

Highway 11

WASHAGO to GRAVENHURST



Environmental Assessment &
Preliminary Design Study

Welcome to the First Public Information Centre For the

Highway 11 Class Environmental Assessment and Preliminary Design Study

From 1.0 km South of Simcoe Road 169 Northerly to Muskoka Road 169

G.W.P. 5817-04-00

February 16th, 2010

Please Sign In Here

Members of the Project Team are available to discuss and answer any questions you may have.



Purpose of PIC #1

- ❖ **The purpose of this Public Information Centre (PIC) is to present and receive feedback on:**
 - Study Background and the Study Area
 - Study Purpose and Process
 - Timing of Study Activities
 - Existing Conditions
 - Need and Justification for Improvements to Highway 11
 - Evaluation of “Alternatives to the Undertaking”
 - Alternatives to be Considered
 - Evaluation Criteria and Process
 - What’s Next?

Your input on each of these – and other issues – is important to us!



Study Background

Simcoe Area Transportation Network Needs Assessment Study (the “Simcoe Study”) (2002)

- ❖ Identified existing and/or future transportation problems and made recommendations for addressing the identified problems.
- ❖ Recommended the provision of additional highway capacity between Barrie and Gravenhurst:
 - Via widening / upgrading Highway 11 or a new corridor between Highways 400 and 11.

Highway 11 Study Design – Barrie to Gravenhurst (2005)

- ❖ Built upon the work undertaken as part of the Simcoe Study.
- ❖ Recommendation was to widen / upgrade the existing Highway 11 corridor, based on:
 - Direct access onto Highway 11 is not considered appropriate in the long-term.
 - Would directly address capacity requirements.
 - A new corridor would not divert enough traffic from Highway 11 to avoid the need to widen / upgrade Highway 11.
 - Any new corridor alternative would result in significant impacts to the natural environment.
 - In addition to impacts associated with upgrading Highway 11.
- ❖ Identified the process to be followed during the subsequent EA study, including the consultation requirements.



Current Study

- ❖ Initiated in response to the recommendations of the Highway 11 Study Design.
- ❖ To identify possible interim and long-term improvement strategies for this section of the Highway 11 corridor.
- ❖ The ultimate vision is a controlled access freeway, which will allow access to the highway at interchange locations only.
- ❖ In particular, this study will consider the following:
 - Closure of at-grade intersections and entrances;
 - Increasing the number of lanes along Highway 11;
 - Improvements to existing interchanges; and,
 - New interchanges and service road connections.
- ❖ This study includes the section of the Highway 11 corridor from 1.0 km south of Simcoe Road 169 northerly approximately 20 km to Muskoka Road 169.



Highway 11

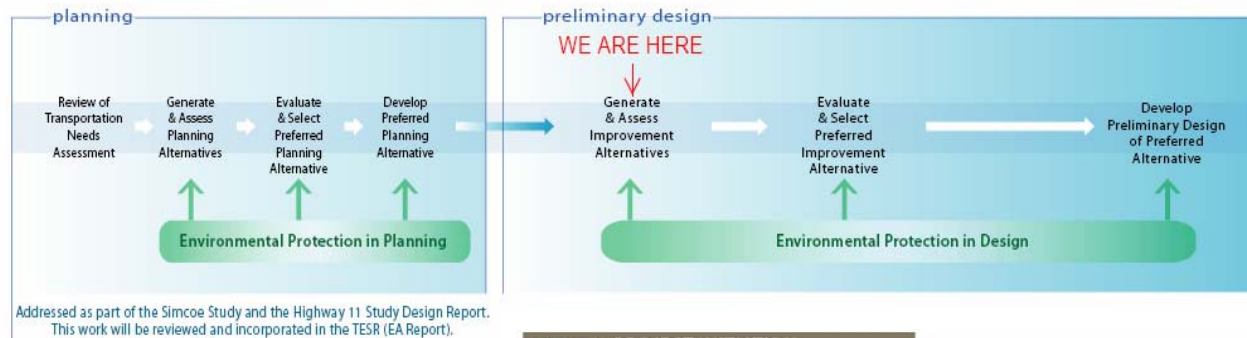
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Study Process

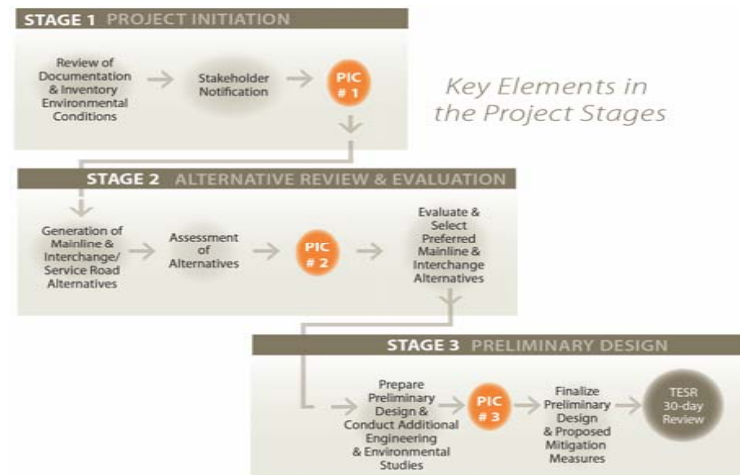
- ❖ Following the approved planning process for a Group 'A' project under the Class Environmental Assessment for Provincial Transportation Facilities.



