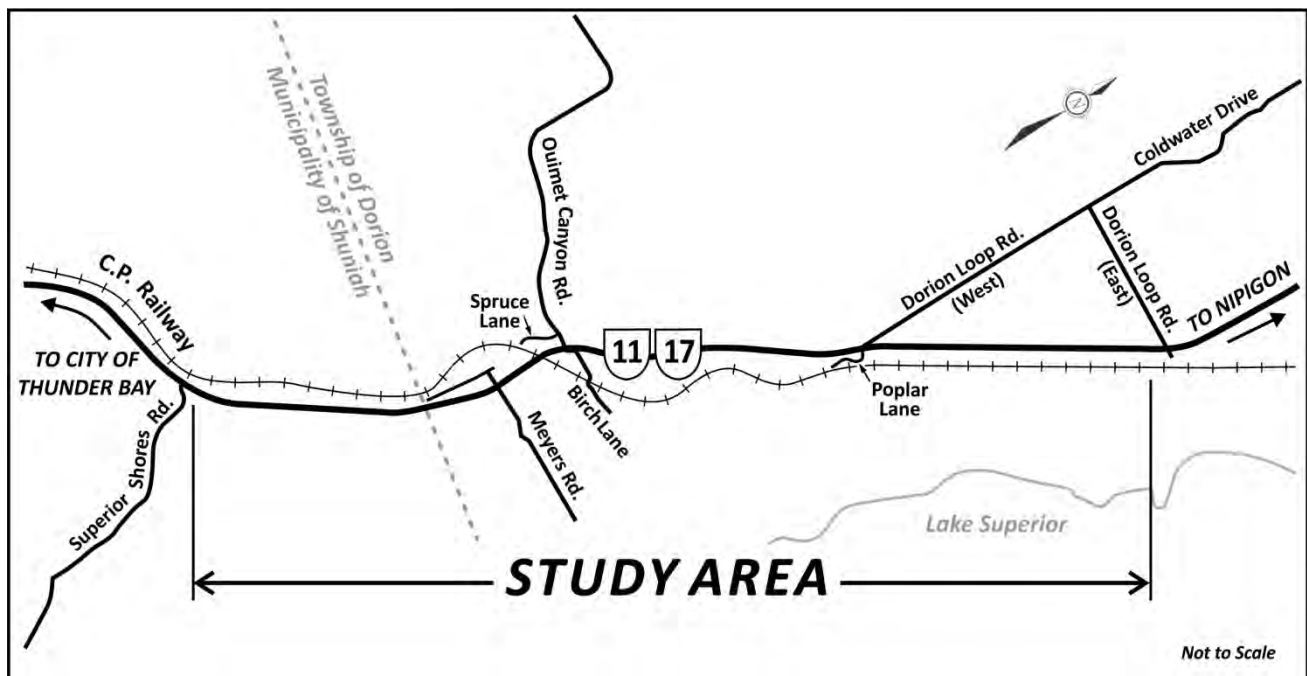


Welcome to
Public Information Centre #1
for the
HIGHWAY 11/17 FOUR-LANING
from OUIMET TO DORION

Preliminary Design



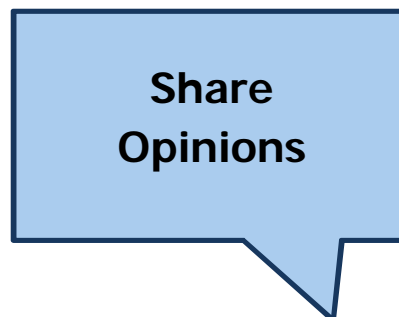
Please Sign-in at the Front Desk

WELCOME

Welcome to the first Public Information Centre (PIC) for the Preliminary Design, Detail Design and Class Environmental Assessment Study for the four-laning of Highway 11/17 from 2.83 km west of Ouimet Overhead easterly 8.63 km.

Representatives from the Ministry of Transportation (MTO) and MMM Group Limited, a WSP Company are available to discuss the project with you.

Please ask questions and make your opinions known to us. We encourage you to fill out a comment sheet recording your comments and concerns.



Information presented today is also available on the project website: www.hwyl1-17four-laningfromouimettodorion.ca

PURPOSE OF STUDY



Highway 11/17

The purpose of this study is to build upon the Planning and Preliminary Design (completed in 1997), which determined the planning requirements for the four-laning of Highway 11/17. A second PIC will be held during the detail design phase.

This PIC presents:

- The overall study process;
- Existing environmental conditions; and
- Proposed changes to the preliminary design identified in the 1997 Environmental Study Report.

This project is being conducted in accordance with the requirements of the Ministry of Transportation's (MTO) *Class Environmental Assessment for Provincial Transportation Facilities* (amended 2000) as a Group 'B' undertaking. Throughout the study process, input will be sought from the public and external agencies.

BACKGROUND

- In 1989, the Province made an announcement to four-lane Highway 11/17 from Thunder Bay to Nipigon.
- In 1997, the Planning and Preliminary Design Study for the Four-Laning of Highway 11/17 from 8 km west of Ouimet easterly 36 km to the Red Rock Township West Boundary was completed. An Environmental Study Report (ESR) was filed in September 1997 and received environmental clearance.
- An Addendum to the ESR is necessary to document any changes to the original design decisions and environmental conditions that have occurred since the submission of the 1997 report. The proposed changes to the ESR are presented at this PIC.



Highway 11/17

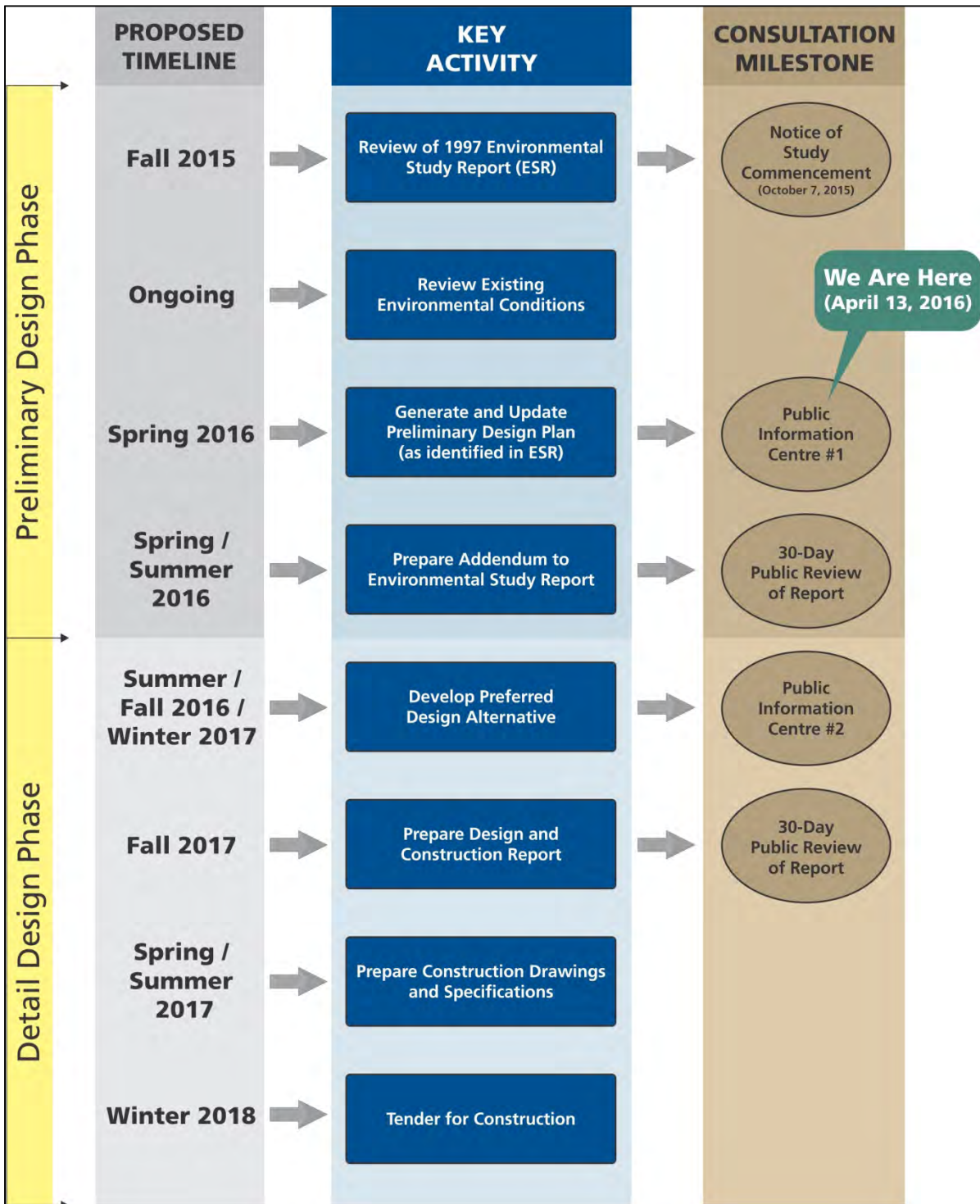
HIGHWAY 11/17 FOUR-LANING PROJECT BENEFITS



Example of a Four-Laned Highway 11/17

- Reduced delays caused by slower moving vehicles.
- Improved movement of goods and services will have a positive economic impact on the area.
- Reduced collisions and decreased severity of some types of collisions.
- Addresses future travel demand along the highway.
- The new four-lane highway will allow for a parallel, continuous, alternative route system in the event of roadway collisions, natural disasters or structural loss which could lead to the closure of the existing highway.

