

Appendix D

In **Section 6.4** of this report, each Short List Network Alternative was reviewed in detail based on the Environmental Assessment Criteria for evaluations. Evaluation of transportation, cultural environment, natural environment, and socio-economic criteria determined an overall recommendation for each Short List Alternative. The criteria are listed on the right-hand side of this page.

Summaries of Short List of Network Alternatives were provided in **Section 6.4** of this report; in this Appendix, the complete evaluation of the Short List of Network Alternatives is provided.

Based upon the evaluations, rankings were determined as one of the following, with associated point attribution.

• Screened Out	= 0 points
• Least Preferred	= 1 point
• Less Preferred	= 2 points
• More Preferred	= 3 points
• Most Preferred	= 4 points

Based upon the point attributions, points were collectively tallied to produce an “Overall Total Score” and an “Overall Total of Category Scores.” The recommendations included in **Section 6.4** of this report are based upon the results of this scoring system.

For reference, the Short List Network Alternatives are:

- C. Precinct 52-3 Road Network
- E. East-West Connection Focus Area (Inter-Regional)
- F. Buick Boulevard (52-2)
- G. North-South Rail Crossing (52-5, 52-6)

<b>Transportation Criteria</b> <ul style="list-style-type: none"><li>Enhance sustainable mobility and multi-modal travel options</li><li>Address modelled traffic impacts</li><li>Enhance connectivity for people and goods</li><li>Integrate transportation and land use planning</li><li>Protect public health and safety</li><li>Leverage flexibility for future planning</li></ul>	<b>Natural Environment Criteria</b> <ul style="list-style-type: none"><li>Terrestrial (species)</li><li>Aquatic (watercourses, species at risk)</li><li>Greenbelt &amp; Natural Heritage Systems</li><li>Stormwater &amp; Surface Water (flooding, erosion)</li></ul>
<b>Cultural Environment Criteria</b> <ul style="list-style-type: none"><li>Archaeologic</li><li>Cultural and Built Heritage</li></ul>	<b>Socio-Economic Criteria</b> <ul style="list-style-type: none"><li>Transportation Equity</li><li>Property Impacts/Requirements</li><li>Nuisance Impacts (Noise, Vibration &amp; Air Quality)</li><li>Ease of Construction (Phasing, Geotechnical)</li><li>Cost (Capital, Operating &amp; Maintenance)</li></ul>

C.      PRECINCT 52-3 ROAD NETWORK

C. Precinct 52-3 Road Network: Transportation Criteria

Category	Measure	Alternatives			
		Option 1 – Secondary Plan Collector Road Network	Option 2 – Continuous North-South Connection	Option 3 – Continuous East-West Connection	Option 3A – Continuous East-West Connection (Pinnacle/Serve Realignment)
Enhance sustainable mobility and multi-modal travel options	Enhances public transit connectivity	Two continuous north-south collector roads provide additional options for continuous transit connectivity.	Maintains N-S transit connectivity. Additional intersections along Goderich that breaks up continuity.	Maintains E-W transit connectivity. Additional intersections along Pinnacle, that breaks up continuity.  Provides a parallel transit relief corridor to Mayfield Road and Wanless Drive.	Maintains E-W transit connectivity and intersection continuity along Goderich Drive.  Introduces offset along Wanless Drive between Precincts 52-3 and 52-2W.  Provides a continuous parallel traffic and transit relief corridor to Mayfield Road and Wanless Drive.
		Most Preferred	Less Preferred	More preferred	Less Preferred
		4	2	3	2
	Enhances Active transportation connectivity and Micromobility options	Two continuous north-south collector roads provide additional options for continuous active transportation connectivity.	E-W continuous road facility is interrupted. However, connectivity can be achieved in lieu of disconnected road network.	N-S continuous road facility is interrupted. However, connectivity can be achieved in lieu of disconnected road network.	N-S continuous road facility is interrupted. However, connectivity can be achieved in lieu of disconnected road network.  Introduces offset along Wanless Drive between Precincts 52-3 and 52-2W.
		Most Preferred	More preferred	More preferred	Less Preferred
		4	3	3	2
Traffic Impacts	Traffic operations & capacity impacts	Provides the finest grained connectivity for vehicular capacity and routing options.	Less local routing options compared to Secondary Plan (removes Nightjar/Deuce extension through wetlands)  Modelling shows parallel Mayfield Road takes on additional diversion of traffic (within capacity), accommodated within 6-lane widening.	Less local routing options compared to Secondary Plan (removes Nightjar/Deuce extension through wetlands)  Modelling shows parallel continuous E-W collector provides greater relief to Mayfield Road between Highway 413 and Mississauga Road compared to Option 2.	Less local routing options compared to Secondary Plan (removes Nightjar/Deuce extension through wetlands)  Introduces offset along Wanless Drive between Precincts 52-3 and 52-2W.  Modelling shows parallel continuous E-W collector provides greater relief to Mayfield Road between Highway 413 and Mississauga Road compared to Option 2.  Modelling shows offset of Pinnacle-Serve Street along Wanless Drive is expected to be able to accommodate north-south travel demands.
		Most Preferred	Less Preferred	More preferred	Less Preferred
		4	2	3	2
Enhance connectivity for people and goods	Enhances General travel routing	Provides the finest grained connectivity for people by all modes.	Less continuous E-W connectivity for goods than Options 1 and Option 3, including between Employment Uses in Precinct 52-3 and Precinct 52-7  Less active transportation local routing options compared to Secondary Plan (removes Nightjar/Deuce extension through wetlands). Connectivity can be achieved in lieu of disconnected road network.	Less active transportation local routing options compared to Secondary Plan (removes Nightjar/Deuce extension through wetlands). Connectivity can be achieved in lieu of disconnected road network.	Less active transportation local routing options compared to Secondary Plan (removes Nightjar/Deuce extension through wetlands). Connectivity can be achieved in lieu of disconnected road network.
		Most Preferred	More preferred	More preferred	More Preferred
		4	3	3	3

Category	Measure	Alternatives			
		Option 1 – Secondary Plan Collector Road Network	Option 2 – Continuous North-South Connection	Option 3 – Continuous East-West Connection	Option 3A – Continuous East-West Connection (Pinnacle/Serve Realignment)
	Freight routing impacts	Provides finest grained local delivery options. Most goods movement expected on higher order highway, arterial and industrial collector roads.	Less continuous E-W connectivity for goods than Options 1 and Option 3, including between Employment Uses in Precinct 52-3 and Precinct 52-7.	Maintains E-W continuous goods connectivity (industrial collector) between Precinct 52-7 and Precinct 52-3.	Maintains E-W continuous goods connectivity (industrial collector) between Precinct 52-7 and Precinct 52-3.
		Most Preferred	Less Preferred	More preferred	More preferred
		4	2	3	3
Integrate transportation and land use planning	Compatibility with existing and proposed land uses.	Provides the finest grained connectivity for people by all modes.	Less continuous E-W connectivity for goods than Options 1 and Option 3, including between Employment Uses in Precinct 52-3 and Precinct 52-7.	Maintains E-W continuous goods/access connectivity (industrial collector) between Precinct 52-7 and Precinct 52-3.	Maintains E-W continuous goods/access connectivity (industrial collector) between Precinct 52-7 and Precinct 52-3.  Introduces offset along Wanless Drive between Precincts 52-3 and 52-2W.
		Most Preferred	More preferred	Most Preferred	More preferred
		4	3	4	3
Protect public health and safety	Prioritizes vulnerable road users	Provides the finest grained connectivity for people by all modes.	E-W continuous road facility is interrupted. However, connectivity can be achieved in lieu of disconnected road network.	E-W continuous road facility is interrupted. However, connectivity can be achieved in lieu of disconnected road network.	E-W continuous road facility is interrupted. However, some connectivity can be achieved in lieu of disconnected road network.
		Most Preferred	Most Preferred	Most Preferred	More preferred
		4	4	4	3
	Promotes active living	Provides the finest grained connectivity for people by all modes.	E-W continuous road facility is interrupted. However, connectivity can be achieved in lieu of disconnected road network.	E-W continuous road facility is interrupted. However, connectivity can be achieved in lieu of disconnected road network.	E-W continuous road facility is interrupted. However, some connectivity can be achieved in lieu of disconnected road network.
		Most Preferred	Most Preferred	Most Preferred	More preferred
		4	4	4	3
Leverage flexibility for future planning	Protects for long range vision of Secondary Plan and flexible land use planning in adjacent Precincts.	Provides the finest grained connectivity for people by all modes.	Less continuous E-W connectivity for goods than Options 1 and Option 3, including between Employment Uses in Precinct 52-3 and Precinct 52-7	Provides connectivity compatible with land uses in Precinct 52-2W while avoiding major wetland feature. Maintains E-W continuous goods/access connectivity (industrial collector) between Precinct 52-7 and Precinct 52-3.	Mitigates major wetland feature. Maintains E-W continuous goods/access connectivity (industrial collector) between Precinct 52-7 and Precinct 52-3.
		More Preferred	Least Preferred	Most Preferred	More preferred
		3	1	4	3
TOTAL Transportation Criteria Score		35	24	31	24