- ❖ At the end of this study, a Transportation Environmental Study Report (TESR) will be prepared to document the planning process and the preferred alternative.

Ministry of Transportation
Class EA Process
(Group "A" Project)

- ❖ The TESR will be placed on the public record for a 30-day review period.



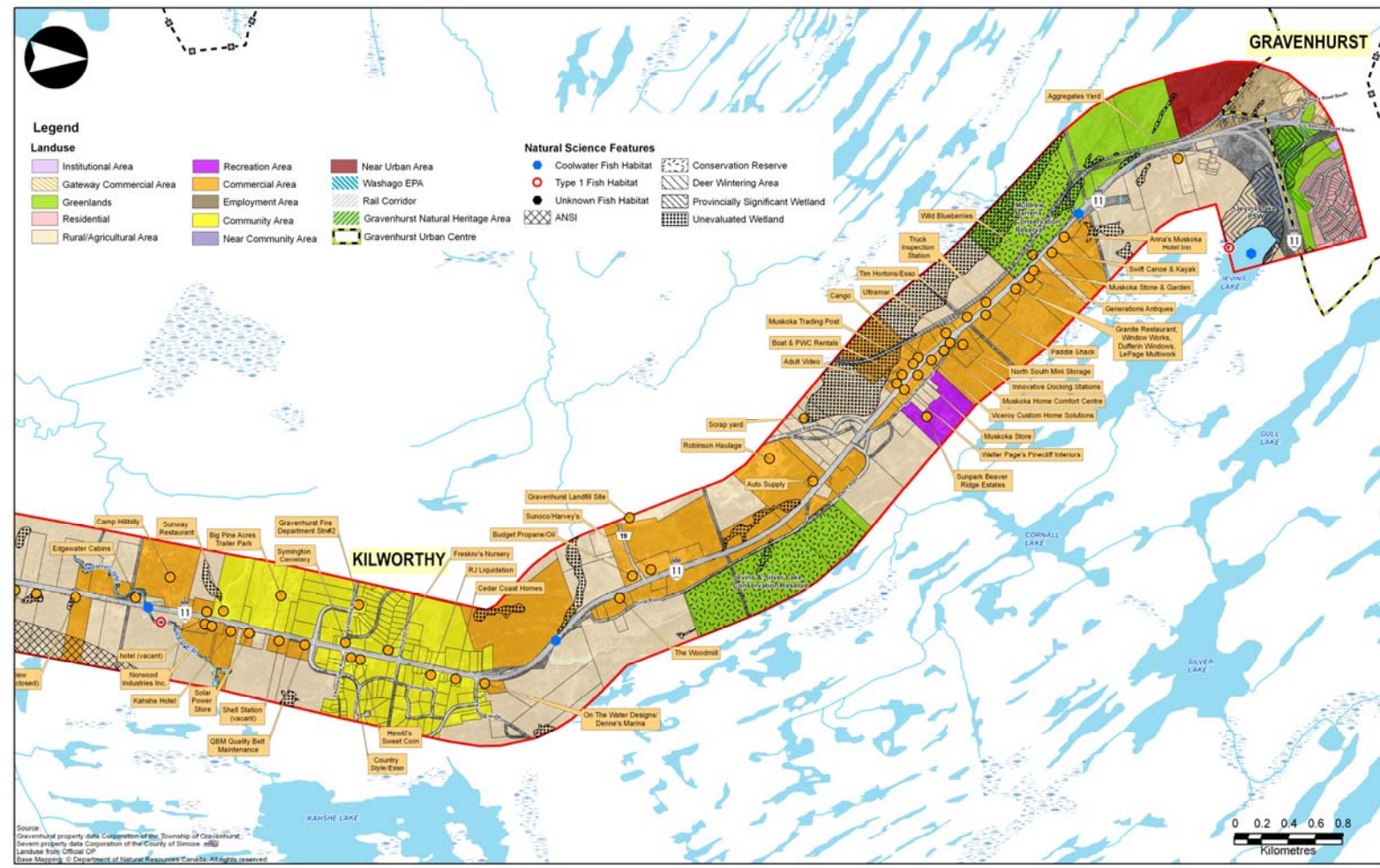
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Planned Land Use and Existing Environmental Conditions



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Existing Transportation Conditions

Existing transportation issues within the corridor include:

- ❖ Congestion during summer peak periods;
- ❖ Tight horizontal curves;
- ❖ Steep grades;
- ❖ Short speed change lanes;
- ❖ Sight distance concerns at entrances;
- ❖ Narrow median shoulders;
- ❖ Areas of unpaved outside shoulders;
- ❖ Rock cut close to travelled lanes.

