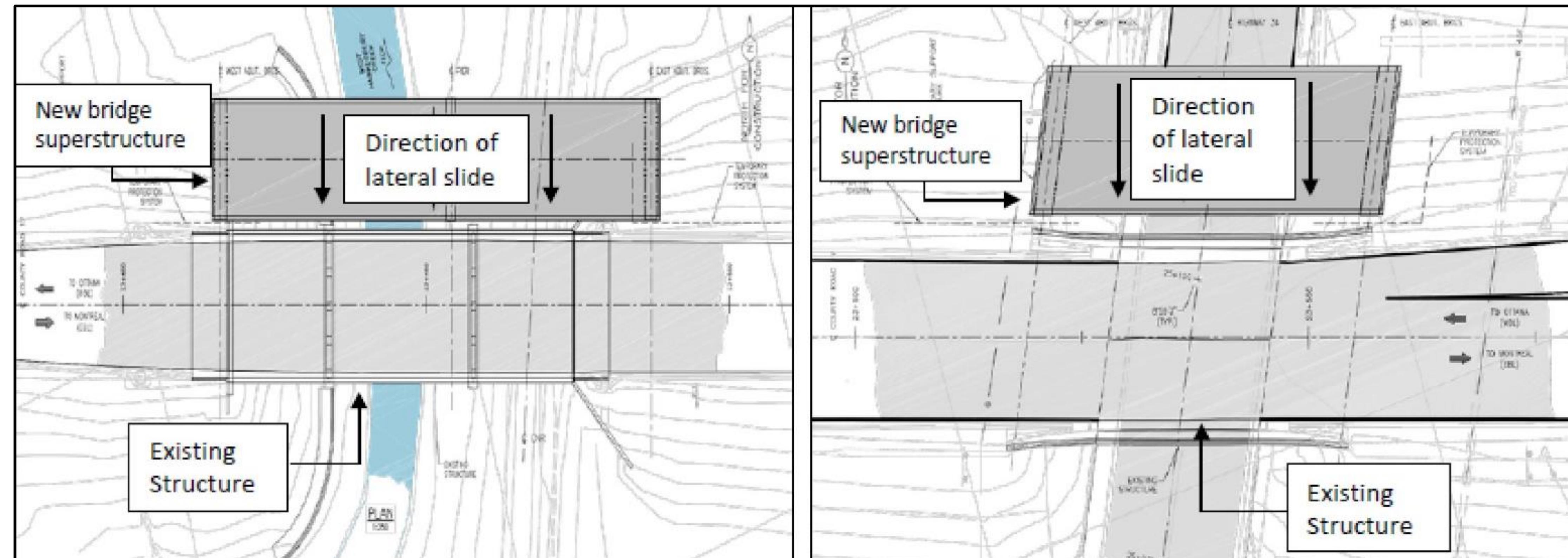
Alternative 1: Lateral Slide

This alternative uses an accelerated bridge construction technique whereby the new bridge decks are constructed on temporary supports adjacent to (and north of) the existing bridges.

When the new bridge decks are constructed (off-line), a closure of 2-4 weeks is required to demolish the bridges, complete the new abutments and piers, and slide the new structures into place.

Construction operations are estimated to be 1.5 years for this staging option.

Impacts to utilities are being evaluated.



County Road 17 Closure

To accommodate the rapid demolition and lateral slide, County Road 17 will be closed completely for 2 to 4 weeks.

Highway 34 Closure

Three overnight closures of Highway 34 are required to erect the new girders, demolish the existing structure, and jack and slide the new structure into place.