C.      PRECINCT 52-3 ROAD NETWORK

C. Precinct 52-3 Road Network: Cultural Environment Criteria

Category	Measure	Alternatives			
		Option 1 – Secondary Plan Collector Road Network	Option 2 – Continuous North-South Connection	Option 3 – Continuous East-West Connection	Option 3A – Continuous East-West Connection (Pinnacle/Serve Realignment)
Archaeologic	Archaeological resources impacts	No Archeology Studies Completed in Precinct 52-3.	No Archeology Studies Completed in Precinct 52-3.	No Archeology Studies Completed in Precinct 52-3.	No Archeology Studies Completed in Precinct 52-3.
		Not Applicable	Not Applicable	Not Applicable	Not Applicable
		0	0	0	0
Cultural and Built Heritage	Cultural landscape	Cultural Heritage Lands 1, 2, and 4 witin Precinct 52-3. See <b>Existing Context – Cultural Heritage Areas</b> map.	Cultural Heritage Lands 1, 2, and 4 witin Precinct 52-3. See <b>Existing Context – Cultural Heritage Areas</b> map.	Cultural Heritage Lands 1, 2, and 4 witin Precinct 52-3. See <b>Existing Context – Cultural Heritage Areas</b> map.	Cultural Heritage Lands 1, 2, and 4 witin Precinct 52-3. See <b>Existing Context – Cultural Heritage Areas</b> map.
		Not Applicable	Not Applicable	Not Applicable	Not Applicable
		0	0	0	0
	Built heritage features	No Built Heritage Identified in Precinct 52-3. See <b>Existing Context – Cultural Heritage Areas</b> map.	No Built Heritage Identified in Precinct 52-3. See <b>Existing Context – Cultural Heritage Areas</b> map.	No Built Heritage Identified in Precinct 52-3. See <b>Existing Context – Cultural Heritage Areas</b> map.	No Built Heritage Identified in Precinct 52-3. See <b>Existing Context – Cultural Heritage Areas</b> map.
		Not Applicable	Not Applicable	Not Applicable	Not Applicable
		0	0	0	0
TOTAL Cultural Environment Criteria Score		0	0	0	0

C.      PRECINCT 52-3 ROAD NETWORK

C. Precinct 52-3 Road Network: Natural Environment Criteria

Category	Measure	Alternatives			
		Option 1 – Secondary Plan Collector Road Network	Option 2 – Continuous North-South Connection	Option 3 – Continuous East-West Connection	Option 3A – Continuous East-West Connection (Pinnacle/Serve Realignment)
Terrestrial (species)	Environmentally sensitive areas (Vegetation, woodlots, wetlands)	Collector road crosses through wetland, woodlot and Natural Heritage System occupies a large portion of the west side of 52-3.	Eliminates E-W collector road going through wetland features.	Eliminates E-W collector road going through wetland features.	Eliminates E-W collector road going through wetland features. Re-alignment of Pinnacle/Serve may require mitigation where it crosses the wetland, woodlot, and Natural Heritage System that occupies a large portion of the west side of Precinct 52-3.
		Least Preferred	More Preferred	More Preferred	Less Preferred
		1	3	3	2
Aquatic (watercourses, species at risk)	Watercourse & fisheries	Collector road crosses through wetland, woodlot and Natural Heritage System occupies a large portion of the west side of 52-3.	"Eliminates E-W collector road going through wetland features.	"Eliminates E-W collector road going through wetland features.	Re-alignment of Pinnacle/Serve may require mitigation where it crosses the wetland, woodlot, and Natural Heritage System that occupies a large portion of the west side of Precinct 52-3.
		Least Preferred	More Preferred	More Preferred	Less Preferred
		1	3	3	2
Greenbelt & Natural Heritage Systems	Greenbelt impact	Greenbelt outside of study area. See Existing Context – Natural Areas map.	Greenbelt outside of study area. See Existing Context – Natural Areas map.	Greenbelt outside of study area. See Existing Context – Natural Areas map.	Greenbelt outside of study area. See Existing Context – Natural Areas map.
		Not Applicable	Not Applicable	Not Applicable	Not Applicable
		0	0	0	0
	Natural heritage systems impact	Collector road crosses through wetland, woodlot and Natural Heritage System occupies a large portion of the west side of 52-3.	Eliminates E-W collector road going through wetland features.  No change to number of watercourse crossings in Precinct 52-3 compared with other options.  Mitigation in Precinct 52-2W: West Huttonville Creek (reach HV9) in this area is identified as a Medium Constraint (Blue) watercourse with flexibility in its management (i.e., it can be realigned).	Eliminates E-W collector road going through wetland features.  No change to number of watercourse crossings in Precinct 52-3 compared with other options.  Mitigation in Precinct 52-2W: West Huttonville Creek (reach HV9) in this area is identified as a Medium Constraint (Blue) watercourse with flexibility in its management (i.e., it can be realigned).	Eliminates E-W collector road going through wetland features.  No change to number of watercourse crossings in Precinct 52-3 compared with other options.  Mitigation in Precinct 52-2W: West Huttonville Creek (reach HV9) in this area is identified as a Medium Constraint (Blue) watercourse with flexibility in its management (i.e., it can be realigned).  Re-alignment of Pinnacle/Serve may require mitigation where it crosses the wetland, woodlot, and Natural Heritage System that occupies a large portion of the west side of Precinct 52-3.
		Least Preferred	More Preferred	More Preferred	Less Preferred
		1	3	3	2
Stormwater & Surface Water (flooding, erosion)	Stormwater impacts	Collector road crosses through wetland, woodlot and Natural Heritage System occupies a large portion of the west side of 52-3.	Eliminates E-W collector road going through wetland features.	Eliminates E-W collector road going through wetland features.	Eliminates E-W collector road going through wetland features.  Re-alignment of Pinnacle/Serve may require mitigation where it crosses the wetland, woodlot, and Natural Heritage System that occupies a large portion of the west side of Precinct 52-3.
		Least Preferred	More Preferred	More Preferred	Less Preferred
		1	3	3	2

Category	Measure	Alternatives			
		Option 1 – Secondary Plan Collector Road Network	Option 2 – Continuous North-South Connection	Option 3 – Continuous East-West Connection	Option 3A – Continuous East-West Connection (Pinnacle/Serve Realignment)
	Surface water (flooding, erosion) impacts	Collector road crosses through wetland, woodlot and Natural Heritage System occupies a large portion of the west side of 52-3.	Eliminates E-W collector road going through wetland features.	Eliminates E-W collector road going through wetland features.	Eliminates E-W collector road going through wetland features.  Re-alignment of Pinnacle/Serve may require mitigation where it crosses the wetland, woodlot, and Natural Heritage System that occupies a large portion of the west side of Precinct 52-3.
		Least Preferred	More Preferred	More Preferred	Less Preferred
		1	3	3	2
TOTAL Natural Environment Criteria Score		5	15	15	10