Highway 11

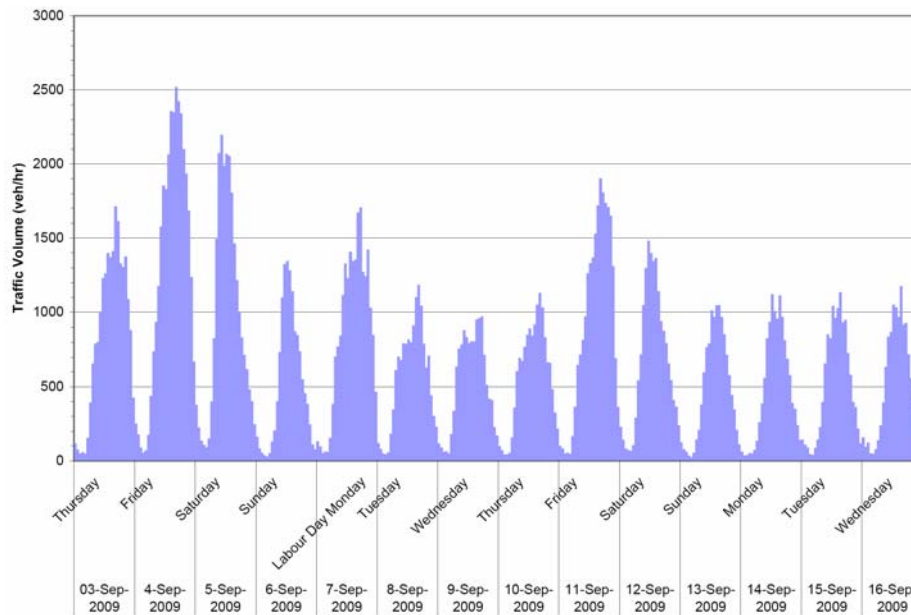
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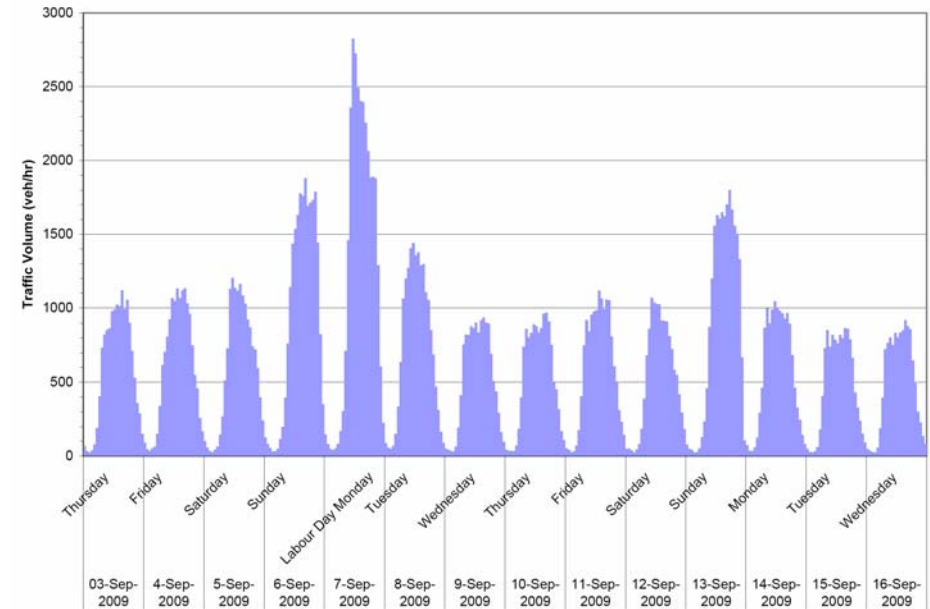
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Existing Traffic Conditions

- ❖ Traffic volume surveys were undertaken along Highway 11 in September 2009 to assist in the traffic analysis for this study.
- ❖ The following graphs depict the mainline hourly volumes along this section of Highway 11.



Northbound



Southbound



Future Traffic Projections

- ❖ The traffic volumes from the September 2009 surveys were combined with historical growth rates and traffic information to project future traffic volumes.
- ❖ The figures below illustrate the traffic volumes forecasts for the 2018, 2028 and 2038 horizon years based on a low growth and a high growth scenario.
- ❖ MTO will consider widening of Highway 11 to six lanes when traffic operations approach level-of-service "LOS E" (refer to following display for LOS descriptions).
- ❖ It is anticipated that this condition will be reached within the ultimate planning horizon (2038).