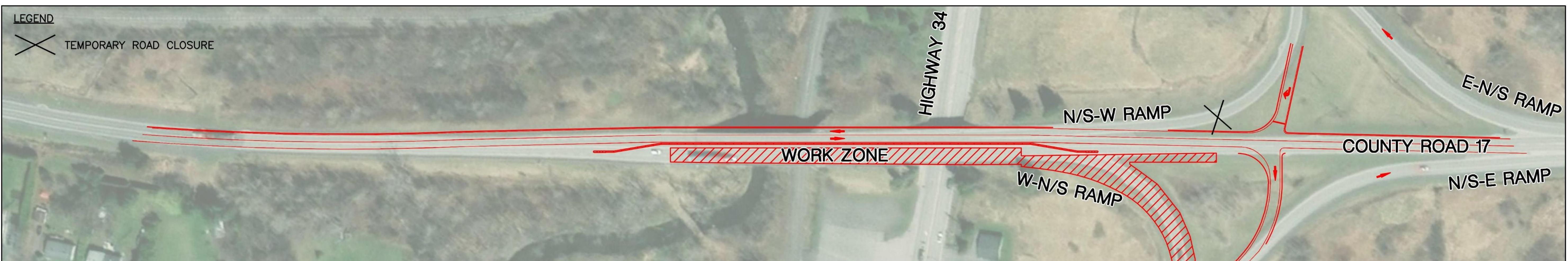
Construction Staging

Alternative 2a: Single-Lane Staged Construction

Stage 1



Stage 2



This alternative uses conventional construction techniques to remove and construct the new bridges in two stages.

Stage 1 maintains one alternating lane of traffic during construction using temporary traffic signals on County Road 17 and the N/S-W ramp. A delay of 3-4 minutes is expected for the AM and PM peaks. Stage 1 will be in place for one construction season. Stage 2 maintains two lanes of traffic during construction.

Construction operations are estimated to be 1.5 to two years for this staging option.

County Road 17 Closures

A minimum of two overnight closures or lane reductions of County Road 17 are required to demolish and construct the new bridge.

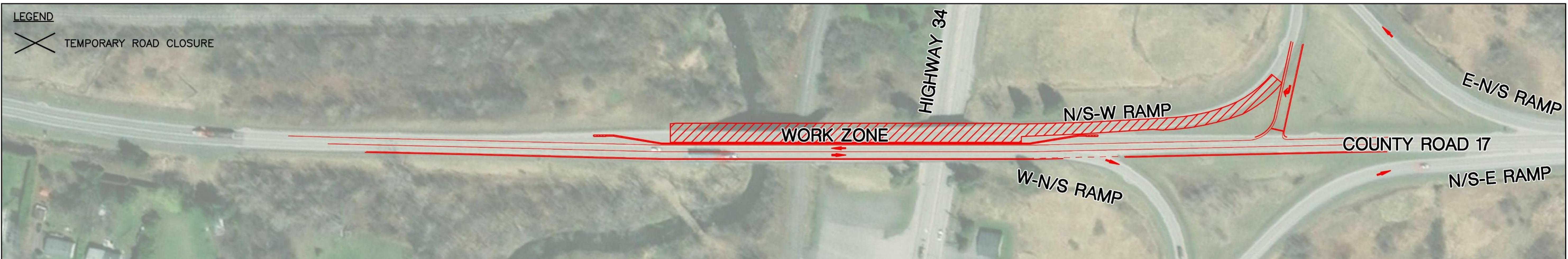
Highway 34 Closures

A minimum of four overnight closures of Highway 34 are required, to demolish the existing structure and erect the new girders.

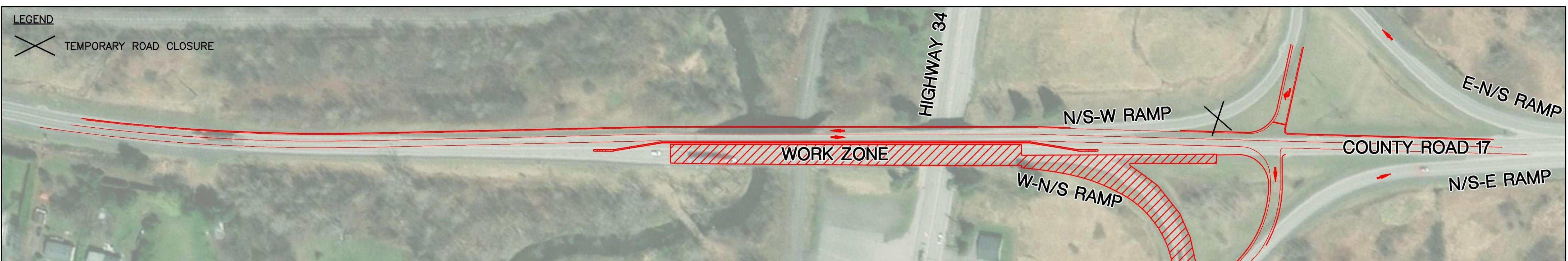
Construction Staging

Alternative 2b: Two Lane Staged Construction

Stage 1



Stage 2



This alternative uses conventional construction techniques to remove and construct the new bridges in two stages.