C. PRECINCT 52-3 ROAD NETWORK

C. Precinct 52-3 Road Network: Socio-Economic Criteria

Category	Measure	Alternatives			
		Option 1 – Secondary Plan Collector Road Network	Option 2 – Continuous North-South Connection	Option 3 – Continuous East-West Connection	Option 3A – Continuous East-West Connection
Advance Transportation Equity	Enhances transportation equity	Provides the finest grained connectivity for people by all modes.	E-W continuous road facility is interrupted. However, connectivity can be achieved in lieu of disconnected road network.	E-W continuous road facility is interrupted. However, connectivity can be achieved in lieu of disconnected road network.	E-W continuous road facility is interrupted. However, some connectivity can be achieved in lieu of disconnected road network.
		Most Preferred	More Preferred	More Preferred	Less Preferred
		4	3	3	2
Property Impacts / Requirements	Property impacts, including space and maintaining access to neighbouring properties	Requires the most overall land for transportation infrastructure compared to other options.	Overall, requires less land for transportation infrastructure than Option 1 across Precinct 52-3.	Overall, requires less land for transportation infrastructure than Option 1 across Precinct 52-3.	Least land acquisition compared to other options.  Connects east and west employment areas in Precinct 52-3 and 52-7.
		Less Preferred	More Preferred	More Preferred	Most Preferred
		2	3	3	4
	Land acquisition considerations	Requires the most overall land for transportation infrastructure compared to other options.	Overall, requires less land for transportation infrastructure than Option 1 across Precinct 52-3.	Overall, requires less land for transportation infrastructure than Option 1 across Precinct 52-3.	Least land acquisition compared to other options.
		Less Preferred	More Preferred	More Preferred	Most Preferred
		2	3	3	4
Nuisance Impacts (Noise, Vibration & Air Quality)	Noise and vibration level impact to area residents and road users	Divides vehicular traffic activity across multiple routes and provides local connectivity within Precinct 52-3	Greater vehicular activity on parallel corridors (Mayfield Road)	Greater vehicular activity on parallel corridors (Mayfield Road). Mitigated by continuous east-west connection between Precinct 52-3 and 52-7.	Greater vehicular activity on parallel corridors (Mayfield Road). Mitigated by continuous east-west connection between Precinct 52-3 and 52-7 and continuous north-south connection of Serve Street between Wanless Drive and Mayfield Road.
		Most Preferred	Least Preferred	Less Preferred	More Preferred
		4	1	2	3
	Air quality impact to area residents and road users	Divides vehicular traffic activity across multiple routes and provides local connectivity within Precinct 52-3	Greater vehicular activity on parallel corridors (Mayfield Road)	Greater vehicular activity on parallel corridors (Mayfield Road). Mitigated by continuous east-west connection between Precinct 52-3 and 52-7.	Greater vehicular activity on parallel corridors (Mayfield Road). Mitigated by continuous east-west connection between Precinct 52-3 and 52-7 and continuous north-south connection of Serve Street between Wanless Drive and Mayfield Road.
		Most Preferred	Least Preferred	Less Preferred	More Preferred
		4	1	2	3
Ease of Construction (Phasing, Geotechnical)	Construction phasing and Geotechnical Impact	Geotechnical impacts related to crossing wetland, woodlot and Natural Heritage feature in Precinct 52-3	Geotechnical impacts related to diversion of watercourse in Precinct 52-2W to match watercourse crossing to Precinct 52-3.	Geotechnical impacts related to diversion of watercourse in Precinct 52-2W to match watercourse crossing to Precinct 52-3.	Potential geotechnical impacts related to Serve Street realignment to address NHS mitigation requirements.
		Least Preferred	More Preferred	More Preferred	More Preferred
		1	3	3	3
Cost (Capital, Operating & Maintenance)	Capital, Operating, Maintenance Cost Impact	Greatest kilometres of roads in Precinct 52-3 and Pinnacle in Precinct 52-2W	Less kilometres of roads compared to Option 1.	Less kilometres of roads compared to Option 1 and 2.	Least kilometres of roads in Precinct 52-3.
		Less Preferred	More Preferred	More Preferred	Most Preferred
		2	3	3	4

Category	Measure	Alternatives			
		Option 1 – Secondary Plan Collector Road Network	Option 2 – Continuous North-South Connection	Option 3 – Continuous East-West Connection	Option 3A – Continuous East-West Connection
TOTAL Socio-Economic Criteria Score		19	17	19	23



C.      PRECINCT 52-3 ROAD NETWORK

C. Precinct 52-3 Road Network: Evaluation Tabulation

Category	Measure	Alternatives			
		Option 1 – Secondary Plan Collector Road Network	Option 2 – Continuous North-South Connection	Option 3 – Continuous East-West Connection	Option 3A – Continuous East-West Connection
Transportation Criteria	Total Score	35	24	31	24
	Ranking	Most Preferred	Less Preferred	More Preferred	Less Preferred
	Category Score	4	2	3	2
Cultural Environment Criteria	Total Score	0	0	0	0
	Ranking	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Category Score	0	0	0	0
Natural Environment Criteria	Total Score	5	15	15	10
	Ranking	Least Preferred	Most Preferred	Most Preferred	Less Preferred
	Category Score	1	4	4	3
Socio-Economic Criteria	Total Score	19	17	19	23
	Ranking	More/Less Preferred	Least Preferred	More/Less Preferred	Most Preferred
	Category Score	2	1	2	4
OVERALL TOTAL SCORE		59	56	65	57
OVERALL TOTAL OF CATEGORY SCORES		7	7	9	9

E. EAST-WEST CONNECTION FOCUS AREA (INTER-REGIONAL)

E. East-West Connection Focus Area (Inter-Regional): Transportation Criteria

Category	Measure	Alternatives			
		Option 1 – Do Nothing	Option 2 – North Bypass	Option 3 – South Bypass	Option 4 – Widen Highway 7
Enhance sustainable mobility and multi-modal travel options	Enhances public transit connectivity		Provides dedicated additional transit capacity in addition to maintaining Highway 7 through Norval.	Provides dedicated additional transit capacity in addition to maintaining Highway 7 through Norval. Not as effective as other options in addressing routing options of desired routes.	Provides transit capacity in mixed traffic with widening of Highway 7 through Norval.
		Not Applicable	Most Preferred	More Preferred	Less Preferred
		0	4	3	2
	Enhances Active transportation connectivity and Micromobility options		Provides dedicated additional active transportation routes in addition to maintaining Highway 7 through Norval.	Provides dedicated additional active transportation routes in addition to maintaining Highway 7 through Norval. Not as effective as other options in addressing routing options of desired routes.	May provide opportunity for dedicated active transportation with widening of Highway 7 through Norval.
		Not Applicable	Most Preferred	Less Preferred	More Preferred
		0	4	2	3
Traffic Impacts	Traffic operations & capacity impacts	Does not support the modelled traffic activity and EA Problem Statement	Provides the most effective relief of Norval traffic destined between Georgetown and Brampton.	Provides relief of Norval traffic destined between Georgetown and Brampton. Not as effective as other options in addressing capacity constraints of desired routes.	Traffic modelling shows the greatest operational improvements. However, traffic demand through Norval is induced with greater lanes.
		Not Applicable	Most Preferred	Less Preferred	More Preferred
		0	4	2	3
Enhance connectivity for people and goods	Enhances General travel routing		Provides the most effective relief of Norval traffic destined between Georgetown and Brampton.	Provides relief of Norval traffic destined between Georgetown and Brampton. Not as effective as other options in addressing routing options of desired routes.	Traffic modelling shows the greatest operational improvements. However, traffic demand through Norval is induced with greater lanes.
		Not Applicable	Most Preferred	Least Preferred	More Preferred
		0	4	1	3
	Freight routing impacts		Provides dedicated goods movement corridor in addition to maintaining Highway 7 through Norval.	Provides dedicated goods movement corridor in addition to maintaining Highway 7 through Norval. Less direct than Option 2.	Provides goods movemnent in mixed traffic with widening of Highway 7 through Norval.
		Not Applicable	Most Preferred	More Preferred	Less Preferred
		0	4	3	2
Integrate transportation and land use planning	Compatibility with existing and proposed land uses.		Impact to existing Greenbelt and existing landowners north of Highway 7 / Bovaird Drive (e.g. Old Pine Crest Road). Acts as a bypass of land uses in future, e.g. no interaction with future land uses.  Illustrative comparison. <b>Further detailed study recommended.</b>	Impact to existing Greenbelt and existing landowners south of Highway 7 / Bovaird Drive. Acts as a bypass of land uses in future, e.g. no interaction with future land uses.  Illustrative comparison. <b>Further detailed study recommended.</b>	Potential to impact existing land uses through Norval. Widening interacts with adjacent existing and future land uses.  Illustrative comparison. <b>Further detailed study recommended.</b>
		Not Applicable	Less Preferred	Less Preferred	More Preferred
		0	2	2	3
Protect public health and safety	Prioritizes vulnerable road users		Provides dedicated additional active transportation routes in addition to maintaining Highway 7 through Norval. Opportunities for enhanced pedestrian crossings.	Provides dedicated additional active transportation routes in addition to maintaining Highway 7 through Norval. Opportunities for enhanced pedestrian	May provide opportunity for dedicated active transportation with widening of Highway 7 through Norval. Opportunities for enhanced pedestrian crossings. Induced traffic demand with widening.