Low Growth - 1.1%

Section	Daily Traffic Volume (both directions)			Design Hourly Traffic Volume (both directions)			Design Hourly Traffic Volume (one direction)		
	2018	2028	2038	2018	2028	2038	2018	2028	2038
SR169 - MR169	24,600	27,100	29,500	3,460	3,810	4,150	2,220	2,450	2,670

High Growth - 2.5%

Section	Daily Traffic Volume (both directions)			Design Hourly Traffic Volume (both directions)			Design Hourly Traffic Volume (one direction)		
	2018	2028	2038	2018	2028	2038	2018	2028	2038
SR169 - MR169	27,400	33,000	38,600	3,860	4,650	5,430	2,480	2,990	3,490



Level of Service (LOS) Descriptions

- ❖ **LOS "D"**: High density but stable traffic flow with speeds that are generally 65 to 80 km/hr. Small increases in traffic may cause operational problems and restricted maneuverability.
- ❖ **LOS "E"**: Operating traffic conditions are near or at capacity, resulting in low but relatively uniform traffic speeds typically in the 50 to 65 km/hr range. Maneuverability in the traffic stream is extremely difficult.
- ❖ **LOS "F"**: Operating traffic conditions are over capacity, resulting in traffic queues at particular locations where traffic volumes exceed freeway capacity.



Alternatives to the Undertaking

- ❖ Alternatives to the Undertaking are broad-based alternatives that represent fundamentally different ways of addressing future transportation needs.
- ❖ The Alternatives to the Undertaking considered for this study include:
 - Do Nothing;
 - Travel Demand Management (e.g. techniques to reduce or shift travel demand);
 - Encourage the use of other modes of Transportation (e.g. rail, bus, marine, etc.);
 - Encourage greater use of local roads; and,
 - Improvements to Highway 11.
- ❖ The Alternatives to the Undertaking were evaluated based on their ability to meet the following study objectives:
 - To address future capacity and operational issues along Highway 11;
 - To improve safety conditions on Highway 11; and,
 - To reduce or minimize impacts to the natural, social, economic and cultural environment.

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Assessment of Alternatives to the Undertaking

ALTERNATIVES TO THE UNDERTAKING	STUDY OBJECTIVES			SUMMARY
	1 Address future capacity and operational issues along Highway 11	2 Improve safety conditions on Highway 11	3 Reduce or minimize impacts to the Natural, Social, Economic and Cultural environments	
Do Nothing	○	○	●	○
Transportation Demand Management (TDM) and Transportation System Management (TSM)	◐	○	●	◐
Encourage the use of other transportation modes (e.g rail, bus, marine, etc.)	◐	○	◐	◐
Improvements to Highway 11	●	●	◐	◐
Encourage Greater Use of Local Roads	◐	○	◐	◐
OVERALL SUMMARY	<p>Improvements to Highway 11 is the only Alternative Solution that can fully address the major objectives of this study on its own, and will therefore be carried forward for further study. However, the benefits of encouraging greater use of local roads are recognized from a traffic operations and capacity perspective, and as such this option will be considered in conjunction with improvements to Highway 11.</p> <p>The benefits of TDM/TSM measures and encouraging the use of other transportation modes from a traffic operations and capacity perspective are also recognized, although the implementation of either of these alternatives will not fully address the objectives of this study. While these alternatives will not be carried forward as part of this study, they should be given further consideration as part of future studies.</p> <p>Although the "Do Nothing" alternative does not address the primary objectives of the study, it will be carried forward as a basis for comparison during future evaluation stages but is not considered to be a potential solution for the study.</p>			

LEGEND	
Most Preferred	●
↓	◐
	◑
	◒
	◓
Least Preferred	○

- ❖ The Alternatives to the Undertaking to be carried forward for further study include improvements to Highway 11, and encouraging greater use of local roads (in conjunction with improvements to Highway 11).
- ❖ The "Do Nothing" alternative will be carried forward and used as a baseline for comparison with the Highway 11 improvement alternatives.



Alternatives to be Considered

The alternatives to be considered during the study include:

- ❖ Widening the existing highway platform and maintaining barrier median;
- ❖ Widening the existing highway platform and providing grassed median;
- ❖ Realignment alternatives for sections of Highway 11;
- ❖ Interchange alternatives;
- ❖ Service road alternatives; and,
- ❖ Interim highway improvements, including but not exclusive to:
 - Extending speed change lanes;
 - Correcting geometric deficiencies;
 - Provision of paved/wider shoulders.

For all alternatives, access to Highway 11 will be provided via grade-separated interchanges only.