Two lanes of traffic are maintained throughout construction.

Construction operations are estimated to be 1.5 to 2 years for this staging option.

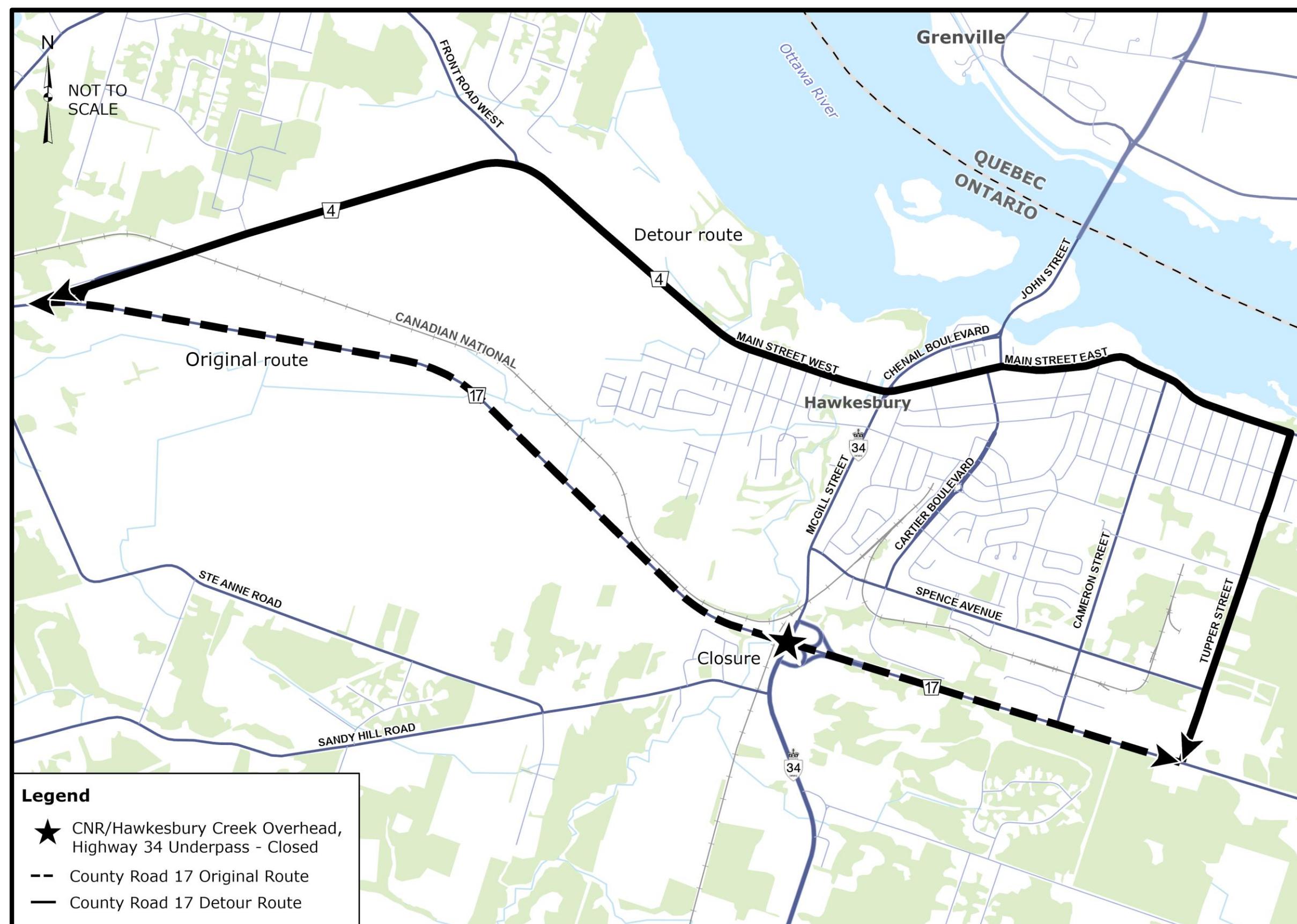
County Road 17 Closures

A minimum of two overnight closures or lane reductions