

The logo for the company 'wood.' is displayed in a bold, lowercase, sans-serif font. The text is black and positioned in the upper right quadrant of the page. The background features large, light gray curved shapes that sweep across the left and bottom portions of the page.

**wood.**

**Appendix O**

**Assessment of Alternative Solutions (2017)**

# Memo

**To:** Syed Rizvi, Town of Oakville

**From:** Heather Dearlove, Amec Foster Wheeler; Bob Felker, Amec Foster Wheeler; Neal Smith, Amec Foster Wheeler

**Date:** April 2017

**File:** TPB166147

**cc:** David Sinke, Amec Foster Wheeler

**Re:** **Lakeshore Road West Improvements  
Class Environmental Assessment  
Assessment of Planning Alternatives**

Table 1 provides a description of the evaluation criteria that will be used in subsequent phases of the study:

Table 1 Evaluation Criteria for Planning Alternatives		
Component	Evaluation Criteria	Description
<b>Natural Environment</b>	Wetlands and Vegetation	Potential adverse effects on terrestrial species and habitats
	Wildlife Habitat	Potential adverse effects on existing wildlife due to disturbance or loss of habitat
	Species at Risk	Potential effects on Species at Risk identified in the study area
	Groundwater/ Surface Water	Potential adverse effect on groundwater and wells including groundwater discharge and recharge
	Fisheries and Water Quality	Potential to minimize impact on aquatic features
	Flooding, Erosion and Surface Water Quality	Potential impact on flood potential, flood elevations, downstream erosion risk and water quality
<b>Social Environment including,</b>	Land Use	Presence, number and characteristics of residences, community facilities, public parks, institutions or businesses within or adjacent to the study corridor

Town of Oakville  
April 2017

<b>Cultural, and Economic</b>	Noise	Impact on noise levels at noise sensitive receivers during construction, and during operation
	Archaeology and Cultural Heritage Resources	Potential adverse effects on archaeological and built heritage resources
	Property Access Considerations	Ability to maintain/maximize access following construction
	Utilities	Ability to minimize effects on existing and proposed utilities
	Construction Disruptions	Ability to minimize construction constraints and complexity
	Active Modes of Transportation	Ability to contribute to the Active Transportation (AT) network through the corridor including the provision of continuous facilities, AT type and design, and access to destinations along the corridor
	Accessibility (AODA)	Ability to maintain or enhance accessibility of the roadway for all road users including pedestrians
	Air Quality	Ability to reduce emission associated with transportation within the study area
<b>Transportation</b>	Safety	Ability to improve road user safety
	Travel Delay/Traffic Capacity	Potential to address existing and future capacity and operational needs
	Transit	Potential to address transit needs for future planned transit initiatives
<b>Costs</b>	Capital Cost	Capital costs of the proposed improvements
	Constructability	The degree of ability to construct the improvements in a simple and cost effective manner
<b>Technical</b>	Adherence to Applicable Design Standards	Degree to which the proposed improvements meet applicable standards and codes
	Compatibility with Regional and City Transportation Plans and Policies	Compatibility with Regional and Municipal Official Plans and Policies

The following planning alternatives have been identified for consideration in addressing the problems and opportunities discussed above:

**Alternative 1: Do Nothing:** Maintain Lakeshore Road in its present configuration with no improvements other than to continue regular maintenance.

Town of Oakville  
April 2017

**Alternative 2: Improve other Roads:** Add capacity to adjacent parallel roads to accommodate traffic volumes.

**Alternative 3: Multi-Modal Improvements:** Improve transit and active transportation infrastructure. Promotion of increased active transportation and car pooling use.

**Alternative 4: Additional Improvements to the Lakeshore Road Corridor:** Improvements in the form of signal timing and speed reduction.

**Alternative 5: Widen Lakeshore Road West:** Addition of through-traffic lanes including intersection improvements, to increase traffic capacity of the corridor.