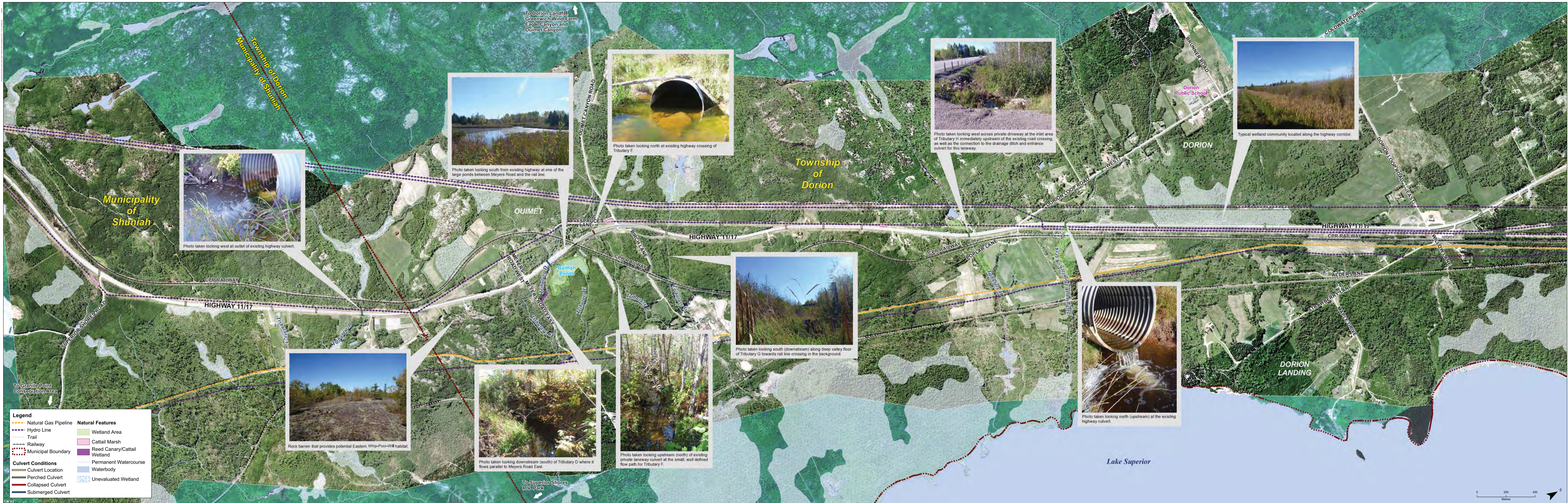
STUDY PROCESS



COMPARISON BETWEEN 1997 AND EXISTING ENVIRONMENTAL CONDITIONS

	Environmental Study Report Existing Environmental Conditions (1997)	Review of Existing Environmental Conditions (2015)
Natural Environment		
Vegetation	<ul style="list-style-type: none"> No significant species identified by the Ministry of Natural Resources and Forestry (MNRF) (formerly Ministry of Natural Resources). 	<ul style="list-style-type: none"> Vegetation along the highway corridor consists primarily of second growth forest, wetland, agricultural land and anthropogenic land (residential and commercial development). No vegetation Species of Special Concern were noted by MNRF. MNRF identified a "significant woodland" located within the study area.
Wildlife and Wildlife Habitat	<ul style="list-style-type: none"> Area supports a wide range of species, including moose, black bear, deer, rabbit, gamebirds and waterfowl. No species of conservation concern were identified. 	<ul style="list-style-type: none"> Area continues to provide a variety of habitats that support a wide range of wildlife species. One Species of Special Concern, Eastern Whip-Poor-Will was identified by MNRF to be in the project area.
Fish and Fish Habitat	<ul style="list-style-type: none"> Waterbodies within study area are mainly cold water streams. Streams flowing into Lake Superior are considered high significance by MNRF. Lake Superior tributaries contain a wide range of aquatic wildlife, such as resident brook trout, minnows, trout, and tadpoles. Minnows, trout, and tadpoles were observed throughout the study area. No species of conservation concern were identified. Limited aquifer potential as a result of the underlying bedrock and its proximity to the surface. 	<ul style="list-style-type: none"> Initial screening / background information from MNRF has identified that all watercourse crossings within the highway corridor should be treated as coldwater streams as they are tributaries of Lake Superior and likely support coldwater species. All streams in the area have a high probability of being or are known migratory routes and/or nursery grounds for Lake Superior Salmonid populations. MMM ecology staff will determine the potential for spawning and migration of salmonid species within the highway corridor during detailed field assessments in 2016. Several culverts are perched at the existing highway, limiting upstream movement of fish seasonally. MTO will assess potential repair / remediation works to address the perched outlets during expansion projects to improve potential fish movement / seasonal passage concerns within the highway corridor. MNRF did not indicate any aquatic species of conservation concern. MNRF identified that the ponds south of the highway between Meyers Road and the railway, as well as the ponded portion of Tributary H north of the highway and west of Dorion Loop Road West belong to a baitfish block that is licenced by MNRF.
Social and Cultural Environment		
Social	<ul style="list-style-type: none"> Project area is sparsely populated in a rural landscape. Residents within study area are on well water. 	<ul style="list-style-type: none"> No changes since 1997.
Land-use	<ul style="list-style-type: none"> Township of Shuniah is generally characterized by rural land use and is sparsely developed. Lands fronting along existing Highway 11/17 include scattered residential development and farms. Township of Shuniah's Official Plan states Highway 11/17 is to remain a main transportation artery. Township of Dorion is generally characterized by rural land uses with commercial establishments located adjacent to Highway 11/17. 	<ul style="list-style-type: none"> <i>Municipality of Shuniah's Official Plan</i> (2005) designates lands within the study area as 'Open Space' and a pocket of 'Aggregate Extraction' in the vicinity. <i>Municipality of Shuniah's Official Plan</i> continues to state Highway 11/17 is to remain a main transportation artery. <i>Township of Dorion's Official Plan</i> (2014) designates lands within the study area as predominately 'Rural' or 'Hamlet/Settlement Residential', with pockets of 'Environmental Protection' and 'Highway Commercial' No significant changes since 1997.
Archaeology	<ul style="list-style-type: none"> The 1997 ESR recommended future archaeological assessments be conducted along the corridor. 	<ul style="list-style-type: none"> A Stage 1 archaeological assessment was carried out in the Fall of 2015. A Stage 2 archaeological assessment will be carried out in the Spring / Summer of 2016.

EXISTING ENVIRONMENTAL CONDITIONS



REVIEW OF 1997 EA APPROVED PLAN

This Preliminary Design, Detail Design and Class Environmental Assessment (EA) Study includes a review of the commitments made in the 1997 Environmental Study Report (ESR) based on new engineering standards and new environmental constraints. The review of the 1997 EA Approved Plan includes the following:

Review of Highway Alignment

- The four-laning alignment identified in the 1997 EA Approved Plan is being reviewed to ensure the proposed highway alignment meets current highway engineering standards and minimizes / avoids updated environmental constraints.

Review of Public Access Locations

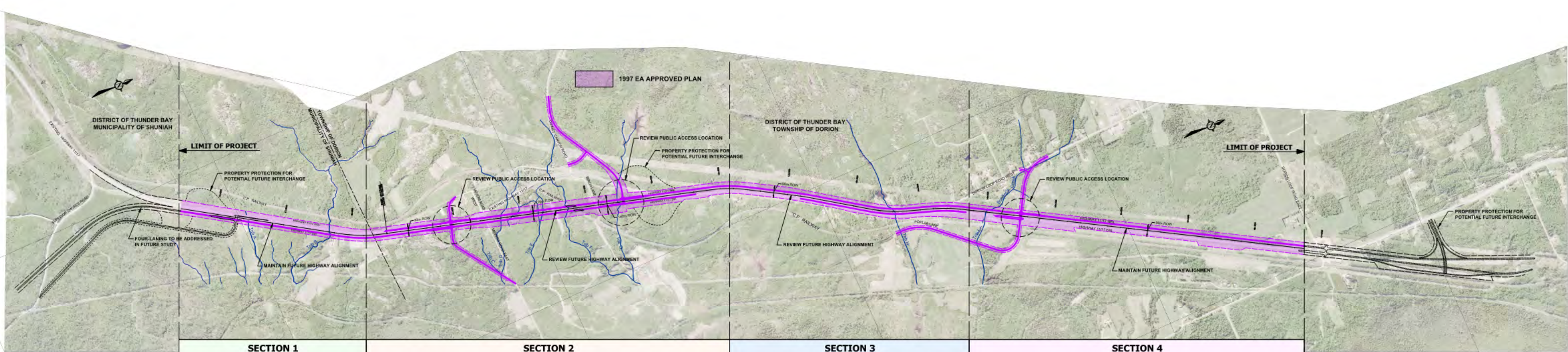
- The public access provisions in the Ministry's approved four-lane plan include interim at-grade intersections and consideration of future interchanges at Superior Shores Road, Ouimet Canyon Road and Dorion Loop Road East.
- The public access provisions identified in the 1997 EA Approved Plan will be reviewed in consideration of the Controlled Highway Access Criteria (e.g. number of direct accesses to be limited), dependent on the needs of the community in consideration of the adjacent development and a spacing criteria of 3 to 8 km.

Review of Highway Cross-Section

- MTO is proposing to increase the right-of-way from 90 m to 110 m (minimum) as a result of revisions to highway engineering design and safety standards that have occurred since the 1997 ESR. This will accommodate a 30 m wide median and flatter (4:1) side slopes.

The next display outlines the review of the 1997 EA Approved Plan.

REVIEW OF 1997 EA APPROVED PLAN



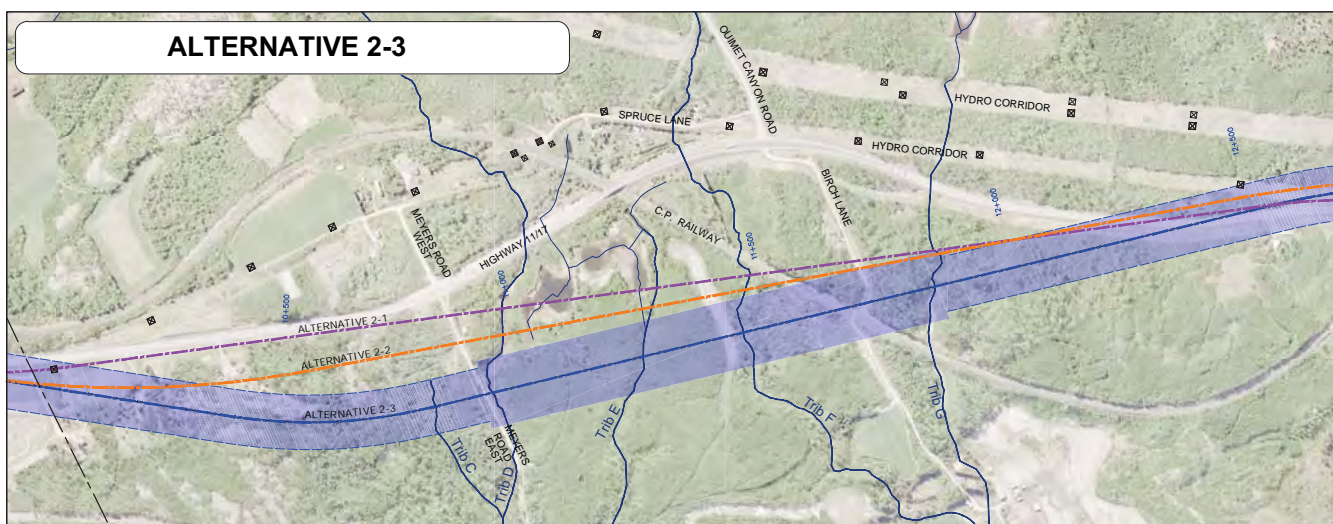
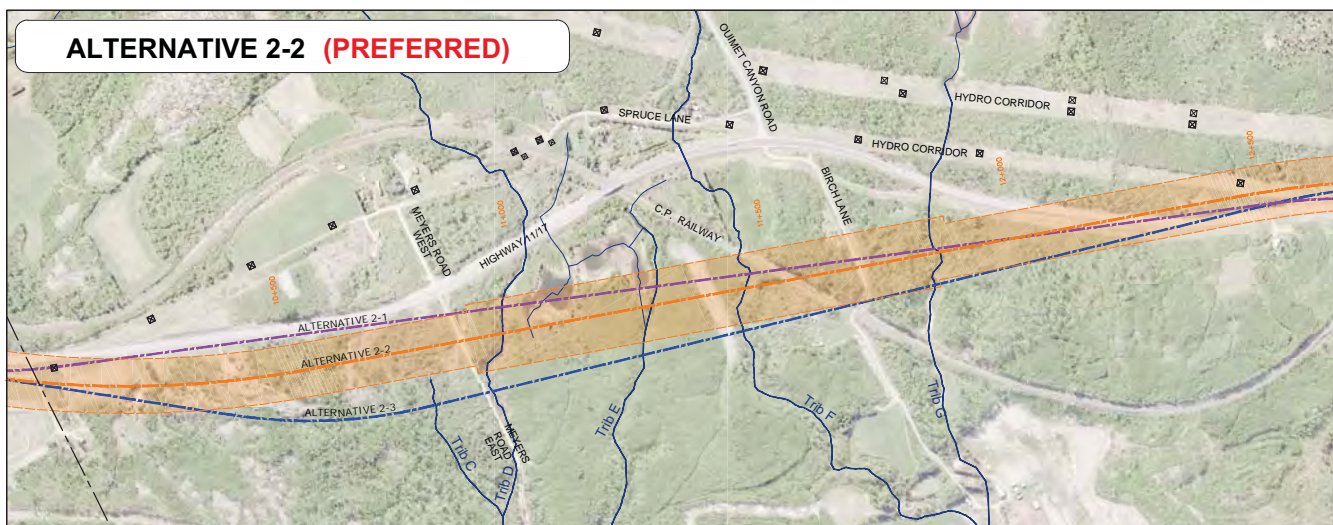
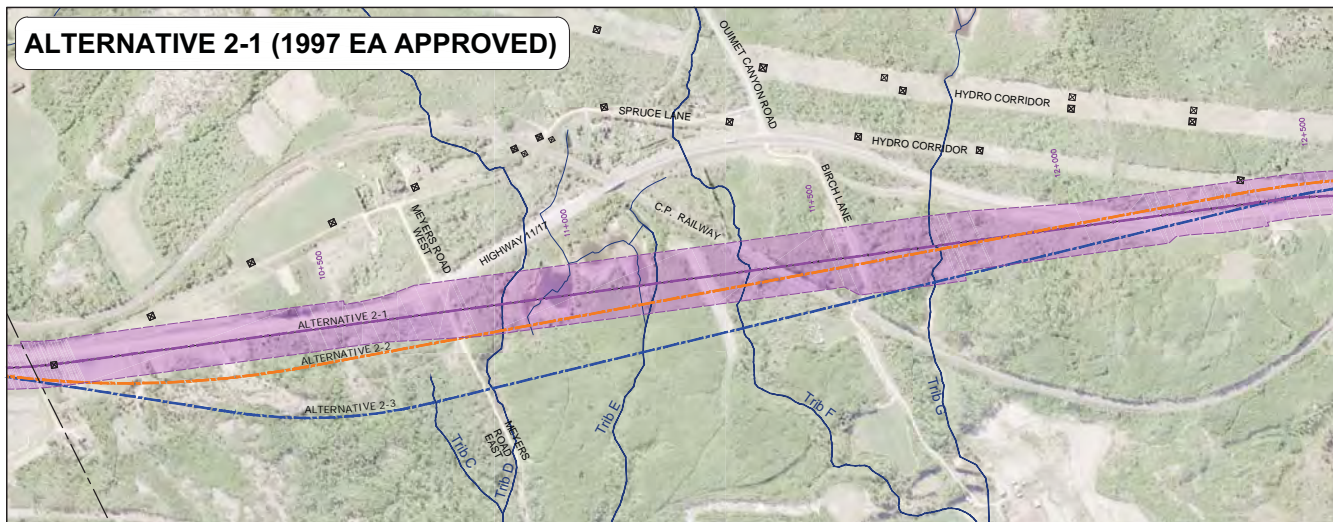
SECTION 1	SECTION 2	SECTION 3	SECTION 4
<ul style="list-style-type: none"> • NO SIGNIFICANT CHANGES TO HIGHWAY ALIGNMENT. • WIDEN HIGHWAY RIGHT-OF-WAY FROM 90m to 110m (MINIMUM). • INTERIM TRANSITION FROM EXISTING HIGHWAY TO PROPOSED FOUR-LANING. 	<ul style="list-style-type: none"> • NEW HIGHWAY ALIGNMENT ALTERNATIVES DEVELOPED TO MINIMIZE ENVIRONMENTAL IMPACTS AND TO ENHANCE HIGHWAY GEOMETRY (SEE EVALUATION OF HIGHWAY ALIGNMENT ALTERNATIVES DISPLAY). • WIDEN HIGHWAY RIGHT-OF-WAY FROM 90m to 110m (MINIMUM). • NEW PUBLIC ACCESS ALTERNATIVES DEVELOPED WITH CONSIDERATION TO A MINISTRY SPACING CRITERIA OF 3-8km AND THE NEEDS OF THE COMMUNITY (SEE "MEYERS ROAD EAST", "MEYERS ROAD WEST" & "OUIMET CANYON ROAD" DISPLAYS). 	<ul style="list-style-type: none"> • NEW HIGHWAY ALIGNMENT ALTERNATIVES DEVELOPED TO IMPROVE HIGHWAY GEOMETRY AND MINIMIZE IMPACTS TO HYDRO TOWERS. (SEE EVALUATION OF HIGHWAY ALIGNMENT ALTERNATIVES DISPLAY) • WIDEN HIGHWAY RIGHT-OF-WAY FROM 90m to 110m (MINIMUM). • NEW PUBLIC ACCESS ALTERNATIVES DEVELOPED WITH CONSIDERATION TO A MINISTRY SPACING CRITERIA OF 3-8km AND THE NEEDS OF THE COMMUNITY (SEE "MEYERS ROAD EAST", "MEYERS ROAD WEST" & "OUIMET CANYON ROAD" DISPLAYS) 	<ul style="list-style-type: none"> • NO SIGNIFICANT CHANGES TO HIGHWAY ALIGNMENT. • WIDEN HIGHWAY RIGHT-OF-WAY FROM 90m to 110m (MINIMUM). • NEW PUBLIC ACCESS ALTERNATIVES DEVELOPED WITH CONSIDERATION TO A MINISTRY SPACING CRITERIA OF 3-8km AND THE NEEDS OF THE COMMUNITY (SEE "DORION LOOP ROAD WEST" & "POPLAR LANE" DISPLAYS)