of County Road 17 are required to demolish and construct the new bridge.

Highway 34 Closures

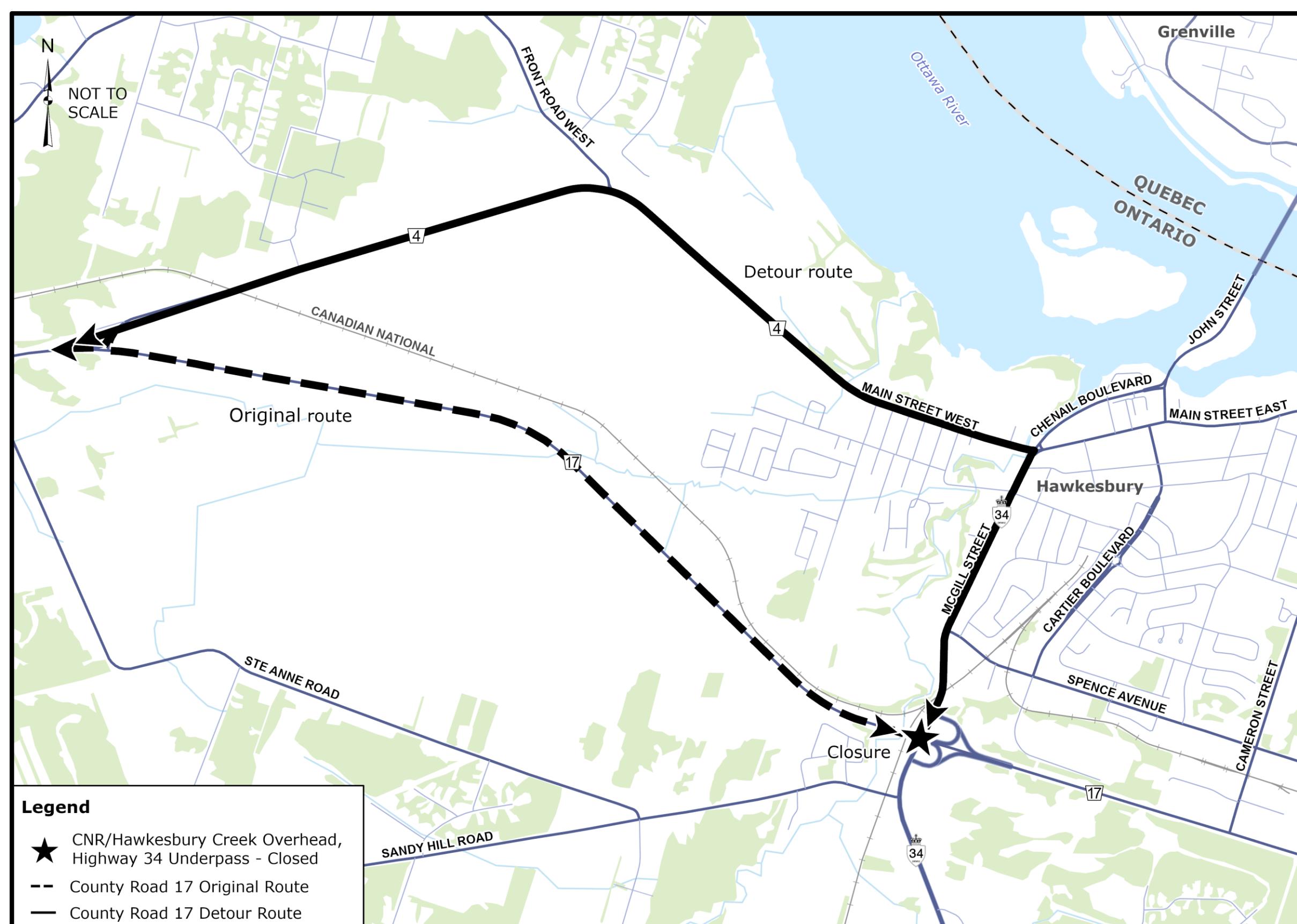
A minimum of four overnight closures of Highway 34 are required, to demolish the existing structure and erect the new girders.