Assessment of Alternative Planning Solutions										
Component	Evaluation Criteria	Alternative 1: Do Nothing: Maintain Lakeshore Road in its present configuration with no improvements other than to continue regular maintenance.	Alternative 2: Improve other Roads: Add capacity to adjacent parallel roads to accommodate traffic volumes.	Alternative 3: Multi-Modal Improvements: Improve transit and active transportation infrastructure. Promotion of increased active transportation and car pooling use.	Alternative 4: Additional Improvements to the Lakeshore Road Corridor: Improvements in the form of signal timing and speed reduction.	Alternative 5: Widen Lakeshore Road West: Addition of through-traffic lanes including intersection improvements, to increase traffic capacity of the corridor.				
Natural Environment	Wetlands and Vegetation	No impacts	Potential for minor impacts but can be mitigated with established practices and guidelines	Potential for minor impacts but can be mitigated with established practices and guidelines	Potential for minor impacts but can be mitigated with established practices and guidelines	Significant impacts associated with widening of road corridor				
	Wildlife Habitat	No impacts	Minor impacts dependent on the scope of the transit improvements implemented	No impacts	Potential for impacts dependent on the design of the widening but can be mitigated with established practices and guidelines	Potential for impacts dependent on the design of the widening and other improvements but can be mitigated with established practices and guidelines				
	Species at Risk	No impacts	Minor impacts dependent on the scope of the transit improvements implemented	No impacts	Potential for impacts dependent on the design of the widening but can be mitigated with established practices and guidelines	Potential for impacts dependent on the design of the widening and other improvements but can be mitigated with established practices and guidelines				
	Groundwater/ Source Protection	No impacts	Minor impacts dependent on the scope of the transit improvements implemented	No impacts	Potential for minor impacts dependent on the design of the widening but can be mitigated with established practices and guidelines	Potential for minor impacts dependent on the design of the widening and other improvements but can be mitigated with established practices and guidelines				
	Fisheries and Water Quality	No impacts	Minor impacts dependent on the scope of the transit improvements implemented	No impacts	Potential for minor impacts dependent on the design of the widening but can be mitigated with established practices and guidelines	Potential for minor impacts dependent on the design of the widening and other improvements but can be mitigated with established practices and guidelines				
	Flooding, Erosion and Surface Water Quality	No impacts	Minor impacts dependent on the scope of the transit improvements implemented	No impacts	Potential for minor impacts dependent on the design of the widening but can be mitigated with established practices and guidelines	Potential for minor impacts dependent on the design of the widening and other improvements but can be mitigated with established practices and guidelines				
	<b>Summary</b>	<b>Most Preferred</b>	<b>Neutral</b>	<b>Most Preferred</b>	<b>Not Preferred</b>	<b>Not Preferred</b>				

Legend:

Most Preferred	Preferred	Neutral	Not Preferred	Least Preferred
----------------	-----------	---------	---------------	-----------------

Assessment of Alternative Planning Solutions										
Component	Evaluation Criteria	Alternative 1: Do Nothing: Maintain Lakeshore Road in its present configuration with no improvements other than to continue regular maintenance.	Alternative 2: Improve other Roads: Add capacity to adjacent parallel roads to accommodate traffic volumes.	Alternative 3: Multi-Modal Improvements: Improve transit and active transportation infrastructure. Promotion of increased active transportation and car pooling use.	Alternative 4: Additional Improvements to the Lakeshore Road Corridor: Improvements in the form of signal timing and speed reduction.	Alternative 5: Widen Lakeshore Road West: Addition of through-traffic lanes including intersection improvements, to increase traffic capacity of the corridor.				
Social Environment including, Cultural, and Economic	Land Use	With increase in traffic volumes and no expansion of existing facilities, congestion would create a negative impact on the existing land use	Minor impacts dependent on the scope of the transit improvements implemented	No impacts	Minor impacts to land use along corridor dependent on property acquisition required for the design of the widening	Minor impacts to land use along corridor dependent on property acquisition required for the design of the widening				
	Noise	With increase in traffic volumes and no expansion of existing facilities, congestion, and in turn noise, will increase	A reduction in predicted traffic volumes would be achieved, however, background traffic would still increase, and in turn noise, will increase	A reduction in predicted traffic volumes would be achieved, however, background traffic would still increase, and in turn noise, will increase	Potential increase in noise due to increased traffic volumes. Opportunity to include additional noise mitigation if required	Potential increase in noise due to increased traffic volumes. Opportunity to include additional noise mitigation if required				
	Archaeology and Cultural Heritage Resources	No impacts	Potential impacts to archaeological and built heritage resources along the corridor	No impacts	Potential impacts to archaeological and built heritage resources along the corridor	Potential impacts to archaeological and built heritage resources along the corridor				
	Property Access Considerations	No opportunity to improve access along the corridor	No opportunity to improve access along the corridor	No opportunity to improve access along the corridor	Opportunity to improve access to the corridor and other local roadways	Opportunity to improve access to the corridor and other local roadways				
	Utilities	Utility relocation would not be required	Utility relocation dependent on the scope of the transit improvements implemented	Utility relocation would not be required	Utility relocation would be required along the corridor	Utility relocation would be required along the corridor				
	Construction Disruptions	No Impact	Minor impact	No impacts	Potential for disruption to traffic and residents as a result of construction	Potential for disruption to traffic and residents as a result of construction				
	Active Modes of Transportation	No opportunity to improve Active Transportation facilities	Minor improvements to Active Transportation facilities	No opportunity to improve Active Transportation facilities	Opportunity to improve Active Transportation facilities as part of widening	Significant opportunity to improve Active Transportation facilities as part of widening and other improvements				
	Accessibility (AODA)	No opportunity to improve accessibility (AODA) along corridor	No opportunity to improve accessibility (AODA) along corridor	No opportunity to improve accessibility (AODA) along corridor	Opportunity to improve accessibility (AODA) along corridor	Significant opportunity to improve accessibility (AODA) along corridor				
	Air Quality	With increase in traffic volumes and no expansion of existing facilities, congestion will increase and in turn air quality will decrease	Marginal improvement to future air quality condition due to reduction in predicted traffic volume	Marginal improvement to future air quality condition due to reduction in predicted traffic volume	Improvement to future air quality condition due to reduction in congestion	Improvement to future air quality condition due to reduction in congestion				
<b>Summary</b>	<b>Least Preferred</b>	<b>Neutral</b>	<b>Not Preferred</b>	<b>Preferred</b>	<b>Most Preferred</b>					
Transportation	Safety	Increase in traffic volumes with no expansion of the corridor will increase the potential for collisions	Increase in traffic volumes with no expansion of the corridor will increase the potential for collisions	Increase in traffic volumes and pedestrian / cyclist movement with no expansion of the corridor will increase the potential for collisions	Opportunity to improve safety due to reduction in congestion and other improvements	Opportunity to improve safety due to reduction in congestion and other improvements				