PROPOSED EVALUATION CRITERIA

The following list of factors is being used to evaluate the alternatives / options. Please provide any comments you may have regarding the factors, criteria, and proposed evaluation on the comment sheets provided.

Factor / Indicator	Level of Importance	Rationale for Significance	Key Factors
Natural Environment <ul style="list-style-type: none"> Extent of Natural Habitat Fragmentation Extent of Impacts to Natural Features Extent of Vegetation Community Removal Potential Impacts to Wildlife and Wildlife Habitat Impact to Fish and Aquatic Resources 	Medium	<ul style="list-style-type: none"> Natural Environment has medium relevance in the decision-making process. Minimizing potential impacts to undisturbed natural areas and water features is considered important; however, these potential impacts must be weighed against the benefits of a four-laned highway that improves future traffic operations and meets current design standards. 	<ul style="list-style-type: none"> Fragmenting undisturbed natural areas, and impacting significant natural features and terrestrial and aquatic Species at Risk are considered to be key factors for the natural environment.
Socio-Economic and Cultural Environment <ul style="list-style-type: none"> Residents and Business Displacement Property Requirements Noise Archaeological Resources 	Medium	<ul style="list-style-type: none"> Socio-Economic and Cultural Environment has medium relevance in the decision-making process. While it is desirable to minimize property takings and impacts, and potential noise impacts, these potential impacts must be weighed against the benefits of a four-laned highway that improves future traffic operations and meets current design standards. 	<ul style="list-style-type: none"> Displacement of existing residences is considered to be the key factor for the socio-economic environment since displacement is permanent. Other socio-economic and cultural factors have the potential to be mitigated.
Transportation/Engineering <ul style="list-style-type: none"> Flexibility to Accommodate Municipal Road Connections Highway Geometrics Flexibility to Accommodate Future Interchanges Intersection Spacing Requirements (3 - 8 km) Complexity and Difficulty of Construction Geotechnical Suitability Impacts to Utilities Structures 	High	<ul style="list-style-type: none"> Transportation is the key factor in the decision-making process since the overall purpose of the highway planning and design project is to develop a proposed plan that accommodates future traffic operations and meets current design standards. 	<ul style="list-style-type: none"> Meeting current design standards is considered the most important factor. Complexity of construction is the key factor for engineering as the highway must remain open to traffic at all times and accesses must be maintained.
Cost <ul style="list-style-type: none"> Cost including Construction, Utility Relocation, and Property Requirement 	Medium	<ul style="list-style-type: none"> Cost has medium relevance in the decision-making process. While a cost-effective plan is required, improvements to future traffic operations and meeting current design standards are considered at a higher significance relative to cost. 	<ul style="list-style-type: none"> Construction cost is considered to be the key factor as it forms the majority of the overall costs.

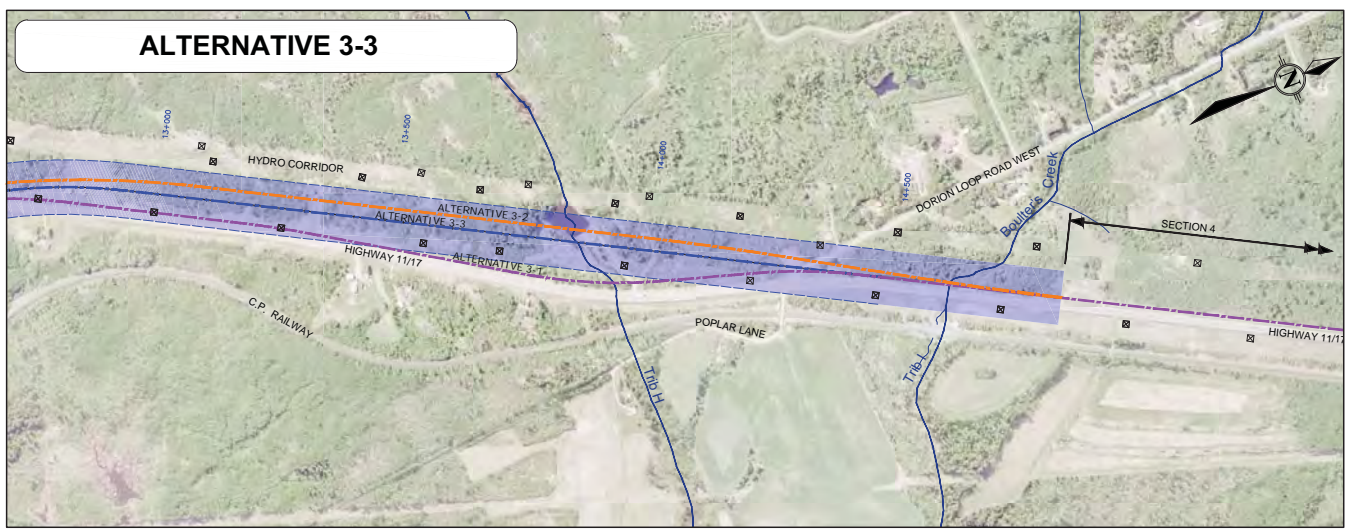
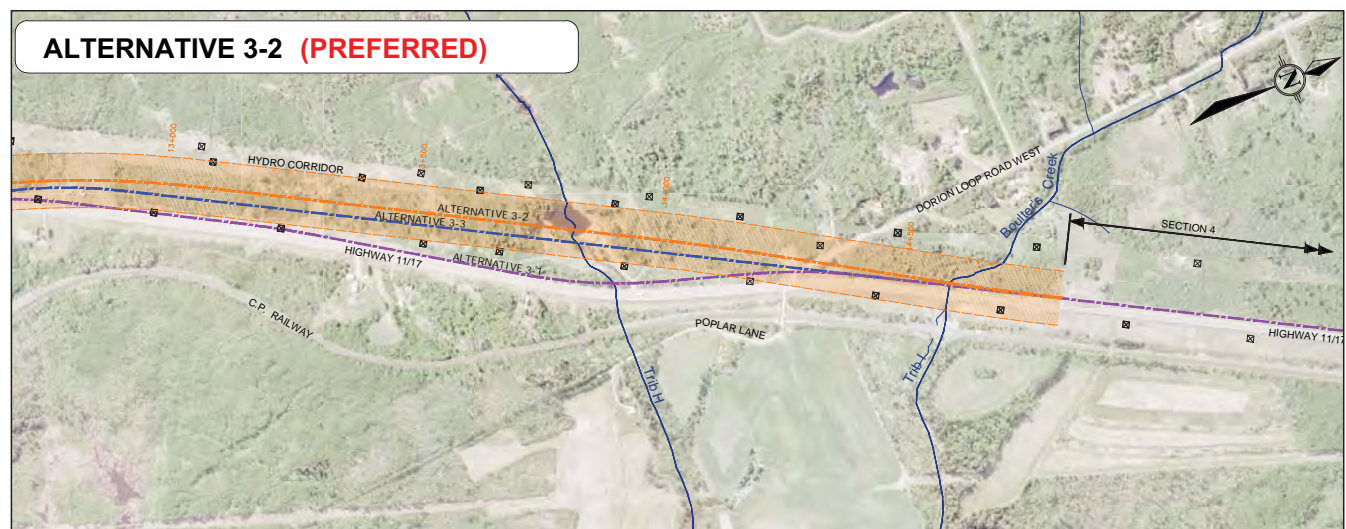
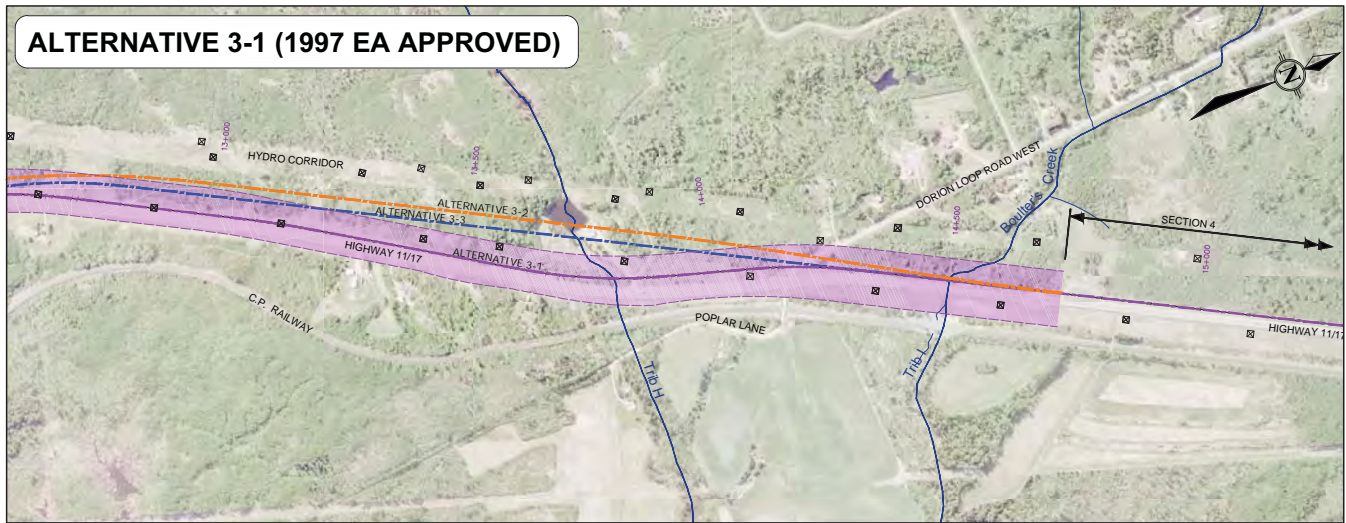
EVALUATION OF HIGHWAY ALIGNMENT ALTERNATIVES - SECTION 2