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Evaluation Criteria and Process

- ❖ Feasible alternatives will be assessed based on the evaluation criteria.
- ❖ These criteria are derived from the Highway 11 Study Design Report.
- ❖ Alternatives will be evaluated using a subjective trade-off method, which considers the relative advantages and disadvantages of each alternative and the relative significance of the impacts.

ENVIRONMENTAL COMPONENT	CRITERIA
Natural Environment	<ul style="list-style-type: none">• Effect on Fisheries and Aquatic Habitat• Effect on Wildlife and Vegetation• Effect on Wetlands• Effect on Groundwater
Social Environment	<ul style="list-style-type: none">• Effect on Residential Properties• Effect on Community Features• Effect on Institutions• Noise Impacts
Economic Environment	<ul style="list-style-type: none">• Effect on Commercial Properties• Effect on Agricultural Operations• Effect on Areas of Waste and Contamination
Cultural Environment	<ul style="list-style-type: none">• Effect on Archaeological Resources• Effect on Built Heritage Resources
Transportation and Cost	<ul style="list-style-type: none">• Traffic Operations and Capacity• Traffic Safety• Construction Impacts• Emergency Access• Cost

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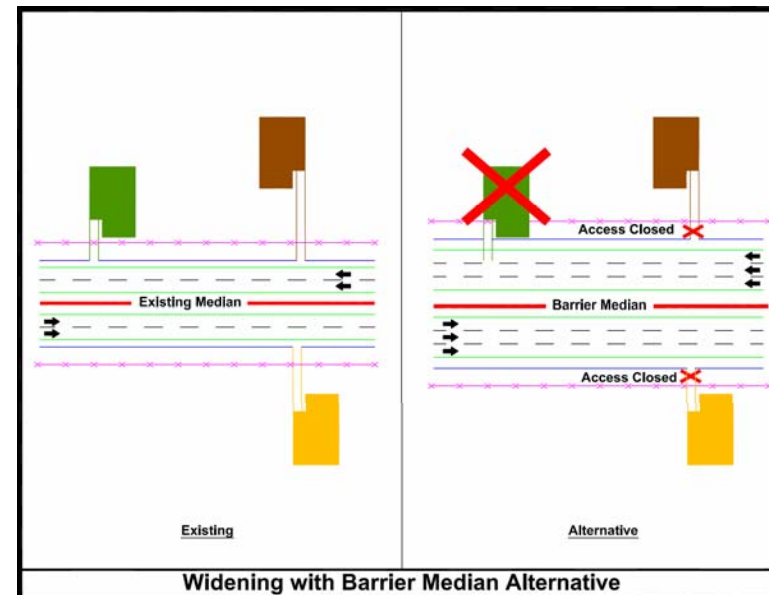
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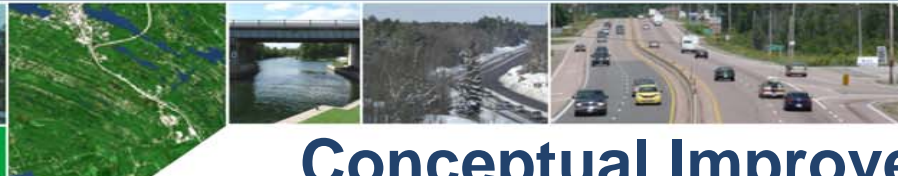
Conceptual Improvement Alternatives Widening (With Barrier Median)

- ❖ Widening existing Highway 11 to 6 lanes will involve a combination of:
 - Widening equally about the centreline (additional outside lane provided in either direction);
 - Widening to the east (additional lanes provided on the east side); and,
 - Widening to the west (additional lanes provided on the west side).
- ❖ For all alternatives, the median will require widening by approximately 5 m.
- ❖ Service roads may be provided on the west side, east side or both sides of Highway 11.