County Road 17 Detour Routes



Detour Option 1

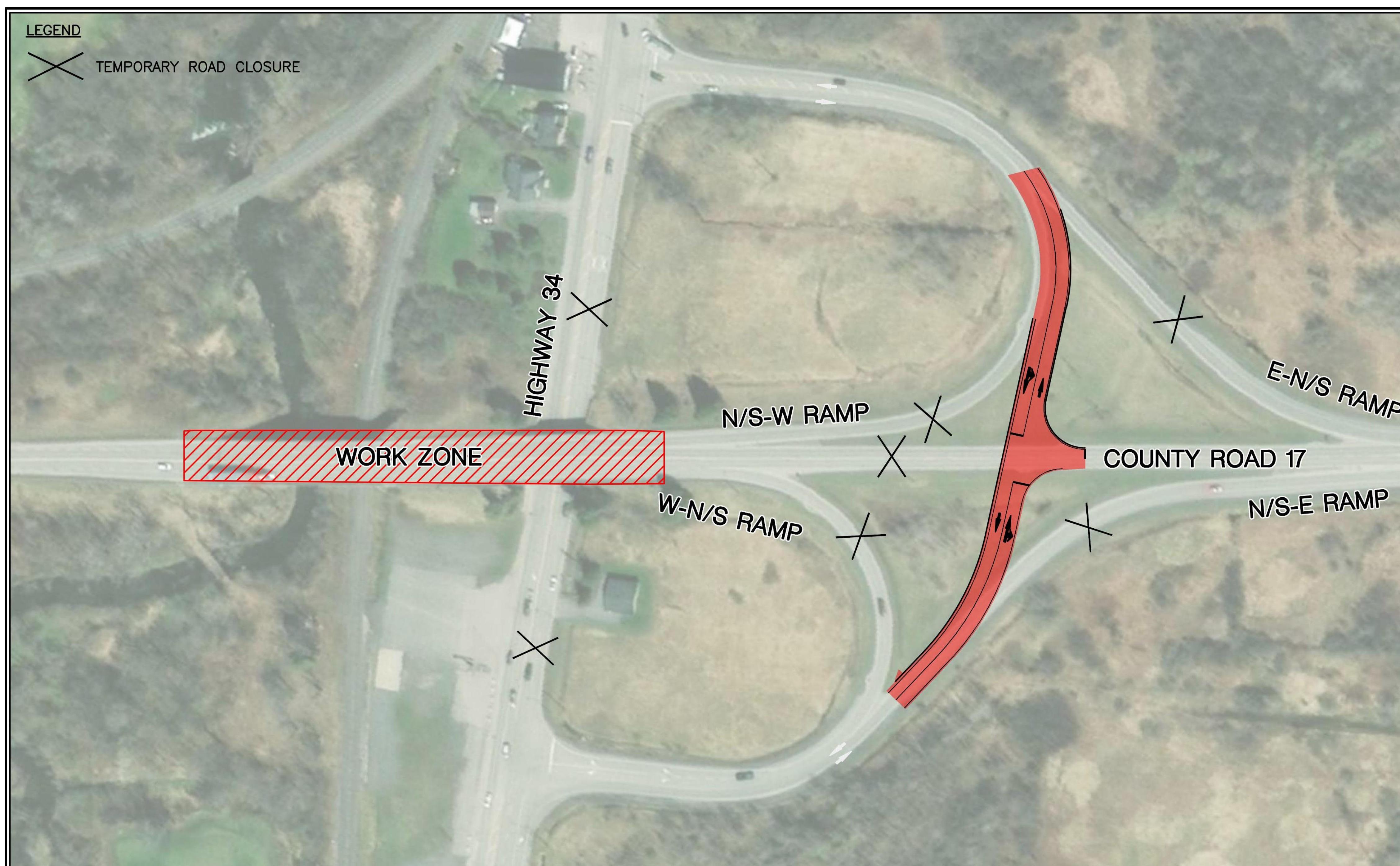
County Road 17 traffic will be detoured along County Road 4 heading east-west through Hawkesbury Main Street and heading north-south along Tupper Street.