Evaluation of Highway 11/17 Alignment Alternatives SECTION 2				
Factor / Indicator	Alternative 2-1 (1997 EA Approved Plan)	Alternative 2-2	Alternative 2-3	Comments
Natural Environment <ul style="list-style-type: none"> Extent of Natural Habitat Fragmentation Impacts to Natural Features Extent of Vegetation Community Removal Potential Impacts to Wildlife and Wildlife Habitat Impact to Fish and Aquatic Resources 				<ul style="list-style-type: none"> Alternative 2-1 will result in minor habitat fragmentation whereas Alternatives 2-2 and 2-3 will cause greater habitat fragmentation. Alternative 2-1 will minimize impacts to significant woodland area, wetlands, and rock barren (potential Whip-Poor-Will habitat). Alternative 2-2 will result in minor impacts to the significant woodland area but higher impacts to rock barren areas. Alternative 2-3 will result in direct impacts to the significant woodland area and the highest impact to rock barren areas. Alternative 2-1 will require the least amount of vegetation removal because this alignment reuses a portion of existing Highway 11/17. Alternatives 2-2 and 2-3 will require greater extents of vegetation removal. All Alternatives will require crossings over Tributaries C, D, E, F, and G. Alternative 2-1 is not preferred because it is anticipated to have greater impacts to batfish ponds.
Category Summary • Alternative 2-1 is preferred from a natural environment perspective.				
Socio-Economic and Cultural Environment <ul style="list-style-type: none"> Residents and Business Displacement Property Requirements Noise Archaeological Resources 				<ul style="list-style-type: none"> All Alternatives will impact the private batfish operation, however, Alternative 2-1 causes the least impacts to private batfish ponds. Alternative 2-1 is anticipated to impact 13 properties; Alternative 2-2 is anticipated to impact 11 properties and Alternative 2-3 is anticipated to impact 12 properties. 2 residential and/or business displacements result with all three alternatives. Alternative 2-1 has the lowest property requirement by area, though all have similar total property requirements. Alternative 2-2 will impact the fewest noise / air quality sensitive areas. All alternatives require archaeological assessment.
Category Summary • Alternative 2-2 is preferred from a socio-economic and cultural perspective.				
Transportation/Engineering <ul style="list-style-type: none"> Flexibility to Accommodate Municipal Road Connections Highway Geometrics Flexibility to Accommodate Future Interchanges Complexity and Difficulty of Construction Geotechnical suitability Impacts to Utilities Structures 				<ul style="list-style-type: none"> All Alternatives will meet the projected traffic demand and enhance highway safety. Alternative 2-2 will offer slightly better highway geometrics, and will accommodate future municipal road connections. Alternative 2-2 allows for better construction staging which reduces the impacts of traffic during construction. Alternative 2-2 allows for a slightly better skew at the CPR bridge crossing and reduces CPR bridge length. All Alternatives will have similar impacts to utility towers.
Category Summary • Alternative 2-2 is preferred from a transportation / engineering perspective.				
Cost <ul style="list-style-type: none"> Cost including Construction, Utility Relocation and Property Requirement 				<ul style="list-style-type: none"> Alternative 2-2 has a lower construction cost whereas Alternatives 2-1 and 2-3 have higher construction costs.
Category Summary • Alternative 2-2 is preferred from a cost perspective.				
OVERALL EVALUATION		 PREFERRED		Overall, Alternative 2-2 is preferred for the following reasons: <ul style="list-style-type: none"> Retains most of batfish ponds between Meyers Road and CPR; Lowest property impact and displacement Minimizes impact to significant woodland area and potential Whip-Poor-Will habitat; Impacts fewer noise / air quality sensitive areas; Has better construction staging; Slightly better skew on the CPR structure and geometrics; and Lower cost.



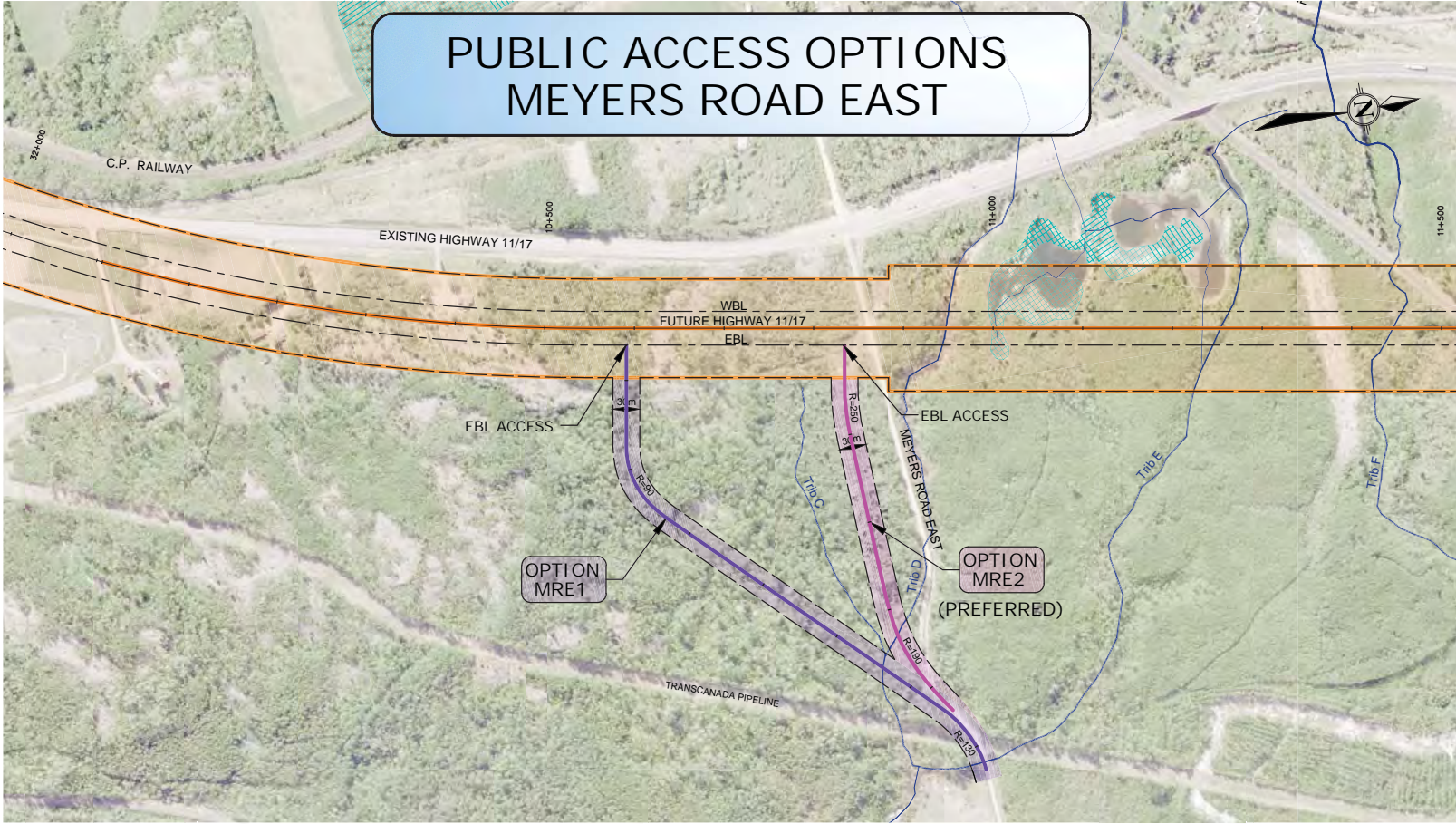
EVALUATION OF HIGHWAY ALIGNMENT ALTERNATIVES - SECTION 3



Analysis & Evaluation of Highway Alignment Alternatives SECTION 3				
Factor / Indicator	Alternative 3-1 (1997 EA Approved Plan)	Alternative 3-2	Alternative 3-3	Comments
Natural Environment <ul style="list-style-type: none"> Extent of Natural Habitat Fragmentation Impacts to Natural Features Extent of Vegetation Community Removal Potential Impacts to Wildlife and Wildlife Habitat Impact to Fish and Aquatic Resources 				<ul style="list-style-type: none"> Alternative 3-1 will result in minor habitat fragmentation whereas Alternatives 3-2 and 3-3 will cause greater habitat fragmentation. Alternative 3-1 will minimize impacts to significant natural features (i.e. wetlands), whereas Alternatives 3-2 and 3-3 will result in greater impacts to wetlands. Alternative 3-1 avoids impacts to the private baitfish pond while Alternatives 3-2 and 3-3 impacts the private baitfish pond. All alternatives will require a crossing over Tributary H and Tributary I / Boulter's Creek.
Category Summary <ul style="list-style-type: none"> Residents and Business Displacement Property Requirements Noise Archaeological Resources 				<ul style="list-style-type: none"> Alternative 3-1 is anticipated to impact 11 properties; Alternative 3-2 is anticipated to impact 7 properties, and Alternative 3-3 is anticipated to impact 7 properties. 3 residential and/or business displacements result with all three alternatives. Alternative 3 has the lowest property requirement by area, though all have similar total property requirements. Alternative 3-2 will impact fewer noise / air quality sensitive areas. All alternatives require archaeological assessment.
Category Summary <ul style="list-style-type: none"> Highway Geometrics Complexity and Difficulty of Construction Geotechnical suitability Impacts to Utilities 				<ul style="list-style-type: none"> All Alternatives meet the projected traffic demand and enhances highway safety. However, Alternative 3-2 offers better highway geometrics. Alternative 3-2 will result in fewer disruptions to traffic during construction as it allows for better construction staging. Alternative 3-2 will impact the fewest hydro towers.
Category Summary <ul style="list-style-type: none"> Cost including Construction, Utility Relocation and Property Requirement 				<ul style="list-style-type: none"> Alternative 3-2 has a lower construction cost whereas Alternatives 3-1 and 3-3 require higher construction costs.
Category Summary	<ul style="list-style-type: none"> Alternative 3-2 is preferred from a cost perspective. 			<ul style="list-style-type: none"> Alternative 3-1 is preferred from a natural environment perspective. Alternative 3-2 is preferred from a socio-economic and cultural perspective. Alternative 3-2 is preferred from a transportation / engineering perspective.
OVERALL EVALUATION				Overall, Alternative 3-2 is preferred for the following reasons: <ul style="list-style-type: none"> Lower property impact and displacements; Impacts fewer noise / air quality sensitive areas; Has better highway geometrics; Has better construction staging; Impacts fewer hydro towers; and Lower cost.