Highway 11

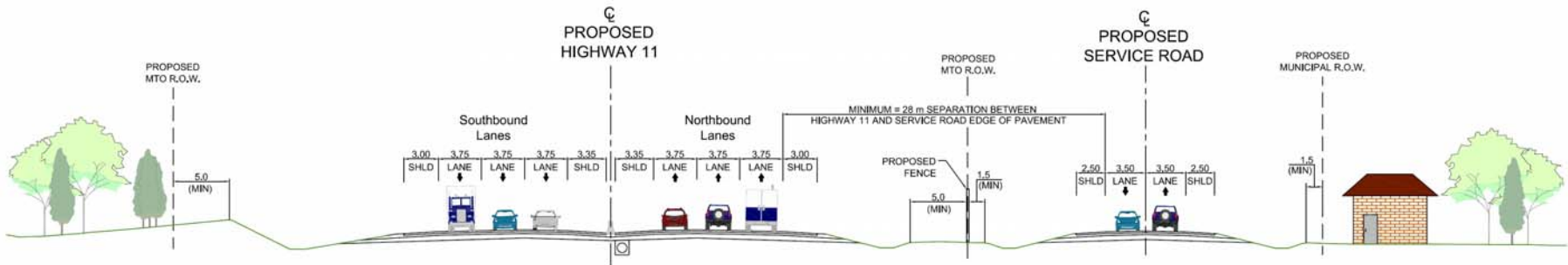
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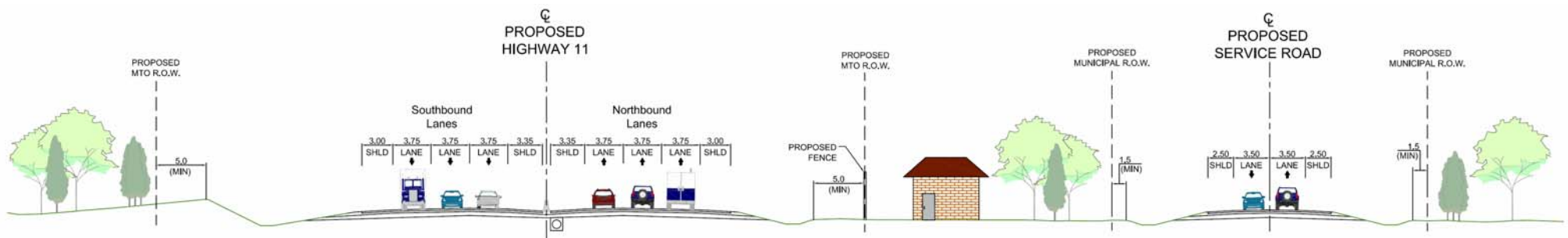
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Conceptual Improvement Alternatives Widening (With Barrier Median)

Barrier Median with Service Road Adjacent to Highway 11 (In Front of Residential/Commercial Properties)



Barrier Median with Service Road Offset from Highway 11 (Behind Residential/Commercial Properties)



Highway 11

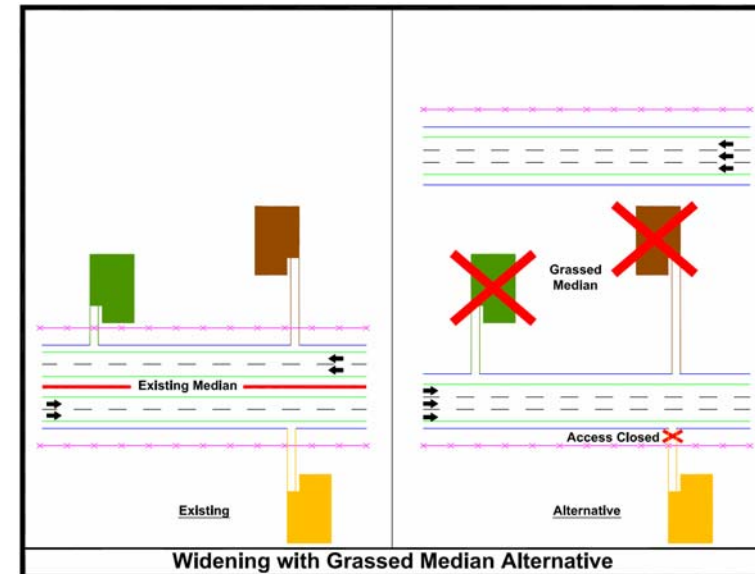
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Conceptual Improvement Alternatives Widening (With Grass Median)

- ❖ This alternative would generally consist of converting the existing highway platform to the required three lanes in either the northbound or southbound direction.
- ❖ The other direction of traffic would be constructed to the east or west of the existing highway platform.
- ❖ A standard 22.5 m separation would generally be provided between northbound and southbound lanes.