Category	Measure	Alternatives			
		Option 1 – Do Nothing	Option 2 – North Bypass	Option 3 – South Bypass	Option 4 – Widen Highway 7
				crossings. Limited opportunities for improvement for desired routes compared to other options.	
		Not Applicable	Most Preferred	More Preferred	Less Preferred
		0	4	3	2
	Promotes active living		Provides dedicated additional active transportation routes in addition to maintaining Highway 7 through Norval.	Provides dedicated additional active transportation routes in addition to maintaining Highway 7 through Norval. Limited opportunities for improvement for desired routes compared to other options.	May provide opportunity for dedicated active transportation with widening of Highway 7 through Norval. More direct than Option 3.
		Not Applicable	Most Preferred	Less Preferred	More Preferred
		0	4	2	3
Leverage flexibility for future planning	Protects for long range vision of Secondary Plan and flexible land use planning in adjacent Precincts.		Provides options for routing that can respond to several land use scenarios.  Adjacent Precincts protect for connection.	Provides options for routing that can respond to several land use scenarios. Not as effective as other options in addressing routing options of desired routes.  Adjacent Precincts protect for connection.	Options for widening would be closely tied to impacts/interface with existing Norval, while also providing new capacity, limiting flexibility.  Adjacent Precincts protect for connection.
		Not Applicable	Most Preferred	Less Preferred	Least Preferred
		0	4	2	1
TOTAL Transportation Criteria Score		0	34	20	22

E. EAST-WEST CONNECTION FOCUS AREA (INTER-REGIONAL)

E. East-West Connection Focus Area (Inter-Regional): Cultural Environment Criteria

Category	Measure	Alternatives			
		Option 1 – Do Nothing	Option 2 – North Bypass	Option 3 – South Bypass	Option 4 – Widen Highway 7
Archaeologic	Archaeological resources impacts		No current studies. High potential for archeological impacts in Credit River Valley. Illustrative comparison. <b>Further detailed study recommended.</b>	No current studies. High potential for archeological impacts in Credit River Valley. Illustrative comparison. <b>Further detailed study recommended.</b>	No current studies. Potential for archeological impacts in Norval. Illustrative comparison. <b>Further detailed study recommended.</b>
		Not Applicable	Least Preferred	Least Preferred	Less Preferred
		0	1	1	2
Cultural and Built Heritage	Cultural landscape		No current studies. Potential for cultural heritage in Credit River Valley. Illustrative comparison. <b>Further detailed study recommended.</b>	No current studies. Potential for cultural heritage in Credit River Valley. Illustrative comparison. <b>Further detailed study recommended.</b>	No current studies. Known cultural heritage in Norval. Illustrative comparison. <b>Further detailed study recommended.</b>
		Not Applicable	Less Preferred	Less Preferred	Least Preferred
		0	2	2	1
	Built heritage features		No current studies. Potential for built heritage in Credit River Valley. Illustrative comparison. <b>Further detailed study recommended.</b>	No current studies. Potential for built heritage in Credit River Valley. Illustrative comparison. <b>Further detailed study recommended.</b>	No current studies. Known built heritage in Norval. Illustrative comparison. <b>Further detailed study recommended.</b>
		Not Applicable	Less Preferred	Less Preferred	Least Preferred
		0	2	2	1
TOTAL Cultural Environment Criteria Score		0	5	5	4

E. EAST-WEST CONNECTION FOCUS AREA (INTER-REGIONAL)

E. East-West Connection Focus Area (Inter-Regional): Natural Environment Criteria					
Category	Measure	Alternatives			
		Option 1 – Do Nothing	Option 2 – North Bypass	Option 3 – South Bypass	Option 4 – Widen Highway 7
Terrestrial (species)	Environmentally sensitive areas (Vegetation, woodlots, wetlands)		High potential for impacts in the Credit River Valley. Illustrative comparison. <b>Further study recommended.</b>	High potential for impacts in the Credit River Valley. Illustrative comparison. <b>Further study recommended.</b>	Avoids Credit River Valley.
		Not Applicable	Least Preferred	Least Preferred	Most Preferred
		0	1	1	4
Aquatic (watercourses, species at risk)	Watercourse & fisheries		High potential for impacts in the Credit River Valley. Illustrative comparison. <b>Further study recommended.</b>	High potential for impacts in the Credit River Valley. Illustrative comparison. <b>Further study recommended.</b>	Avoids Credit River Valley.
		Not Applicable	Least Preferred	Least Preferred	Most Preferred
		0	1	1	4
Greenbelt & Natural Heritage Systems	Greenbelt impact		Entirely within the Greenbelt limits. High potential for impacts in the Credit River Valley. Illustrative comparison. <b>Further study recommended.</b>	Entirely within the Greenbelt limits. High potential for impacts in the Credit River Valley. Illustrative comparison. <b>Further study recommended.</b>	Entirely within the Greenbelt limits. Avoids the Credit River Valley.
		Not Applicable	Least Preferred	Least Preferred	More Preferred
		0	1	1	3
	Natural heritage systems impact		High potential for impacts in the Credit River Valley. Illustrative comparison. <b>Further study recommended.</b>	High potential for impacts in the Credit River Valley. Illustrative comparison. <b>Further study recommended.</b>	Avoids Credit River Valley.
		Not Applicable	Least Preferred	Least Preferred	Most Preferred
		0	1	1	4
Stormwater & Surface Water (flooding, erosion)	Stormwater impacts		Further study recommended to understand impacts.	Further study recommended to understand impacts.	Further study recommended to understand impacts.
		Not Applicable	Not Applicable	Not Applicable	Not Applicable
		0	0	0	0
	Surface water (flooding, erosion) impacts		Further study recommended to understand impacts.	Further study recommended to understand impacts.	Further study recommended to understand impacts.
		Not Applicable	Not Applicable	Not Applicable	Not Applicable
		0	0	0	0
TOTAL Natural Environment Criteria Score		0	4	4	15

E. EAST-WEST CONNECTION FOCUS AREA (INTER-REGIONAL)

E. East-West Connection Focus Area (Inter-Regional): Socio-Economic Criteria

Category	Measure	Alternatives			
		Option 1 – Do Nothing	Option 2 – North Bypass	Option 3 – South Bypass	Option 4 – Widen Highway 7
Advance Transportation Equity	Enhances transportation equity		Provides dedicated additional active transportation routes in addition to maintaining Highway 7 through Norval.	Provides dedicated additional active transportation routes in addition to maintaining Highway 7 through Norval.	May provide opportunity for dedicated active transportation with widening of Highway 7 through Norval.
		Not Applicable	Most Preferred	Most Preferred	Less Preferred
		0	4	4	2
Property Impacts / Requirements	Property impacts, including space and maintaining access to neighbouring properties		Several potential impacts to existing properties north of Highway 7 / Bovaird Drive	Several potential impacts to existing properties south of Highway 7 / Bovaird Drive	Known direct impacts to Norval community.
		Not Applicable	Less Preferred	Less Preferred	Least Preferred
		0	2	2	1
	Land acquisition considerations		Several potential impacts to existing properties north of Highway 7 / Bovaird Drive	Several potential impacts to existing properties south of Highway 7 / Bovaird Drive	Known direct impacts to Norval community. Highway 7 is a provincial road. Acquisition through coordination and approval of province required.
		Not Applicable	Less Preferred	Less Preferred	Least Preferred
		0	2	2	1
Nuisance Impacts (Noise, Vibration & Air Quality)	Noise and vibration level impact to area residents and road users		Diverts traffic (and related noise) to new route.	Diverts traffic (and related noise) to new route. Less effective than Option 2.	Directs traffic (and related noise) through Norval.
		Not Applicable	Most Preferred	More Preferred	Least Preferred
		0	4	3	1
	Air quality impact to area residents and road users		Diverts traffic (and related air quality impacts) to new route, away from existing Norval.	Diverts traffic (and related air quality impacts) to new route, away from existing Norval. Less effective than Option 2.	Directs traffic (and related air quality impacts) through Norval.
		Not Applicable	Most Preferred	More Preferred	Least Preferred
		0	4	3	1
Ease of Construction (Phasing, Geotechnical)	Construction phasing and Geotechnical Impact		Further study recommended to understand impacts.  Unique infrastructure and long bridge span through Credit River Valley. High potential for geotechnical impacts to be mitigated.	Further study recommended to understand impacts.  Unique infrastructure and long bridge span through Credit River Valley. High potential for geotechnical impacts to be mitigated.	Further study recommended to understand impacts.  Complexity with widening and designing within existing Norval community. Potential for moving, impacting, or restoring cultural/built heritage.
		Not Applicable	Least Preferred	Least Preferred	Less Preferred
		0	1	1	2
Cost (Capital, Operating & Maintenance)	Capital, Operating, Maintenance Cost Impact		Further study recommended to understand impacts.  High cost associated with unique infrastructure and long bridge span through Credit River Valley.	Further study recommended to understand impacts.  High cost associated with unique infrastructure and long bridge span through Credit River Valley.	Further study recommended to understand impacts.  High cost associated with widening and designing within existing Norval community. Potential for moving, impacting, or restoring cultural/built heritage.
		Not Applicable	Least Preferred	Least Preferred	Less Preferred
		0	1	1	2
TOTAL Socio-Economic Criteria Score		0	18	16	10