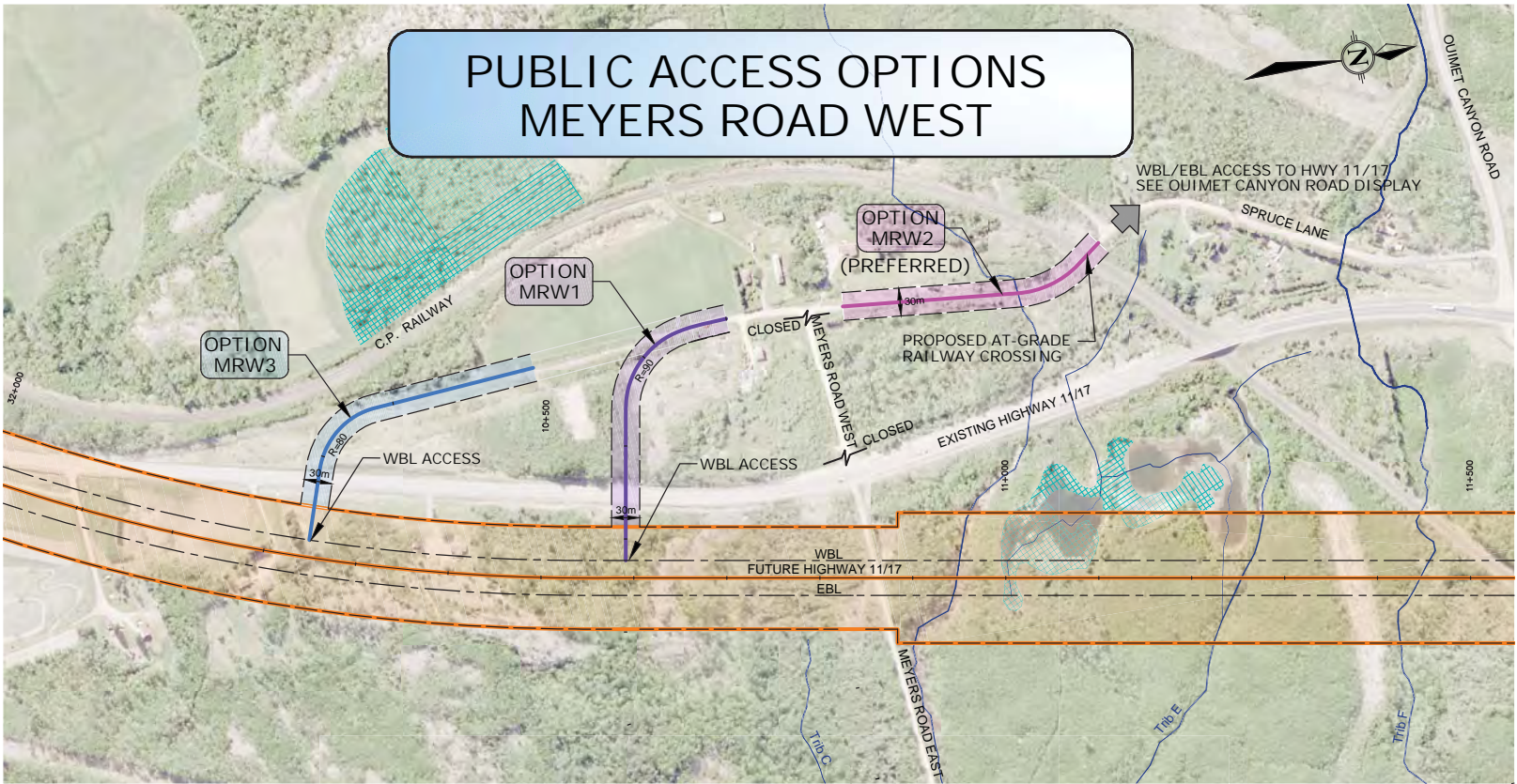
PUBLIC ACCESS OPTIONS MEYERS ROAD EAST



Evaluation of Meyers Road East Options			
Factor / Indicator	Option MRE1 (1997 EA Approved Concept)	Option MRE2	Comments
Natural Environment <ul style="list-style-type: none"> Extent of Natural Habitat Fragmentation Impacts to Natural Features Extent of Vegetation Community Removal Potential Impacts to Wildlife and Wildlife Habitat Impact to Fish and Aquatic Resources 	◐	◑	<ul style="list-style-type: none"> MRE2 results in less natural habitat fragmentation compared to MRE1 given its shorter length and closer proximity to existing Meyers Road East. MRE1 has greater potential to disrupt Whip-Poor-Will habitat in the area. MRE2 requires less vegetation removal. Similar impacts to wildlife and wildlife habitat. MRE1 and MRE2 require respective crossings of Tributary C and Tributary D.
Category Summary • MRE2 is preferred from a natural environment perspective.			
Socio-Economic and Cultural Environment <ul style="list-style-type: none"> Residents and Business Displacement Property Requirements Noise Archaeological Resources 	◐	◑	<ul style="list-style-type: none"> No residential or business displacement. MRE2 has lower property requirements. None of the options result in changes to noise / air quality sensitive receptors. All options may require further archaeological assessment.
Category Summary • MRE2 is preferred from a socio-economic and cultural environment perspective.			
Transportation / Engineering <ul style="list-style-type: none"> Highway Geometrics Intersection Spacing Requirements (3 - 8km) Complexity and Difficulty of Construction Geotechnical Suitability Impacts to Utilities 	◐	◑	<ul style="list-style-type: none"> The road profile for MRE1 results in steeper roadway grades and more cut. MRE2 in conjunction with MRW1 provide full access to Highway 11/17 but do not meet intersection spacing criteria. MRE2 provides right in/right out access only to the eastbound lanes. MRE1 is less desirable given the proposed connection to existing Meyers Road is through potential highly erodible soil. MRE1 requires a longer connection to Highway 11/17. MRE1 crosses the TransCanada pipeline. MRE2 does not have any direct impact to utilities.
Category Summary • MRE2 is preferred from a transportation / engineering perspective.			
Cost <ul style="list-style-type: none"> Cost including Construction, Utility Relocation and Property Requirement 	◐	◑	<ul style="list-style-type: none"> MRE1 is anticipated to result in a higher overall cost compared to MRE2.
Category Summary • MRE2 is preferred from a cost perspective.			
EVALUATION SUMMARY	◐	◑ PREFERRED	Overall, Option MRE2 is preferred for the following reasons: <ul style="list-style-type: none"> Minimizes impact to vegetation and results in less fragmentation of natural habitat; Has fewer impacts to wildlife and wildlife habitat; Shortest connection to Highway 11/17; Improves connection to existing Meyers Road; No impact to the TransCanada Pipeline crossing; and Has lower construction cost.