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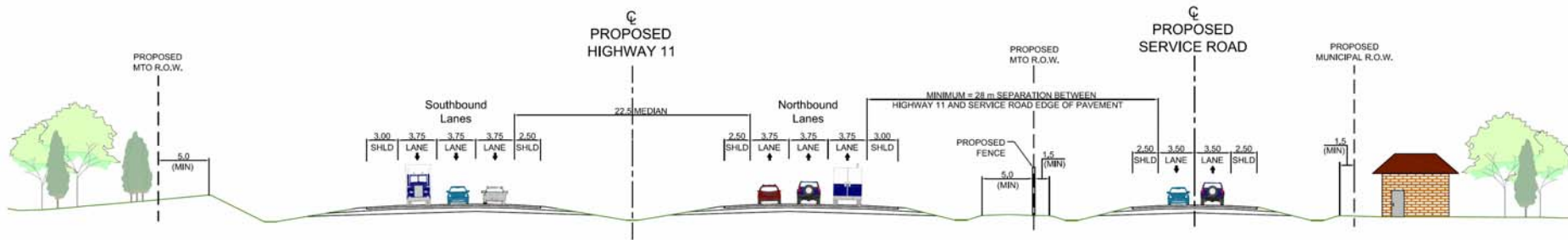
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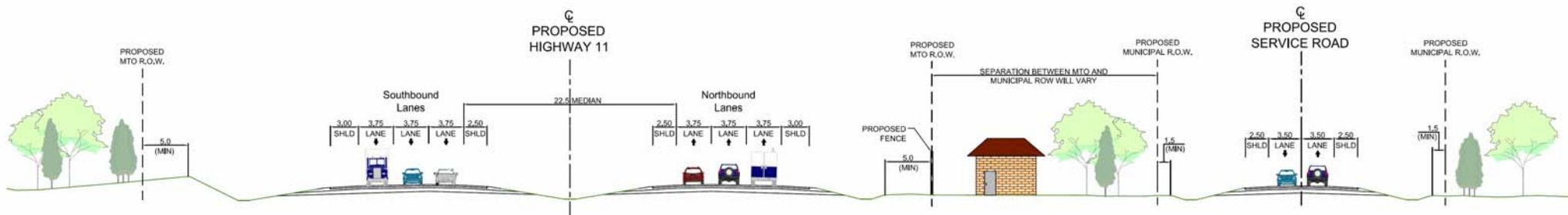
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Conceptual Improvement Alternatives Widening (With Grass Median)

Grass Median with Service Road Adjacent to Highway 11 (In Front of Residential/Commercial Properties)



Grass Median with Service Road Offset from Highway 11 (Behind Residential/Commercial Properties)



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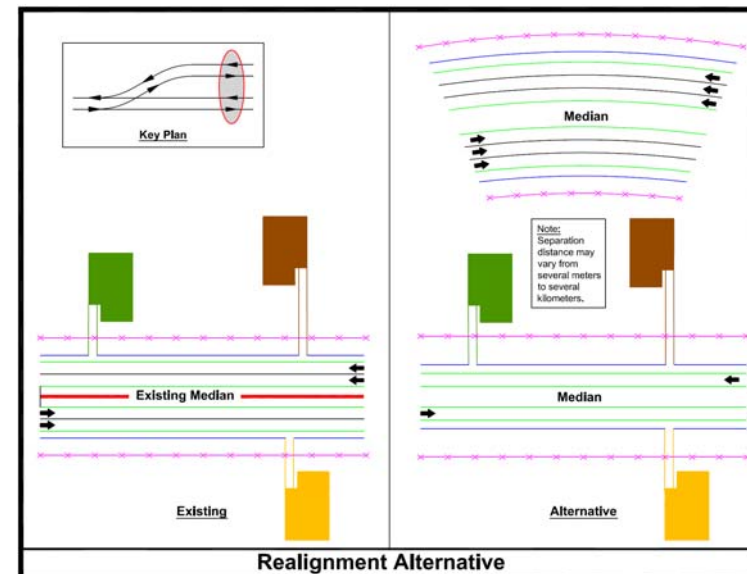


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Conceptual Improvement Alternatives Local Realignment

- ❖ A local realignment would involve constructing a new highway corridor (both northbound and southbound lanes) up to several kilometres away from the existing corridor.
- ❖ Existing Highway 11 would be converted to a local service road, with direct access provided to local residential and commercial properties from both directions of travel.
- ❖ Local realignments may be considered in areas to avoid significant residential or commercial clusters and/or significant environmental features.

Refer to the roll plans at this PIC for potential local realignment alternatives along the Highway 11 corridor.



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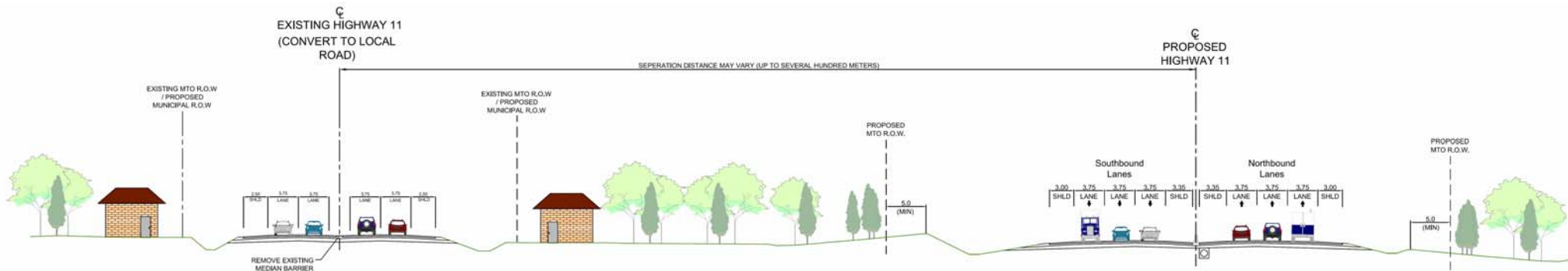
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Conceptual Improvement Alternatives Local Realignment