E. EAST-WEST CONNECTION FOCUS AREA (INTER-REGIONAL)

E. East-West Connection Focus Area (Inter-Regional): Evaluation Tabulation

Category	Measure	Alternatives			
		Option 1 – Do Nothing	Option 2 – North Bypass	Option 3 – South Bypass	Option 4 – Widen Highway 7
Transportation Criteria	Total Score	0	34	20	22
	Ranking	Not Applicable	Most Preferred	Less Preferred	More Preferred
	Category Score	0	4	2	3
Cultural Environment Criteria	Total Score	0	5	5	4
	Ranking	Not Applicable	Most Preferred	Most Preferred	More Preferred
	Category Score	0	4	4	3
Natural Environment Criteria	Total Score	0	4	4	15
	Ranking	Not Applicable	Least Preferred	Least Preferred	Most Preferred
	Category Score	0	1	1	4
Socio-Economic Criteria	Total Score	0	18	16	10
	Ranking	Not Applicable	Most Preferred	More Preferred	Less Preferred
	Category Score	0	4	3	2
OVERALL TOTAL SCORE		0	61	45	51
OVERALL TOTAL OF CATEGORY SCORES		0	13	10	12
STATUS:		SCREENED OUT	NO RECOMMENDATION - FURTHER STUDY REQUIRED	NO RECOMMENDATION - FURTHER STUDY REQUIRED	NO RECOMMENDATION - FURTHER STUDY REQUIRED



F. BUICK BOULEVARD (52-2)

F. Buick Boulevard (52-2): Transportation Criteria

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Road Network (Sandalwood & Yardmaster)	Option 2 – Sandalwood + Yardmaster + Buick	Option 3 – Secondary Plan Road Network (Sandalwood + Yardmaster) + Buick Active Transportation
Enhance sustainable mobility and multi-modal travel options	Enhances public transit connectivity	Less local east-west transit connectivity between Precinct 52-2W and Precinct 52-2E compared to Option 2.	Provides the finest grained connectivity for collector (transit-friendly) road network	Less east-west transit connectivity between Precinct 52-2W and Precinct 52-2E compared to Option 2. Walkability provided between transit routes.
		Least Preferred	Most Preferred	Less Preferred
		1	4	2
	Enhances Active transportation connectivity and Micromobility options	Loss of local east-west active transportation connectivity between Precinct 52-2W and Precinct 52-2E compared to Option 2 and 3.	Provides the fine grained connectivity for walking and cycling between Precinct 52-2W and Precinct 52-2E.	Provides the fine grained connectivity for walking and cycling between Precinct 52-2W and Precinct 52-2E.
		Least Preferred	Most Preferred	Most Preferred
		1	4	4
Traffic Impacts	Traffic operations & capacity impacts	Modelling shows Precinct 52-2 road network remains within capacity.	Provides the finest grained connectivity for vehicular capacity and routing options.	Modelling shows Precinct 52-2 road network remains within capacity.
		More Preferred	Most Preferred	More Preferred
		3	4	3
Enhance connectivity for people and goods	Enhances General travel routing	Less local east-west routing options across all modes between Precinct 52-2W and Precinct 52-2E	Provides the finest grained connectivity for vehicular capacity and routing options.	Provides the fine grained connectivity for walking and cycling between Precinct 52-2W and Precinct 52-2E.
		Least Preferred	Most Preferred	More Preferred
		1	4	3
	Freight routing impacts	Loss of local delivery option compared to Option 2. Most goods movement expected on higher order highway, arterial and industrial collector roads.	Provides local delivery options between Precinct 52-5 and Precinct 52-6 on a collector road. Most goods movement expected on higher order highway, arterial and industrial collector roads.	Loss of local delivery option compared to Option 1. Most goods movement expected on higher order highway, arterial and industrial collector roads.
		More Preferred	Most Preferred	More Preferred
		3	4	3
Integrate transportation and land use planning	Compatibility with existing and proposed land uses.	Alignment of Court Road at Buick impacts land use compatibility and compromises road network configuration in close proximity to Mississauga Road.	Option 2 provides realignment of Buick with Court Road that normalizes intersection configuration and is in greater alignment with land use compatibility.  Connects high density residential in Precinct 52-2E with employment uses in Precinct 52-2W	Option 2 provides realignment of Buick with Court Road that normalizes intersection configuration and is in greater alignment with land use compatibility.  Connects high density residential in Precinct 52-2E with employment uses in Precinct 52-2W
		Least Preferred	Most Preferred	More Preferred
		2	4	3
Protect public health and safety	Prioritizes vulnerable road users	Less local east-west routing options across all modes between Precinct 52-2W and Precinct 52-2E	Provides the finest grained connectivity for vehicular capacity and routing options.	Provides the fine grained connectivity for walking and cycling between Precinct 52-2W and Precinct 52-2E.
		Least Preferred	Most Preferred	More Preferred
		1	4	3
	Promotes active living	Loss of local east-west active transportation connectivity between Precinct 52-2W and Precinct 52-2E compared to Option 2 and 3.	Provides the fine grained connectivity for walking and cycling between Precinct 52-2W and Precinct 52-2E.	Provides the fine grained connectivity for walking and cycling between Precinct 52-2W and Precinct 52-2E.
		Least Preferred	Most Preferred	Most Preferred



Category	Measure	Alternatives		
		Option 1 – Secondary Plan Road Network (Sandalwood & Yardmaster)	Option 2 – Sandalwood + Yardmaster + Buick	Option 3 – Secondary Plan Road Network (Sandalwood + Yardmaster) + Buick Active Transportation
		1	4	4
Leverage flexibility for future planning	Protects for long range vision of Secondary Plan and flexible land use planning in adjacent Precincts.	Less local east-west routing options across all modes between Precinct 52-2W and Precinct 52-2E.	Provides the finest grained connectivity and protection for future road network to support multiple land uses.	Provides the fine grained connectivity for walking and cycling between Precinct 52-2W and Precinct 52-2E.
		Yardmaster provides an alternate servicing option for Secondary Plan (Heritage Heights Infrastructure and Servicing Study)	Yardmaster provides an alternate servicing option for Secondary Plan (Heritage Heights Infrastructure and Servicing Study)	Yardmaster provides an alternate servicing option for Secondary Plan (Heritage Heights Infrastructure and Servicing Study)
		Less Preferred	Most Preferred	More Preferred
		2	4	3
TOTAL Transportation Criteria Score		15	36	28

F. BUICK BOULEVARD (52-2)

F. Buick Boulevard (52-2): Cultural Environment Criteria

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Road Network (Sandalwood & Yardmaster)	Option 2 – Sandalwood + Yardmaster + Buick	Option 3 – Secondary Plan Road Network (Sandalwood + Yardmaster) + Buick Active Transportation
Archaeologic	Archaeological resources impacts	Stage 1-2 and Stage 1-3 Archeological Assessments completed in Precinct 52-2E	Stage 1-2 and Stage 1-3 Archeological Assessments completed in Precinct 52-2E	Stage 1-2 and Stage 1-3 Archeological Assessments completed in Precinct 52-2E
		Not Applicable	Not Applicable	Not Applicable
		0	0	0
Cultural and Built Heritage	Cultural landscape	Cultural Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.	Cultural Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.	Cultural Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.
		Not Applicable	Not Applicable	Not Applicable
		0	0	0
	Built heritage features	Built Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.	Built Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.	Built Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.
		Not Applicable	Not Applicable	Not Applicable
		0	0	0
TOTAL Cultural Environment Criteria Score		0	0	0