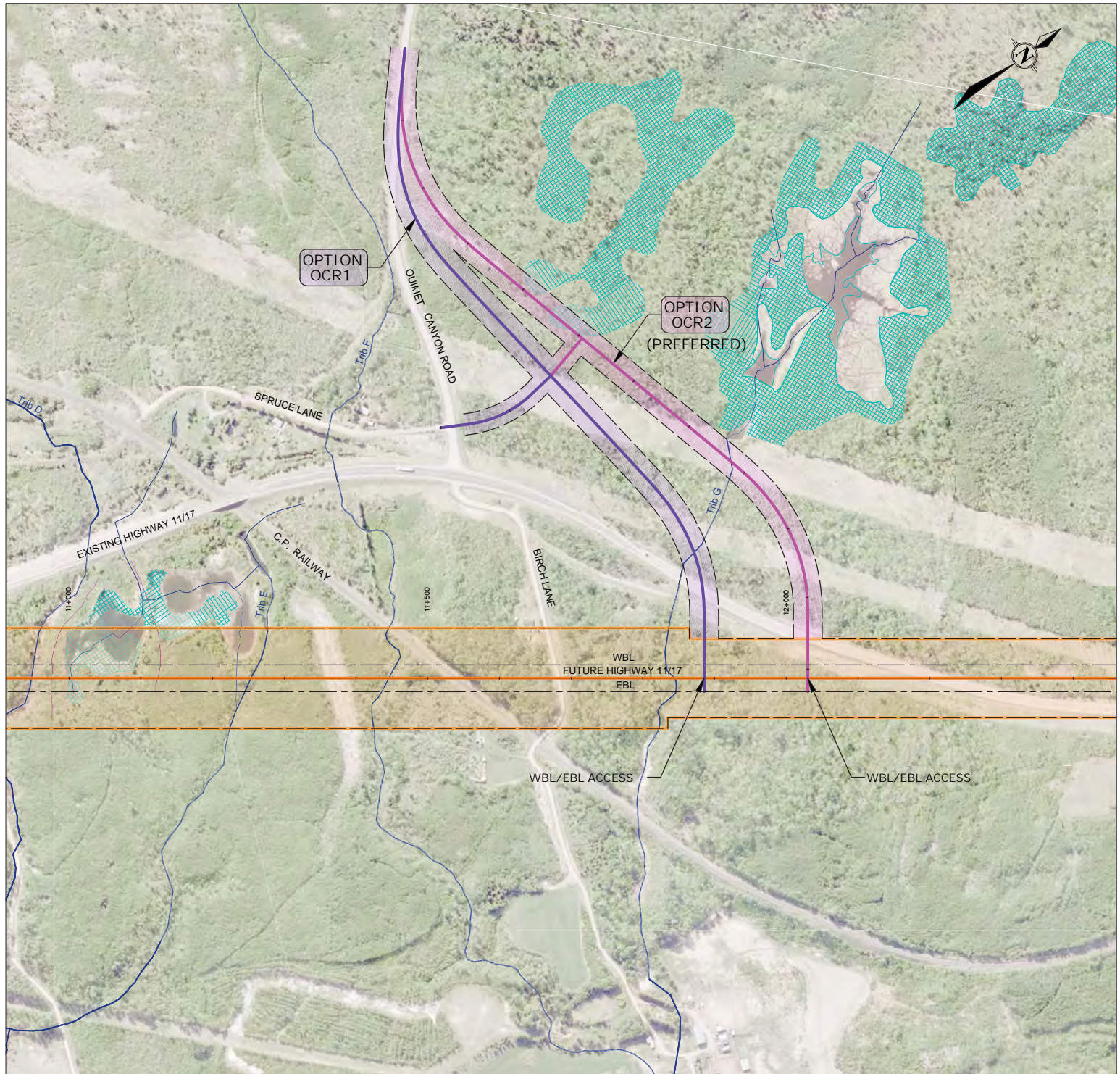
PUBLIC ACCESS OPTIONS MEYERS ROAD WEST



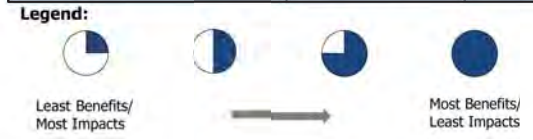
Evaluation of Meyers Road West Options				
Factor / Indicator	Option MRW1 (.997 EA Approved Concept)	Option MRW2	Option MRW3	Comments
Natural Environment <ul style="list-style-type: none"> Extent of Natural Habitat Fragmentation Extent of Impacts to Significant Natural Features Extent of Vegetation Community Removal Potential Impacts to Wildlife and Wildlife Habitat Impact to Fish and Aquatic Resources 	◐	●	◑	<ul style="list-style-type: none"> MRW1 results in the greatest fragmentation of natural habitat while MRW2 results in the least given the MRW2 realignment crosses previously disturbed lands (i.e. abandoned Highway 11/17). Vegetation removal and impacts to wildlife and wildlife habitat are minimized with MRW2. No impact to known fish and aquatic resources.
Category Summary	• MRW2 is preferred from a natural environment perspective.			
Socio-Economic and Cultural Environment <ul style="list-style-type: none"> Residents and Business Displacement Property Requirements Noise Archaeological Resources 	◐	●	◑	<ul style="list-style-type: none"> No residential displacements. Property requirements are greatest with MRW1. MRW2 results in the least impacts to noise / air quality sensitive receptors. Further archaeological assessment will be required for MRW1 and MRW3.
Category Summary	• MRW2 is preferred from a socio-economic and cultural environment perspective			
Transportation / Engineering <ul style="list-style-type: none"> Highway Geometrics Intersection Spacing Requirements (3 - 8km) Complexity and Difficulty of Construction Geotechnical Suitability Impacts to Utilities 	◐	◑	◑	<ul style="list-style-type: none"> The road profile approaching the proposed four-lane highway is less desirable in MRW1 than MRW2 given the need to cross the existing highway. Matching the existing highway grade will make for less complex construction. The new at-grade rail crossing shown as part of MRW2 will be contingent on the closure of the existing rail crossing on Birch Lane. Discussions with CPR are ongoing regarding permitting requirements. MRW1 in conjunction with MRE1 provide full access to Highway 11/17 but do not meet intersection spacing criteria MRW2 provides full (EB/WB) access to Highway via Ouimet Canyon Road. MRW3 provides right in/right out access only to the westbound lanes. No known soil concerns. No direct impacts to utility towers.
Category Summary	• MRW3 is preferred from a transportation / engineering perspective			
Cost <ul style="list-style-type: none"> Cost including Construction, Utility Relocation and Property Requirement 	◐	◑	◑	<ul style="list-style-type: none"> MRW1 will require significantly more earth & rock excavation than MRW3, resulting in a higher cost. MRW2 will require flagging (by CPR) but has the lowest cost overall.
Category Summary	• MRW2 is preferred from a cost perspective.			
EVALUATION SUMMARY	◐	● PREFERRED	◑	<p>Overall, Option MRW2 is preferred for the following reasons (contingent on approvals of the at-grade rail crossing):</p> <ul style="list-style-type: none"> No fragmentation of natural habitat; Minimizes vegetation removal; Minimizes impacts to wildlife and wildlife habitat; Least property impacts; Least impact to noise / air quality sensitive receptors; Provides full access connection of Highway 11/17; No impact to existing utilities; and Has the lowest construction cost. <p>NOTE: SHOULD THE AT-GRADE RAIL CROSSING FOR MRW2 NOT BE APPROVED BY CP RAIL, MRW3 IS THE OPTION THAT WILL BE CARRIED FORTH.</p>



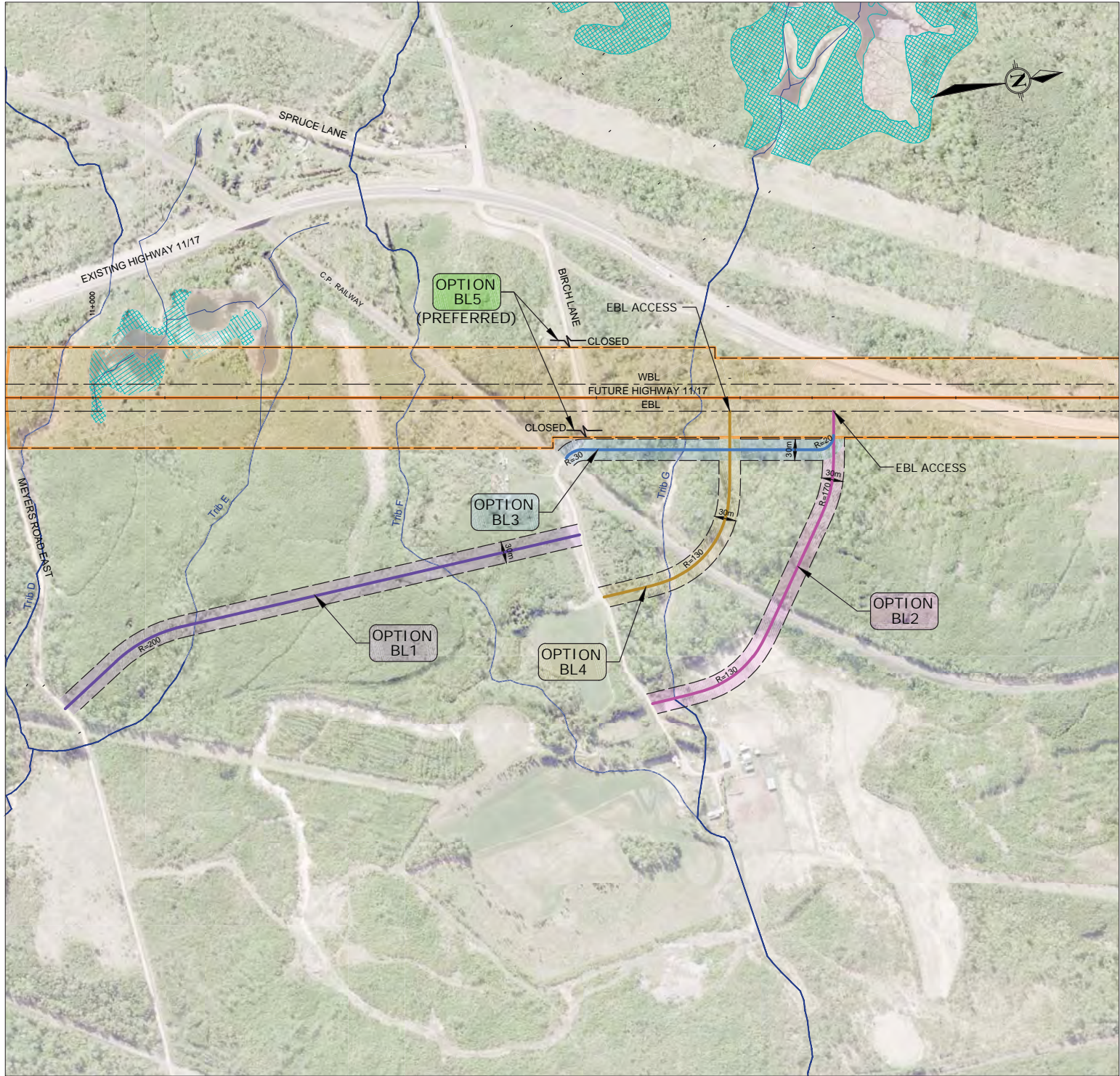
PUBLIC ACCESS OPTIONS OUIMET CANYON ROAD



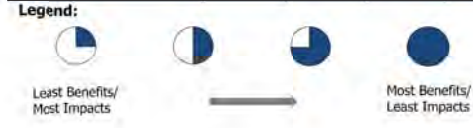
Evaluation of Ouimet Canyon Road Options			
Factor / Indicator	Option OCR1 (1997 EA Approved Concept)	Option OCR2	Comments
Natural Environment <ul style="list-style-type: none"> Extent of Natural Habitat Fragmentation Impacts to Natural Features Extent of Vegetation Community Removal Potential Impacts to Wildlife and Wildlife Habitat Impact to Fish and Aquatic Resources 	◐	◑	<ul style="list-style-type: none"> OCR1 results in less habitat fragmentation than OCR2. OCR2 encroaches into wetland areas (sensitivities not yet known). Both options will require cut through some rock barren, which may serve as potential Whip-Poor-Will habitat. OCR1 requires less vegetation removal than OCR2. OCR1 crosses a portion of Tributary G, but it appears to be at its upstream origins so likely a minor crossing required and fish potential unlikely. OCR2 does not require a watercourse crossing.
Category Summary • OCR1 and OCR2 are preferred equally from a natural environment perspective.			
Socio-Economic and Cultural Environment <ul style="list-style-type: none"> Residents and Business Displacement Property Requirements Noise Archaeological Resources 	◐	◑	<ul style="list-style-type: none"> No residential displacements. Both options have similar property impacts. OCR2 realigns Ouimet Canyon Road further away from 2 noise / air quality sensitive receptors. All options may require further archaeological assessment.
Category Summary • OCR1 and OCR2 are preferred equally from a socio-economic and cultural perspective.			
Transportation / Engineering <ul style="list-style-type: none"> Highway Geometrics Intersection Spacing Requirements (3 - 8km) Complexity and Difficulty of Construction Geotechnical Suitability Impacts to Utilities 	◐	◑	<ul style="list-style-type: none"> The road profile approaching the proposed four-laned highway is less desirable in OCR1 given the requirement to match the existing highway grade. This will allow for less complex construction and is better achieved in OCR2. Both OCR1 and OCR2 provide full access to Highway 11/17 and meet intersection spacing requirements. OCR2 provides less complex staging than OCR1. OCR2 requires a longer extension of Spruce Lane. OCR2 crosses a swamp. No direct impact to hydro transmission towers. Line clearances will be reviewed as the design progresses.
Category Summary • OCR2 is preferred from a transportation / engineering perspective.			
Cost <ul style="list-style-type: none"> Cost including Construction, Utility Relocation and Property Requirement 	◐	◑	<ul style="list-style-type: none"> The cost of both options is similar; neither presents issues requiring cost premiums.
Category Summary • OCR1 and OCR2 are preferred equally from a cost perspective.			
EVALUATION SUMMARY	◐	◑ PREFERRED	Overall, Option OCR2 is preferred for the following reasons: <ul style="list-style-type: none"> No impact to Tributary G; Least impact to noise / air quality sensitive receptors; and Improved constructability / staging.