Legend:

Most Preferred	Preferred	Neutral	Not Preferred	Least Preferred
----------------	-----------	---------	---------------	-----------------

Assessment of Alternative Planning Solutions										
Component	Evaluation Criteria	Alternative 1: Do Nothing: Maintain Lakeshore Road in its present configuration with no improvements other than to continue regular maintenance.	Alternative 2: Improve other Roads: Add capacity to adjacent parallel roads to accommodate traffic volumes.	Alternative 3: Multi-Modal Improvements: Improve transit and active transportation infrastructure. Promotion of increased active transportation and car pooling use.	Alternative 4: Additional Improvements to the Lakeshore Road Corridor: Improvements in the form of signal timing and speed reduction.	Alternative 5: Widen Lakeshore Road West: Addition of through-traffic lanes including intersection improvements, to increase traffic capacity of the corridor.				
	Travel Delay/ Traffic Capacity	With increase in traffic volumes and no expansion of existing facilities, the road will be unable to meet future traffic demands, causing longer delays	Potential to limit increase in traffic congestion by promoting alternative modes of travel	Potential to limit increase in traffic congestion by promoting alternative modes of travel	Improves corridor capacity and reduces delay and queuing	Improves corridor capacity and reduces delay and queuing				
	Transit	No potential to improve transit services along the corridor	Potential to improve transit services along the corridor	No potential to improve transit services along the corridor	Potential to improve transit services along the corridor with changes to the road cross section.	Greatly improves transit services along the corridor with changes to the road cross section with widening				
	<b>Summary</b>	<b>Least Preferred</b>	<b>Not Preferred</b>	<b>Least Preferred</b>	<b>Preferred</b>	<b>Most Preferred</b>				
<b>Costs</b>	Capital Cost	No capital costs	Moderate capital expenditure would be required	Minimal capital cost increase would be required to advance program initiatives	High capital costs associated with improvements to corridor	High capital costs associated with improvements to corridor				
	<b>Summary</b>	<b>Most Preferred</b>	<b>Preferred</b>	<b>Most Preferred</b>	<b>Least Preferred</b>	<b>Least Preferred</b>				
<b>Technical</b>	Constructability	No constructability issues	Some constructability concerns given the restricted right-of-way	No constructability issues	Many constructability issues would need to be resolved.	Many constructability issues would need to be resolved.				
	Adherence to Applicable Design Standards	No ability to upgrade the corridor to adhere to applicable design standards and current practices	No ability to upgrade the corridor to adhere to applicable design standards and current practices	No ability to upgrade the corridor to adhere to applicable design standards and current practices	Ability to upgrade the corridor to adhere to applicable design standards and current practices	Ability to upgrade the corridor to adhere to applicable design standards and current practices				
	<b>Summary</b>	<b>Neutral</b>	<b>Not Preferred</b>	<b>Neutral</b>	<b>Neutral</b>	<b>Neutral</b>				
<b>Transportation Plans &amp; Policies</b>	Compatibility with Regional and City Transportation Plans and Policies	Does not comply with the City's and Region's planning documents	Complies with some aspects of the City's and Region's planning documents by supporting alternative modes of travel	Complies with some aspects of the City's and Region's planning documents by supporting alternative modes of travel	Complies with City's and Region's planning documents	Complies with City's and Region's planning documents				
	<b>Summary</b>	<b>Least Preferred</b>	<b>Not Preferred</b>	<b>Not Preferred</b>	<b>Most Preferred</b>	<b>Most Preferred</b>				
<b>Recommendations</b>		<b>Eliminated from Further Consideration</b>	<b>Eliminated from Further Consideration</b>	<b>Eliminated from Further Consideration</b>	<b>Eliminated from Further Consideration</b>	<b>Recommended as the Preferred Planning Solution</b>				

Legend:

Most Preferred	Preferred	Neutral	Not Preferred	Least Preferred
----------------	-----------	---------	---------------	-----------------