F. BUICK BOULEVARD (52-2)

F. Buick Boulevard (52-2): Natural Environment Criteria

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Road Network (Sandalwood & Yardmaster)	Option 2 – Sandalwood + Yardmaster + Buick	Option 3 – Secondary Plan Road Network (Sandalwood + Yardmaster) + Buick Active Transportation
Terrestrial (species)	Environmentally sensitive areas (Vegetation, woodlots, wetlands)	<b>Yardmaster</b> crosses West Huttonville Creek (HV4) - A High Constraint (Red) watercourse that is direct fish habitat, occupied Redside Dace habitat (considered Critical Habitat by DFO under the federal Species at Risk Act) - PSW 26 is located along the route and would need to be crossed. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction	<b>Buick</b> crosses a narrow riparian band. West Huttonville Creek (reach HV7) is: - a Medium Constraint watercourse providing direct seasonal fish habitat and Terrestrial Crayfish Significant Wildlife Habitat. - PSW22 is close to the proposed crossing location - SPA 2 area north of the crossing is constrained by PSW, significant woodland, significant wildlife habitat and species at risk habitat. - The 30 m PSW buffer and 10 m significant woodland buffer extend into the potential alignment area. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction  <b>Yardmaster</b> crosses West Huttonville Creek (HV4) - A High Constraint watercourse that is direct fish habitat, occupied Redside Dace habitat (considered Critical Habitat by DFO under the federal Species at Risk Act) - PSW 26 is located along the route and would need to be crossed. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction	<b>Yardmaster</b> crosses West Huttonville Creek (HV4) - A High Constraint (Red) watercourse that is direct fish habitat, occupied Redside Dace habitat (considered Critical Habitat by DFO under the federal Species at Risk Act) - PSW 26 is located along the route and would need to be crossed. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction
		More Preferred	Least Preferred	More Preferred
		3	1	3
Aquatic (watercourses, species at risk)	Watercourse & fisheries	<b>Yardmaster</b> crosses West Huttonville Creek (HV4) - A High Constraint (Red) watercourse that is direct fish habitat, occupied Redside Dace habitat (considered Critical Habitat by DFO under the federal Species at Risk Act) - PSW 26 is located along the route and would need to be crossed. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction	<b>Buick</b> crosses a narrow riparian band. West Huttonville Creek (reach HV7) is: - a Medium Constraint watercourse providing direct seasonal fish habitat and Terrestrial Crayfish Significant Wildlife Habitat. - PSW22 is close to the proposed crossing location - SPA 2 area north of the crossing is constrained by PSW, significant woodland, significant wildlife habitat and species at risk habitat. - The 30 m PSW buffer and 10 m significant woodland buffer extend into the potential alignment area. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction  <b>Yardmaster</b> crosses West Huttonville Creek (HV4) - A High Constraint watercourse that is direct fish habitat, occupied Redside Dace habitat (considered Critical Habitat by DFO under the federal Species at Risk Act) - PSW 26 is located along the route and would need to be crossed. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction	<b>Yardmaster</b> crosses West Huttonville Creek (HV4) - A High Constraint (Red) watercourse that is direct fish habitat, occupied Redside Dace habitat (considered Critical Habitat by DFO under the federal Species at Risk Act) - PSW 26 is located along the route and would need to be crossed. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction
		More Preferred	Least Preferred	More Preferred
		3	1	3
Greenbelt & Natural Heritage Systems	Greenbelt impact	Greenbelt outside of study area. See <b>Existing Context – Natural Areas</b> map.	Greenbelt outside of study area. See <b>Existing Context – Natural Areas</b> map.	Greenbelt outside of study area. See <b>Existing Context – Natural Areas</b> map.
		Not Applicable	Not Applicable	Not Applicable
		0	0	0

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Road Network (Sandalwood & Yardmaster)	Option 2 – Sandalwood + Yardmaster + Buick	Option 3 – Secondary Plan Road Network (Sandalwood + Yardmaster) + Buick Active Transportation
	Natural heritage systems impact	<b>Yardmaster</b> crosses West Huttonville Creek (HV4) - A High Constraint (Red) watercourse that is direct fish habitat, occupied Redside Dace habitat (considered Critical Habitat by DFO under the federal Species at Risk Act) - PSW 26 is located along the route and would need to be crossed. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction	<b>Buick</b> crosses a narrow riparian band. West Huttonville Creek (reach HV7) is: - a Medium Constraint watercourse providing direct seasonal fish habitat and Terrestrial Crayfish Significant Wildlife Habitat. - PSW22 is close to the proposed crossing location - SPA 2 area north of the crossing is constrained by PSW, significant woodland, significant wildlife habitat and species at risk habitat. - The 30 m PSW buffer and 10 m significant woodland buffer extend into the potential alignment area. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction  <b>Yardmaster</b> crosses West Huttonville Creek (HV4) - A High Constraint watercourse that is direct fish habitat, occupied Redside Dace habitat (considered Critical Habitat by DFO under the federal Species at Risk Act) - PSW 26 is located along the route and would need to be crossed. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction	<b>Yardmaster</b> crosses West Huttonville Creek (HV4) - A High Constraint (Red) watercourse that is direct fish habitat, occupied Redside Dace habitat (considered Critical Habitat by DFO under the federal Species at Risk Act) - PSW 26 is located along the route and would need to be crossed. - West Huttonville Creek is considered to be an ecological linkage facilitating wildlife movements in a N-S direction
		More Preferred	Least Preferred	More Preferred
		3	1	3
		Stormwater & Surface Water (flooding, erosion)	Stormwater impacts	
Not Applicable	Not Applicable			Not Applicable
0	0		0	
Surface water (flooding, erosion) impacts				
	Not Applicable	Not Applicable	Not Applicable	
0	0	0		
TOTAL Natural Environment Criteria Score		9	3	9

F. BUICK BOULEVARD (52-2)

F. Buick Boulevard (52-2): Socio-Economic Criteria

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Road Network (Sandalwood & Yardmaster)	Option 2 – Sandalwood + Yardmaster + Buick	Option 3 – Secondary Plan Road Network (Sandalwood + Yardmaster) + Buick Active Transportation
Advance Transportation Equity	Enhances transportation equity	Less local east-west routing options across all modes between Precinct 52-2W and Precinct 52-2E	Provides the finest grained connectivity for vehicular capacity and routing options.	Provides the fine grained connectivity for walking and cycling between Precinct 52-2W and Precinct 52-2E.
		Least Preferred	Most Preferred	More Preferred
		1	4	3
Property Impacts / Requirements	Property impacts, including space and maintaining access to neighbouring properties	Least overall property required to deliver road network.	Buick extension requires the greatest overall property to deliver road network.	Some greater property impacts to deliver active transportation compared to Option 1.
		Most Preferred	Least Preferred	More Preferred
		4	1	3
	Land acquisition considerations	Yardmaster crosses two participating landowner properties.	Buick extension requires the greatest overall property to deliver road network. Crosses 3 landowner properties and natural heritage features.  Yardmaster crosses two participating landowner properties.	Buick active transportation crossing may cross 3 landowner properties. Opportunities to explore a variety of designs and crossing locations that may avoid or mitigate impacts to property and Natural Heritage System features.  Yardmaster crosses two participating landowner properties.
		Most Preferred	Least Preferred	More Preferred
		4	1	3
Nuisance Impacts (Noise, Vibration & Air Quality)	Noise and vibration level impact to area residents and road users	Greater vehicular activity (and related noise) on parallel corridors (Sandalwood Parkway, and Yardmaster Drive).	Divides vehicular traffic activity (and related noise) across multiple routes and provides local connectivity between Precinct 52-2W and Precinct 52-2E	Greater vehicular activity (and related noise) on parallel corridors (Sandalwood Parkway, and Yardmaster Drive).  Improved walking and cycling experience between Precinct 52-5 and Precinct 52-6 compared to no bridge.
		Less Preferred	Most Preferred	More Preferred
		2	4	3
	Air quality impact to area residents and road users	Greater vehicular activity (and related noise) on parallel corridors (Sandalwood Parkway, and Yardmaster Drive).	Divides vehicular traffic activity (and related noise) across multiple routes and provides local connectivity between Precinct 52-2W and Precinct 52-2E	Greater vehicular activity (and related noise) on parallel corridors (Sandalwood Parkway, and Yardmaster Drive).  Improved walking and cycling experience between Precinct 52-5 and Precinct 52-6 compared to no bridge.
		Less Preferred	Most Preferred	More Preferred
		2	4	3
Ease of Construction (Phasing, Geotechnical)	Construction phasing and Geotechnical Impact	Yardmaster provides an alternate servicing option for Secondary Plan in advance of Sandalwood Parkway (Heritage Heights Infrastructure and Servicing Study)	Yardmaster provides an alternate servicing option for Secondary Plan in advance of Sandalwood Parkway (Heritage Heights Infrastructure and Servicing Study)  Has three vehicular bridge crossings of Natural Heritage Features (compared to two crossings in Option 1 and Option 3)	Yardmaster provides an alternate servicing option for Secondary Plan in advance of Sandalwood Parkway (Heritage Heights Infrastructure and Servicing Study)  Opportunities to explore a variety of designs and crossing locations for active transportation that may avoid or mitigate impacts to property and Natural Heritage System features.
		Most Preferred	Least Preferred	More Preferred
		4	1	3