Detour Option 2

County Road 17 traffic will be detoured along County Road 4 heading north-south along Highway 34.

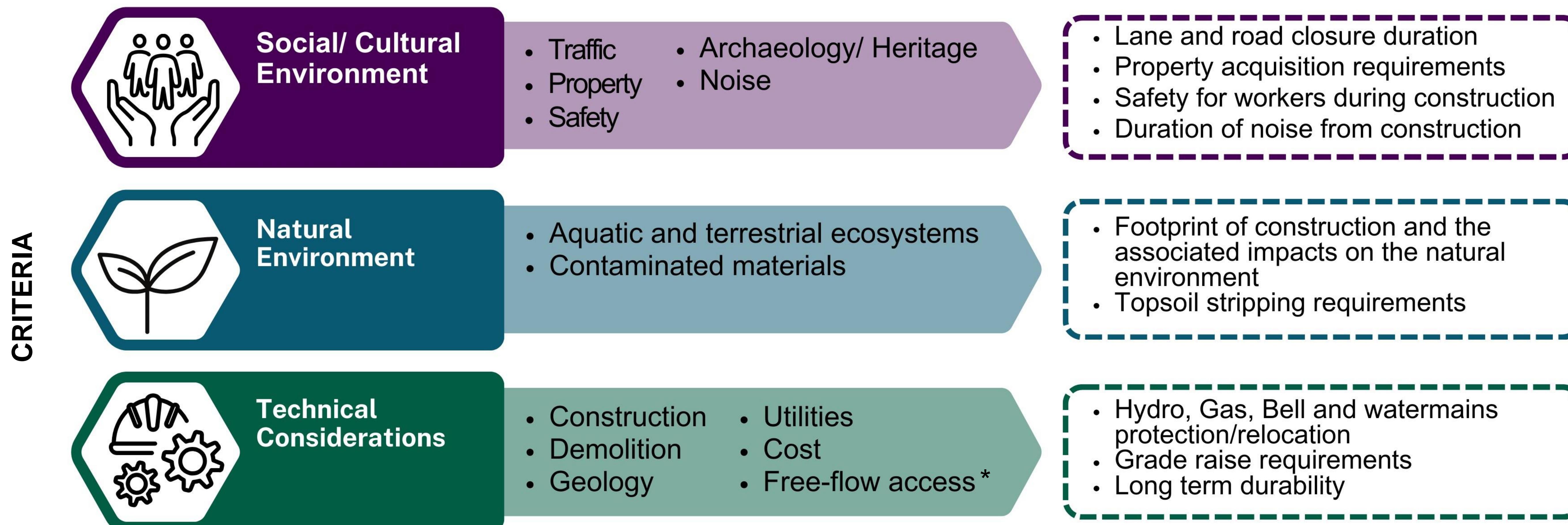
Highway 34 Detour Route



Highway 34 traffic will be detoured via a temporary north-south bypass through the interchange. This detour will be in place at times when Highway 34 is closed.

Alternatives Evaluation Criteria

A reason-based decision-making process will be applied to identify and determine the 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.

Next Steps

We welcome your feedback on the information provided.

Following this Public Information Centre, the Project Team will:

-  1. Review feedback received
-  2. Evaluate alternatives and select the Preferred Alternative(s)
-  3. Host a second Public Information Centre in Fall 2024
-  4. Finalize the Recommended Plan
-  5. Prepare the TESR Addendum, which will be made available on the project website (www.cr17bridges.com) for a 30-day public review period.

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