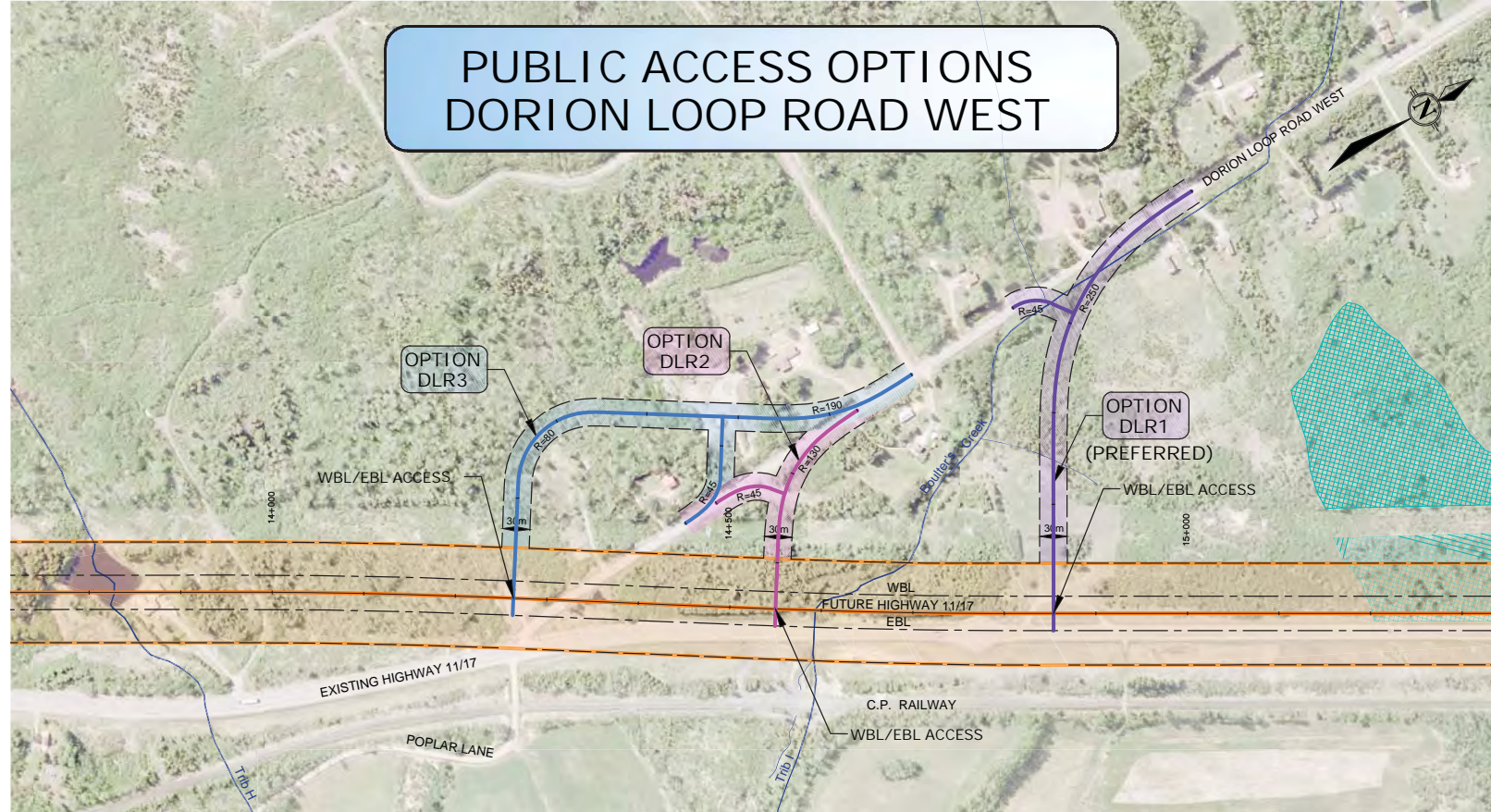
PUBLIC ACCESS OPTIONS BIRCH LANE



Factor / Indicator	Option BL1	Option BL2	Option BL3	Option BL4	Option BL5 (1997 EA Approved Concept)	Comments
Natural Environment <ul style="list-style-type: none"> Extent of Natural Habitat Fragmentation Extent of Impacts to Significant Natural Features Extent of Vegetation Community Removal Potential Impacts to Wildlife and Wildlife Habitat Impact to Fish and Aquatic Resources 						<ul style="list-style-type: none"> BL1 results in the greatest impact to the natural environment due to its length; BL2 results in less impact; BL3 and BL4 result in greater impacts to significant woodland area. BL1 and BL2 will not impact significant woodland area. BL1 requires two watercourse crossings (Tributaries E and F). BL2 and BL4 require two watercourse crossing (Tributary G and Unnamed) and will impact significant woodland area. BL3 requires two watercourse crossings (Tributary G and Unnamed) and will also impact the woodland. BL5 results in no impacts to the natural environment.
Category Summary Socio-Economic and Cultural Environment <ul style="list-style-type: none"> Residents and Business Displacement Property Requirements Noise Archaeological Resources 						<ul style="list-style-type: none"> BL5 is preferred from a natural environment perspective. BL5 displaces 1 resident / business operabr. 2 additional properties adjacent to existing BirchLane are not occupied. BL1 bisects one privately-owned property; BL2 and BL4 bisect one property (Crown Land); BL3 traverses one property (Crown Land). BL1, BL2, BL3, and BL4 impact the same noise / air quality sensitive receptors. BL5 does not impact any noise / air quality sensitive receptors. All road options may require further archaeological assessments.
Category Summary Transportation / Engineering <ul style="list-style-type: none"> Highway Geometrics Intersection Spacing Requirements (3 - 8km) Complexity and Difficulty of Construction Geotechnical suitability Impacts to Utilities 						<ul style="list-style-type: none"> BL5 is preferred from a socio-economic and cultural perspective. BL1, BL2 and BL4 meet design standards / criteria for a public road. BL3 is intended as a private (driveway) access only. BL1 provides right in/right out access only to the eastbound lanes via MRE2. BL2 in conjunction with OCR2, as well as BL4 in conjunction with OCR1, provide full access to Highway 11/17 and meet intersection spacing requirements. At-grade rail crossings are required for BL2 and BL4 whereas; BL3 maintains the existing crossing. The BL1 connection to Meyers Road East will require a large earth cut. Steep grades are required for BL2 and BL4 connectors to Highway 11/17.
Category Summary Cost <ul style="list-style-type: none"> Cost including Construction, Utility Relocation and Property Requirement 						<ul style="list-style-type: none"> BL5 is preferred from a transportation / engineering perspective. BL1 has the highest cost, followed by BL4, BL2 and BL3 respectively. BL5 is the least expensive option.
Category Summary EVALUATION SUMMARY						<ul style="list-style-type: none"> BL5 is preferred from a cost perspective. Overall, Option BL5 is preferred for the following reasons: <ul style="list-style-type: none"> Results in no impacts to the natural environment; Does not impact any noise sensitive receptors; and Has the lowest cost.



PUBLIC ACCESS OPTIONS DORION LOOP ROAD WEST

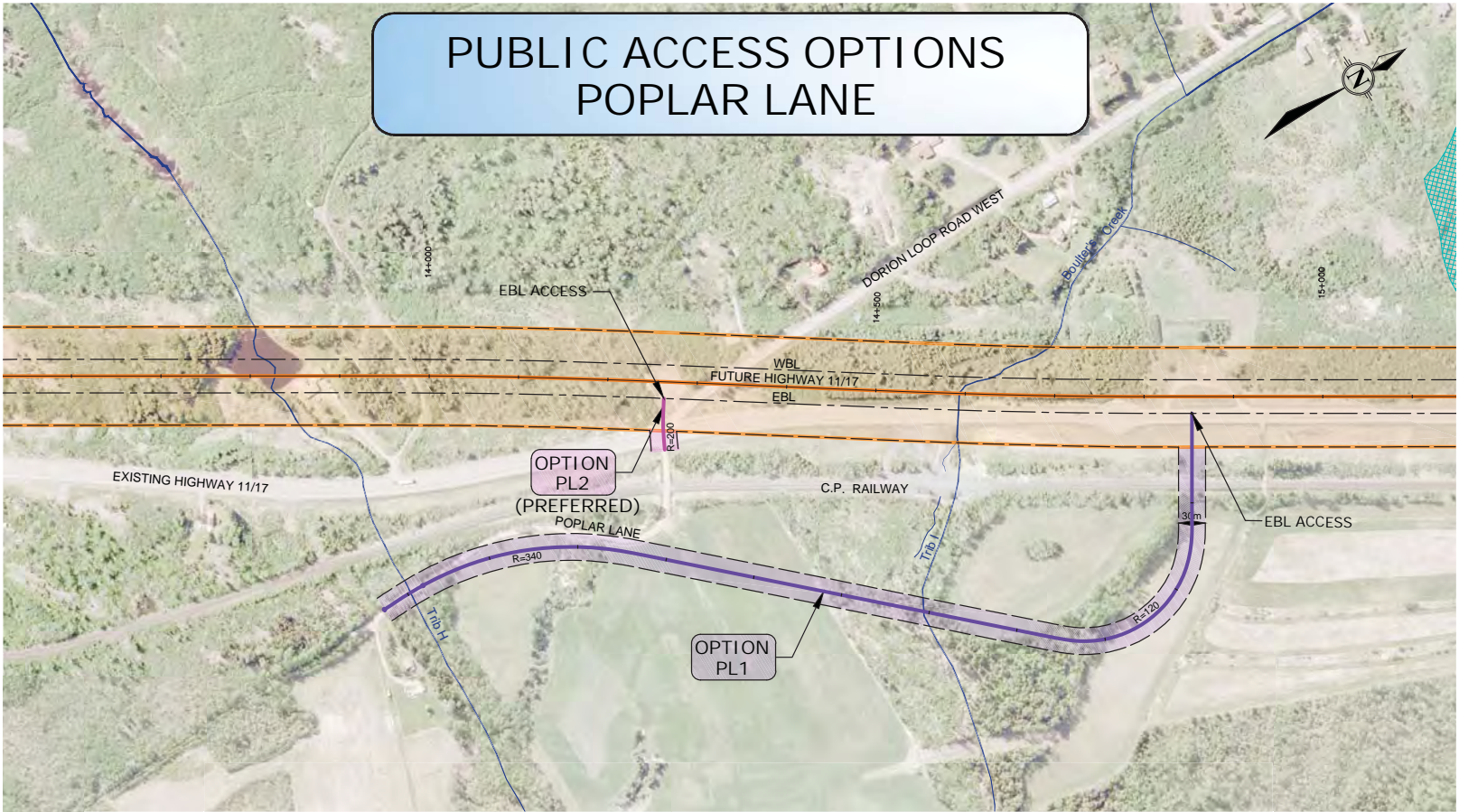


Evaluation of Dorion Loop Road West Options				
Factor / Indicator	Option DLR1 (1997 EA Approved Concept)	Option DLR2	Option DLR3	Comments
Natural Environment <ul style="list-style-type: none"> Extent of Natural Habitat Fragmentation Impacts to Natural Features Extent of Vegetation Community Removal Potential Impacts to Wildlife and Wildlife Habitat Impact to Fish and Aquatic Resources 				<ul style="list-style-type: none"> DLR2 results in the least impact to the natural environment given its close proximity to existing Dorion Loop Road and shores length. None of the options are anticipated to impact any significant natural features. DLR2 results in limited natural habitat fragmentation and vegetation removal compared to DLR1 and DLR3. DLR2 has limited impacts to wildlife or wildlife habitat compared to DLR1 and DLR3. DLR2 does not impact watercourses. DLR3 requires crossing of existing ditchlines at connections to the existing highway, and DLR1 potentially requires channel realignment of Tributary I.
Category Summary	• DLR2 is preferred from a natural environment perspective.			
Socio-Economic and Cultural Environment <ul style="list-style-type: none"> Residents and Business Displacement Property Requirements Noise Archaeological Resources 				<ul style="list-style-type: none"> No residential or business displacements. DLR1 results in impacts to at least 2 residential properties. DLR2 impacts 1 residential property and DLR3 impacts 3 residential properties. DLR1 results in the least impacts to noise / air quality sensitive receptors. All options may require further archaeological assessment.
Category Summary	• DLR1 is preferred from a socio-economic / cultural perspective.			
Transportation / Engineering <ul style="list-style-type: none"> Highway Geometrics Intersection Spacing Requirements (3 - 8km) Complexity and Difficulty of Construction Geotechnical suitability Impacts to Utilities 				<ul style="list-style-type: none"> DLR1 results in better geometrics and connection to Highway 11/17 (e.g. allows for a more gradual connection to existing Dorion Loop Road westerly). All options provide full access to Highway 11/17 and meet intersection spacing criteria. DLR2 requires a temporary closure of Dorion Loop Road West to enable construction. The road profile for DLR2 is the least desirable due to steep grades and significant rock cut. DLR3 results in the longest connection to Highway 11/17. There is a higher risk of encountering contaminated soil as a result of past commercial land use with DLR1. No direct impact to existing utilities with all options.
Category Summary	• DLR1 is preferred from a transportation / engineering perspective.			
Cost <ul style="list-style-type: none"> Cost including Construction, Utility Relocation and Property Requirement 				<ul style="list-style-type: none"> DLR1 is anticipated to have the lowest overall costs.
Category Summary	• DLR1 is preferred from a cost perspective.			
EVALUATION SUMMARY	 PREFERRED			Overall, Option DLR1 is preferred for the following reasons: <ul style="list-style-type: none"> Vegetation impacts consist of removal of culturally impacted second growth communities; Least impact to noise / air quality sensitive areas; Better geometrics and connection to Highway 11/17; Allows for a more gradual connection to existing Dorion Loop Road westerly; and Does not require road closure to construct.