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Road Network (Sandalwood & Yardmaster)	Option 2 – Sandalwood + Yardmaster + Buick	Option 3 – Secondary Plan Road Network (Sandalwood + Yardmaster) + Buick Active Transportation
Cost (Capital, Operating & Maintenance)	Capital, Operating, Maintenance Cost Impact	Has the least kilometres of road network including three vehicular bridge crossings of Natural Heritage Features (compared to Option 1 and Option 3)	Has the greatest kilometres of road network including three vehicular bridge crossings of Natural Heritage Features (compared to two crossings in Option 1 and Option 3)	Has the same kilometres of road network as Option 1, plus an active transportation corridor. Opportunities to explore a variety of designs and crossing locations for active transportation that may mitigate cost.
		Most Preferred	Least Preferred	More Preferred
		4	1	3
TOTAL Socio-Economic Criteria Score		21	16	21

F. BUICK BOULEVARD (52-2)

F. Buick Boulevard (52-2): Evaluation Tabulation

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Road Network (Sandalwood & Yardmaster)	Option 2 – Sandalwood + Yardmaster + Buick	Option 3 – Secondary Plan Road Network (Sandalwood + Yardmaster) + Buick Active Transportation
Transportation Criteria	Total Score	15	36	28
	Ranking	Least Preferred	Most Preferred	More Preferred
	Category Score	1	4	3
Cultural Environment Criteria	Total Score	0	0	0
	Ranking	Not Applicable	Not Applicable	Not Applicable
	Category Score	0	0	0
Natural Environment Criteria	Total Score	9	3	9
	Ranking	Most Preferred	Least Preferred	Most Preferred
	Category Score	4	1	4
Socio-Economic Criteria	Total Score	21	16	21
	Ranking	Most Preferred	Least Preferred	Most Preferred
	Category Score	4	1	4
OVERALL TOTAL SCORE		45	55	58
OVERALL TOTAL OF CATEGORY SCORES		9	6	11

G. NORTH-SOUTH RAIL CROSSING (52-5, 52-6)

G. North-South Rail Crossing (52-5, 52-6): Transportation Criteria

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Collector Road Crossing	Option 2 – Remove Secondary Plan Collector Road Crossing	Option 3 – Remove Secondary Plan Collector Road Crossing, Maintain Active Crossing
Enhance sustainable mobility and multi-modal travel options	Enhances public transit connectivity	Provides the finest grained connectivity for collector (transit-friendly) road network	Loss of local north-south transit connectivity between Precinct 52-5 and Precinct 52-6	Loss of local north-south transit connectivity between Precinct 52-5 and Precinct 52-6. Walkability provided between transit routes.
		Most Preferred	Least Preferred	Less Preferred
		4	1	2
	Enhances Active transportation connectivity and Micromobility options	Provides the fine grained connectivity for walking and cycling between Precinct 52-5 and Precinct 52-6	Loss of local north-south active transportation connectivity between Precinct 52-5 and Precinct 52-6	Provides the fine grained connectivity for walking and cycling between Precinct 52-5 and Precinct 52-6
		Most Preferred	Least Preferred	Most Preferred
		4	1	4
Traffic Impacts	Traffic operations & capacity impacts	Provides the finest grained connectivity for vehicular capacity and routing options.	Less local north-south routing options between Precinct 52-5 and Precinct 52-6.  Modelling shows parallel corridors remain within capacity with removal of crossing.  Mitigation measures: Intersection configuration and signal timing adjustments to accommodate increased demands at Winston Churchill Boulevard and Heritage Road intersections with collector road network.	Less local north-south routing options between Precinct 52-5 and Precinct 52-6.  Modelling shows parallel corridors remain within capacity with removal of crossing.  Mitigation measures: Intersection configuration and signal timing adjustments to accommodate increased demands at Winston Churchill Boulevard and Heritage Road intersections with collector road network.
		Most Preferred	More Preferred	More Preferred
		4	3	3
Enhance connectivity for people and goods	Enhances General travel routing	Provides the finest grained connectivity for people by all modes.	Less local north-south routing options across all modes between Precinct 52-5 and Precinct 52-6.	Walking and cycling routing connectivity maintained for neighbourhood connectivity between Precinct 52-5 and Precinct 52-6.
		Most Preferred	Least Preferred	More Preferred
		4	1	3
	Freight routing impacts	Provides local delivery options between Precinct 52-5 and Precinct 52-6 on a collector road. Most goods movement expected on higher order highway, arterial and industrial collector roads.	Loss of local delivery option compared to Option 1. Most goods movement expected on higher order highway, arterial and industrial collector roads.	Loss of local delivery option compared to Option 1. Most goods movement expected on higher order highway, arterial and industrial collector roads.
		Most Preferred	Less Preferred	Less Preferred
		4	2	2
Integrate transportation and land use planning	Compatibility with existing and proposed land uses.	Requires crossing of the existing and expanding CN Railway Layby and Maintenance Facility.  Grade separation would be required. Overpass restricts opportunities for local access and development areas in Precinct 52-5 and Precinct 52-6. Underpass would mitigate overpass impacts, with increased complexity/cost and would require groundwater pumping (e.g. low-point).	Loss of connection minimizes impact on adjacent land uses and CN Railway Layby and Maintenance Facility. Does not achieve connectivity between Precinct 52-5 and Precinct 52-6.	Active Transportation Crossing has minimal impact on adjacent land uses in Precinct 52-5 and Precinct 52-6, while also achieve local connectivity for walking and cycling. Opportunities to explore a variety of designs and crossing locations.
		Least Preferred	More Preferred	Most Preferred
		1	3	4



Category	Measure	Alternatives		
		Option 1 – Secondary Plan Collector Road Crossing	Option 2 – Remove Secondary Plan Collector Road Crossing	Option 3 – Remove Secondary Plan Collector Road Crossing, Maintain Active Crossing
Protect public health and safety	Prioritizes vulnerable road users	Provides the fine grained connectivity for walking and cycling between Precinct 52-5 and Precinct 52-6	Loss of local north-south active transportation connectivity between Precinct 52-5 and Precinct 52-6	Provides the fine grained connectivity for walking and cycling between Precinct 52-5 and Precinct 52-6
		Most Preferred	Least Preferred	Most Preferred
		4	1	4
	Promotes active living	Provides the fine grained connectivity for walking and cycling between Precinct 52-5 and Precinct 52-6	Loss of local north-south active transportation connectivity between Precinct 52-5 and Precinct 52-6	Provides the fine grained connectivity for walking and cycling between Precinct 52-5 and Precinct 52-6
		Most Preferred	Least Preferred	Most Preferred
		4	1	4
Leverage flexibility for future planning	Protects for long range vision of Secondary Plan and flexible land use planning in adjacent Precincts.	Provides the finest grained connectivity for people by all modes.	Loss of local north-south connectivity between planned Precinct 52-5 and Precinct 52-6 neighbourhood uses.	Provides the finest grained connectivity for walking and cycling between Precinct 52-5 and Precinct 52-6 planned neighbourhood uses without impacting existing and proposed land uses with overpass/underpass design.
		Overpass/Underpass options have potential impacts on existing and proposed land uses.		Bridge connection not required for servicing in Infrastructure Servicing Study.
		Less Preferred	Least Preferred	More Preferred
		2	1	3
TOTAL Transportation Criteria Score		31	14	29

G. NORTH-SOUTH RAIL CROSSING (52-5, 52-6)

G. North-South Rail Crossing (52-5, 52-6): Cultural Environment Criteria

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Collector Road Crossing	Option 2 – Remove Secondary Plan Collector Road Crossing	Option 3 – Remove Secondary Plan Collector Road Crossing, Maintain Active Crossing
Archaeologic	Archaeological resources impacts	Overpass/Underpass may impact	No bridge, least risk	Smaller scale bridge affecting smaller surrounding area.  Opportunities to explore a variety of designs and crossing locations.
		Least Preferred	Most Preferred	More Preferred
		1	4	3
Cultural and Built Heritage	Cultural landscape	Cultural Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.	Cultural Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.	Cultural Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.
		Not Applicable	Not Applicable	Not Applicable
		0	0	0
	Built heritage features	Built Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.	Built Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.	Built Heritage areas not identified within study area. See <b>Existing Context – Cultural Heritage Areas</b> map.
		Not Applicable	Not Applicable	Not Applicable
		0	0	0
TOTAL Cultural Environment Criteria Score		1	4	3