Local Realignment of Highway 11 (Convert Existing Highway 11 to Local Road)



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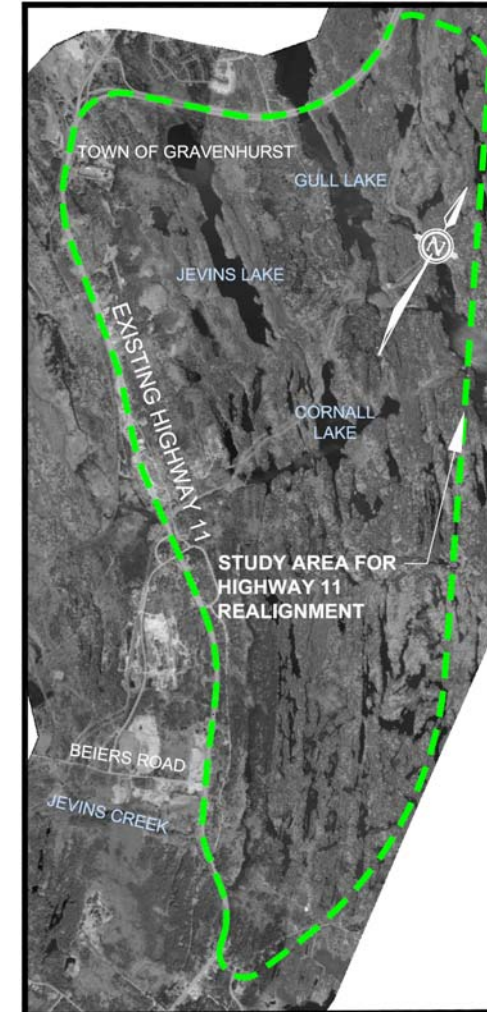
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Realignment of Highway 11

- ❖ A Highway 11 realignment east of the existing alignment will be considered between Jevins Creek and east of the Muskoka Road 169 interchange.
- ❖ Existing Highway 11 would be converted to a local service road, with direct access provided to local residential and commercial properties from both directions of travel.
- ❖ Conceptual realignments through this stretch will be developed and evaluated after this Public Information Centre.





Interchange Location Assessment and Potential Configurations

- ❖ Criteria to be considered in the selection of interchange sites include:
 - Location of existing interchanges;
 - Level of connectivity to adjacent local roads;
 - Access to adjacent commercial and residential development;
 - Spacing between successive interchanges; and,
 - Potential environmental, residential, commercial or other impacts.
- ❖ Interchange locations will be assessed from a network perspective on the basis of providing good connectivity to the local road network and adequate traffic operations on Highway 11.

*Refer to the roll plans at this PIC for
potential **interchange opportunity areas**
along the Highway 11 corridor.*

- ❖ A number of interchange configurations will be developed and assessed for each of the selected interchange site locations.

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Conceptual Interchange Configurations Continuous Crossing Roads

❖ Potential interchange configurations to be considered include:

PARCLO A-4



PARCLO A-2



PARCLO AB



DIAMOND



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Service Roads

- ❖ The provision of service roads along the Highway 11 corridor will be reviewed to facilitate access between interchange locations and residential, commercial and industrial properties.
- ❖ Service road alternatives to be considered will include:
 - New service roads directly adjacent to Highway 11 *in front* of local businesses or residential properties, on one or both sides of the highway;
 - New service roads adjacent to Highway 11 and *behind* local businesses or residential properties; and,
 - Utilization of existing municipal roads as service roads.
- ❖ Service road alternatives will be developed and evaluated following selection of the preferred interchange locations, and in conjunction with mainline Highway 11 alternatives.

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What's Next

- ❖ The following activities will be undertaken following this PIC:
 - Incorporate feedback and respond to comments received at this PIC;
 - Further develop Highway 11 improvement alternatives (mainline, interchange and service roads);
 - Evaluate the Highway 11 improvement alternatives and identify a preferred improvement strategy for the Highway 11 corridor;
 - Present preferred Highway 11 improvement strategy at PIC #2 (anticipated to be held in Fall 2010)

Consultation
Throughout



Thank you for Attending

Please feel free to ask questions and fill out a comment sheet before you leave.

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Freedom of Information & Protection of Privacy Act

Comments and information regarding this study are being collected to assist the Ministry of Transportation in meeting the requirements of the Environmental Assessment (EA) Act. This material will be maintained on file for use during the study and may be included in project 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 members of the Project Team if you have any questions or concerns regarding the above information.