Legend:



PUBLIC ACCESS OPTIONS POPLAR LANE

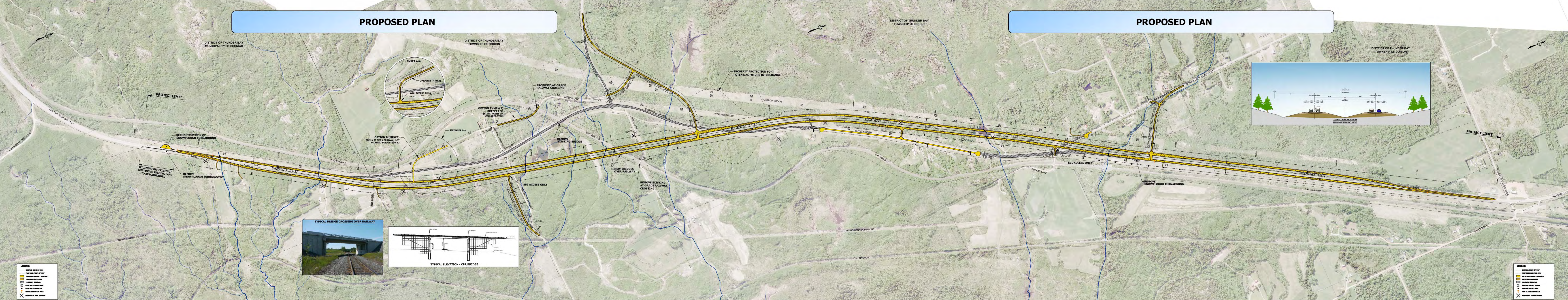


Evaluation of Poplar Lane Options			
Factor / Indicator	Option PL1 (1997 EA Approved Concept)	Option PL2	Comments
Natural Environment <ul style="list-style-type: none"> Extent of Natural Habitat Fragmentation Impacts to Natural Features Extent of Vegetation Community Removal Potential Impacts to Wildlife and Wildlife Habitat Impact to Fish and Aquatic Resources 			<ul style="list-style-type: none"> PL2 results in nonnatural habitat fragmentation or impacts to significant natural features, whereas PL1 fragments a wetland area. PL2 has limited vegetation removal compared to PL1. PL2 has a larger footprint impact to wildlife or wildlife habitat compared to PL1. PL2 requires a crossing of a roadside ditch along Dorion Loop Road West, whereas PL1 will require multiple crossings of watercourses (including Tributary 1) potentially supporting fish.
Category Summary	<ul style="list-style-type: none"> PL2 is preferred from a natural environment perspective. 		
Socio-Economic and Cultural Environment <ul style="list-style-type: none"> Residences and Business Displacement Property Requirements Noise Archaeological Resources 			<ul style="list-style-type: none"> Neither option displaces residences or businesses. PL2 requires additional municipal property whereas PL1 will require property from two (2) private owners. PL1 requires a new at-grade rail crossing. PL2 does not impact additional noise / air quality sensitive receptors. Both options may require further archaeological assessments.
Category Summary	<ul style="list-style-type: none"> PL2 is preferred from a socio-economic and cultural perspective. 		
Transportation / Engineering <ul style="list-style-type: none"> Highway Geometrics Intersection Spacing Requirements (3 - 8km) Complexity and Difficulty of Construction Geotechnical Suitability Impacts to Utilities 			<ul style="list-style-type: none"> Existing Poplar Lane is retained with PL2. PL1 in conjunction with DL1 provides full access to Highway 11/17 and meets intersection spacing requirements; and right in/right out only with eastbound lanes in conjunction with DL2 and DL3. PL2 in conjunction with DL1 and DL2 provides right in/right out only access to eastbound lanes; and full access to Highway 11/17 in conjunction with DL3 and meets intersection spacing requirements. No known soil concerns. PL1 may impact hydro poles.
Category Summary	<ul style="list-style-type: none"> PL2 is preferred from a transportation / engineering perspective. 		
Cost <ul style="list-style-type: none"> Cost including Construction, Utility Relocation and Property Requirement 			<ul style="list-style-type: none"> Alternative PL1 is anticipated to result in a higher cost than PL2 for construction, utility relocation and property requirement.
Category Summary	<ul style="list-style-type: none"> PL2 is preferred from a cost perspective. 		
EVALUATION SUMMARY		 REFERRED	Overall, Option PL2 is preferred for the following reasons: <ul style="list-style-type: none"> No impact to Tributary 1; Footprint impact limited to previously disturbed area; Least property impacts; Shorter connection to Highway 11/17; Uses existing at-grade railway crossing; No impact to existing utilities; and Lower construction cost.



PROPOSED PLAN

PROPOSED PLAN

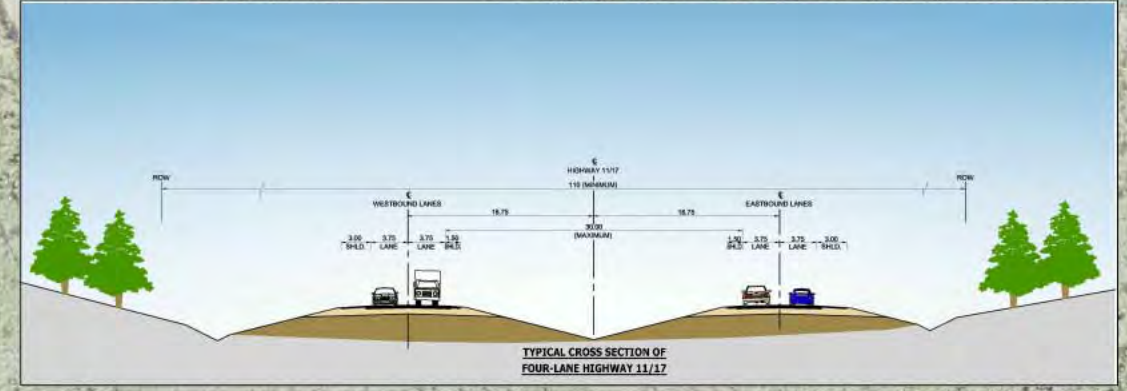
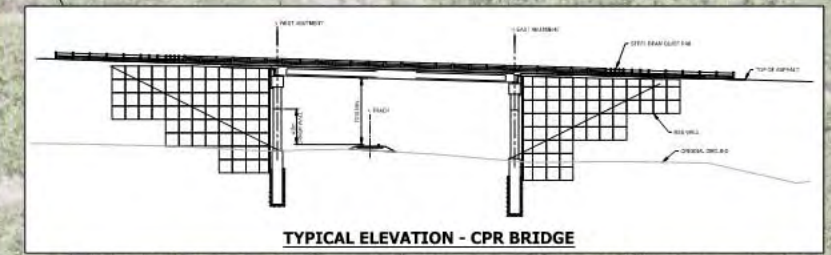


LEGEND:

- EXISTING ROADWAY
- PROPOSED ROADWAY
- PROPOSED ADJUTANT SERVICE
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING HYDRO CORRIDOR
- EXISTING HYDRO TOWER
- EXISTING HYDRO POLE
- NEW ILLUMINATION POLE
- EXISTING UTILITIES

LEGEND:

- EXISTING ROADWAY
- PROPOSED ROADWAY
- PROPOSED ADJUTANT SERVICE
- PROPOSED BRIDGE
- EXISTING BRIDGE
- EXISTING HYDRO CORRIDOR
- EXISTING HYDRO TOWER
- EXISTING HYDRO POLE
- NEW ILLUMINATION POLE
- EXISTING UTILITIES



POTENTIAL IMPACTS FROM THE PROPOSED CHANGES TO THE HIGHWAY 11/17 PLAN

Factor	Potential Impacts Resulting From:				
	Increasing Right-of-Way Width from 90 m to 110 m	Highway Alignment Changes	Public Access Road Relocations		
			Reconfiguration / Partial Access at Meyers Road	Realignment of Ouimet Canyon Road	Reconfiguration / Partial Access at Dorion Loop Road West
Natural Environment					
Vegetation	<ul style="list-style-type: none"> Increasing the right-of-way only incrementally increases the footprint from the 1997 ESR, thus, there are incremental impacts to the natural environment. 	<ul style="list-style-type: none"> Minimizes impacts to significant woodland. Specific natural environmental impacts will be determined once the detail design plan is developed. 	<ul style="list-style-type: none"> Significant impacts to the natural environment are not anticipated. Specific natural environmental impacts will be determined once the detail design plan is developed. 		
Wildlife					
Aquatic Resources					
Social and Cultural Environment					
Archaeology	<ul style="list-style-type: none"> An archaeological assessment is being carried out to determine potential archaeological impacts in all previously unevaluated undisturbed areas. 				
Land Use	<ul style="list-style-type: none"> Proposed changes result in new property impacts. MTO will negotiate with individual owners for property purchase in accordance with standard MTO procedures. Changes to the highway alignment shift the highway closer to adjacent Noise Sensitive Areas. A noise impact assessment will be undertaken and the findings will be presented at PIC #2. 				
Public Access	<ul style="list-style-type: none"> No change 	<ul style="list-style-type: none"> No change 	<ul style="list-style-type: none"> Although the proposed changes may increase travel time to the adjacent development at some locations, access management is improved by limiting the number of full access intersections while balancing community needs with consideration of accommodating future interchanges. The proposed changes to full public access locations more closely comply with intersection spacing requirements. 		
Engineering					
Utilities and Municipal Services	<ul style="list-style-type: none"> Increasing the right-of-way width does not change the conflicts identified in the 1997 ESR. 	<ul style="list-style-type: none"> Proposed changes result in fewer impacts to hydro transmission lines / towers. MTO will consult with any affected utility companies to develop relocation plans to suit the detail design plan. 			

Specific impacts of the Highway 11/17 four-laning plan will be further reviewed and mitigation measures will be developed later in the detail design stage to address these impacts. The more detailed assessment of impacts and the recommended mitigation measures will be presented at the next Public Information Centre (PIC #2).

MINERAL AGGREGATES

Mineral aggregates, such as good quality sand and gravel, are a vital construction material required for Ministry of Transportation undertakings. The *Aggregate Resources Act* ensures that environmental concerns associated with aggregate extraction operations are addressed. In accordance with this legislation, MTO reviews possible environmental concerns associated with aggregate operations (excluding commercial licensed operations) expressed by Government Agencies, local municipalities and the public, when applicable to site-specific projects.

WASTE MANAGEMENT

A MTO and Ministry of the Environment and Climate Change (MOECC) protocol identifies material-by-material management options both inside and outside the construction area, which includes the right-of-way and property with a boundary contiguous to the right-of-way. All excess materials may be reused or recycled. Inside the right-of-way, materials such as asphalt, concrete, swamp material, wood, earth, and rock may be reused as a construction material or managed as fill. Materials also may be temporarily stockpiled in preparation for these uses.

Management of excess materials outside the right-of-way, stockpiling, and wood management depends on local circumstances.

Site protection is provided by the imposition of constraints and for the protection of water and air quality adapted from existing legislation. The constraint on the management of these materials also involves discussions and written agreements with property owners, and may involve consultation with MOECC and other authorities. Where an excess material management option cannot meet constraints, another option must be pursued, or the material must be disposed of as waste.

EMERGENCY SPILL RESPONSE

Direct responsibility for containment and clean-up of spills and abandoned materials on MTO highway facilities rests with the owner of the material and person in control of the material at the time of the spill or abandonment.

Where spills or abandoned materials occur on MTO highway facilities, MTO may assist where persons legally responsible cannot be located or not able to respond. MTO assistance may include notification of authorities, provision of equipment and materials, and traffic management.

In the event of a spill of MTO material by MTO staff, MTO undertakes all notification, containment and cleanup responsibilities required by provincial and federal legislation.

NEXT STEPS

The Project Team will:

Activity	Anticipated Timeline
<ul style="list-style-type: none"> Review the comments received during and following PIC #1 and respond to any questions. 	<p>Spring / Summer 2016</p>
<ul style="list-style-type: none"> Confirm the preferred changes to the approved four-lane plan. 	<p>Spring / Summer 2016</p>
<ul style="list-style-type: none"> Prepare and the Addendum to the 1997 <i>Environmental Study Report</i> and submit for a 30-day public review period. 	<p>Spring / Summer 2016</p>
<ul style="list-style-type: none"> Develop the Detail Design Plan. 	<p>Summer/Fall 2016 / Winter 2017</p>
<ul style="list-style-type: none"> Hold a second Public Information Centre to present the Detail Design Plan, and the anticipated environmental impacts and mitigation measures. 	<p>Fall 2016</p>
<ul style="list-style-type: none"> Prepare the Design and Construction Report and submit for a 30-day public review period. 	<p>Fall 2017</p>
<ul style="list-style-type: none"> Submit the project for tender. 	<p>Winter 2018</p>

Please visit the project website for updates at:

www.hwyl1-17four-laningfromouimettdorion.ca

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

Information collected during this study will be used to assist the Ministry of Transportation in meeting the requirements of the *Ontario Environmental Assessment Act*. This material will be maintained on file for use during the study and may be included in the study documentation.

Information collected will be used in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

You are encouraged to contact the Project Team members noted below if you have any questions or concerns regarding the above information.

CONTACT INFORMATION

You are encouraged to contact the Project Team members noted below if you have questions or concerns.

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*Please feel free to ask questions and fill out a comment sheet before you leave. Comments can be left in the box provided or forwarded to the Project Team by **Friday, May 13, 2016**.*