G. NORTH-SOUTH RAIL CROSSING (52-5, 52-6)

G. North-South Rail Crossing (52-5, 52-6): Natural Environment Criteria

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Collector Road Crossing	Option 2 – Remove Secondary Plan Collector Road Crossing	Option 3 – Remove Secondary Plan Collector Road Crossing, Maintain Active Crossing
Terrestrial (species)	Environmentally sensitive areas (Vegetation, woodlots, wetlands)	Known woodlots and wetlands outside of study area. See <b>Existing Context – Natural Areas</b> map.	Known woodlots and wetlands outside of study area. See <b>Existing Context – Natural Areas</b> map.	Known woodlots and wetlands outside of study area. See <b>Existing Context – Natural Areas</b> map.
		Not Applicable	Not Applicable	Not Applicable
		0	0	0
Aquatic (watercourses, species at risk)	Watercourse & fisheries			
		Not Applicable	Not Applicable	Not Applicable
		0	0	0
Greenbelt & Natural Heritage Systems	Greenbelt impact	Greenbelt outside of study area. See <b>Existing Context – Natural Areas</b> map.	Greenbelt outside of study area. See <b>Existing Context – Natural Areas</b> map.	Greenbelt outside of study area. See <b>Existing Context – Natural Areas</b> map.
		Not Applicable	Not Applicable	Not Applicable
		0	0	0
	Natural heritage systems impact	Impacts to Natural Heritage System with overpass/underpass. See Network B – Short List Alternatives map would require mitigation.	Removes direct impact with Natural Heritage System features at railway.	Smaller scale bridge affecting smaller surrounding area.  Opportunities to explore a variety of designs and crossing locations that may avoid or mitigate impacts to Natural Heritage System features at railway.
		Least Preferred	Most Preferred	More Preferred
		1	4	3
Stormwater & Surface Water (flooding, erosion)	Stormwater impacts	Low Point (underpass) would require pumping and other measures to challenging to mitigate for stormwater. Overpass is challenged by grading that has considerable impacts to future land uses.	Avoids grading and subsequent stormwater impacts related to a bridge.	Opportunities to explore a variety of designs and crossing locations that may avoid or mitigate impacts to grading/stormwater
		Bridge connection not required for servicing in Infrastructure Servicing Study.		
		Least Preferred		
		1		
	Surface water (flooding, erosion) impacts	Low Point (underpass) would require pumping and other measures to mitigate. Overpass	Avoids impacts related to bridge.	Headwater Drainage Feature with a floodplain near crossing location.  Opportunities to explore a variety of designs and crossing locations that may avoid or mitigate impacts to floodplain.
		Headwater Drainage Feature with a floodplain near crossing location.		
		Least Preferred		
1	4	3		
TOTAL Natural Environment Criteria Score		3	12	9

G. NORTH-SOUTH RAIL CROSSING (52-5, 52-6)

G. North-South Rail Crossing (52-5, 52-6): Socio-Economic Criteria

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Collector Road Crossing	Option 2 – Remove Secondary Plan Collector Road Crossing	Option 3 – Remove Secondary Plan Collector Road Crossing, Maintain Active Crossing
Advance Transportation Equity	Enhances transportation equity	Provides the finest grained connectivity for people by all modes.	Less local north-south routing options across all modes between Precinct 52-5 and Precinct 52-6.	Walking and cycling routing connectivity maintained for neighbourhood connectivity between Precinct 52-5 and Precinct 52-6.
		Most Preferred	Least Preferred	More Preferred
		4	1	3
Property Impacts / Requirements	Property impacts, including space and maintaining access to neighbouring properties	Requires crossing of the existing and expanding CN Railway Layby and Maintenance Facility.  Grade separation would be required. Overpass restricts opportunities for local access and development areas in Precinct 52-5 and Precinct 52-6. Underpass would mitigate overpass impacts, with increased complexity/cost and would require groundwater pumping (e.g. low-point).	Loss of connection minimizes impact on adjacent land uses and CN Railway Layby and Maintenance Facility. Does not achieve connectivity between Precinct 52-5 and Precinct 52-6.	Active Transportation Crossing has minimal impact on adjacent land uses in Precinct 52-5 and Precinct 52-6, while also achieve local connectivity for walking and cycling. Opportunities to explore a variety of designs and crossing locations.
		Least Preferred	More Preferred	Most Preferred
		1	3	4
	Land acquisition considerations	Greatest overall impact to adjacent lands.	Least Impact to Adjacent Lands	Minimal Impact to Adjacent Lands
		Least Preferred	More Preferred	Less Preferred
		1	3	2
Nuisance Impacts (Noise, Vibration & Air Quality)	Noise and vibration level impact to area residents and road users	Divides vehicular traffic activity across multiple routes and provides local connectivity between Precinct 52-5 and Precinct 52-6 (e.g. shorter trips)	Greater vehicular activity on parallel corridors (Heritage Road and Winston Churchill Boulevard).	Greater vehicular activity on parallel corridors (Heritage Road and Winston Churchill Boulevard).  Improved walking and cycling experience between Precinct 52-5 and Precinct 52-6 compared to no bridge.
		Most Preferred	Least Preferred	Less Preferred
		4	1	2
	Air quality impact to area residents and road users	Divides vehicular traffic activity across multiple routes and provides local connectivity between Precinct 52-5 and Precinct 52-6 (e.g. shorter trips)	Loss of Greater vehicular activity on parallel corridors (Heritage Road and Winston Churchill Boulevard), including more idling at boundary intersections. north-south transit connectivity between Precinct 52-5 and Precinct 52-6  Mitigation measures: Intersection configuration and signal timing adjustments to accommodate increased demands at Winston Churchill Boulevard and Heritage Road intersections with collector road network.	Greater vehicular activity on parallel corridors (Heritage Road and Winston Churchill Boulevard), including more idling at boundary intersections.  Mitigation measures: Intersection configuration and signal timing adjustments to accommodate increased demands at Winston Churchill Boulevard and Heritage Road intersections with collector road network.  Improved walking and cycling experience between Precinct 52-5 and Precinct 52-6 compared to no bridge.
		Most Preferred	Least Preferred	Less Preferred
		4	1	2
Ease of Construction (Phasing, Geotechnical)	Construction phasing and Geotechnical Impact	Most complex to address and build in context with the existing and expanding CN Railway Layby and Maintenance Facility and development of adjacent Precincts.  Grade separation would be required. Overpass requires significant fill, Underpass would mitigate overpass impacts, with increased complexity/cost and would require groundwater pumping (e.g. low-point).	Eliminates requirement to build bridge	Less complex than vehicular bridge.  Opportunities to explore a variety of designs and crossing locations that may mitigate phasing and geotechnical impacts.
		Least Preferred	Most Preferred	More Preferred
		1	4	3

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Collector Road Crossing	Option 2 – Remove Secondary Plan Collector Road Crossing	Option 3 – Remove Secondary Plan Collector Road Crossing, Maintain Active Crossing
Cost (Capital, Operating & Maintenance)	Capital, Operating, Maintenance Cost Impact	Complex structure required. Highest cost of options.	Eliminates requirement and cost related to build bridge.	Less complex than vehicular bridge.  Opportunities to explore a variety of designs and crossing locations that may mitigate complexity and costs.
		Least Preferred	Most Preferred	More Preferred
		1	4	3
TOTAL Socio-Economic Criteria Score		16	17	19

G. NORTH-SOUTH RAIL CROSSING (52-5, 52-6)

G. North-South Rail Crossing (52-5, 52-6): Evaluation Tabulation

Category	Measure	Alternatives		
		Option 1 – Secondary Plan Collector Road Crossing	Option 2 – Remove Secondary Plan Collector Road Crossing	Option 3 – Remove Secondary Plan Collector Road Crossing, Maintain Active Crossing
Transportation Criteria	Total Score	31	14	29
	Ranking	Most Preferred	Least Preferred	More Preferred
	Category Score	4	1	3
Cultural Environment Criteria	Total Score	1	4	3
	Ranking	Least Preferred	Most Preferred	More Preferred
	Category Score	1	4	3
Natural Environment Criteria	Total Score	3	12	9
	Ranking	Least Preferred	Most Preferred	More Preferred
	Category Score	1	4	3
Socio-Economic Criteria	Total Score	16	17	19
	Ranking	Least Preferred	More Preferred	Most Preferred
	Category Score	1	3	4
OVERALL TOTAL SCORE		51	47	60
OVERALL TOTAL OF CATEGORY SCORES		7	12	13