

FACTOR GROUP	SECTION 1 : SUMMARY/RATIONALE
Natural	<p>A1 is strongly preferred over A2 with regard to the natural environment, for the following reasons:</p> <ul style="list-style-type: none"> • A2 encroaches on one lake not impacted by A1, however it is anticipated that direct impact can be avoided. While A1 impacts more open water wetlands/beaver ponds/small waterbodies than A2, these are primarily beaver ponds at existing culverts crossing the existing highway. Therefore, there is no significant difference between the alternatives related to fish and aquatic habitat. • Neither alternative has a significant edge impact on wildlife habitat, and neither results in significant habitat fragmentation. A1 is strongly preferred over A2 because it has a low impact on habitat for Eastern Massassauga Rattlesnake (species at risk), compared to a high impact on likely EMR habitat by A2. • A1 and A2 directly impact a similar amount of wetland components and wetland complexes. However, A2 results in a significant amount of fragmentation of wetland components, while A1 results in no fragmentation. A1 is therefore strongly preferred. • No policy areas are impacted by either alternative.
Social	<p>A1 is preferred over A2 with regard to noise and community impacts, for the following reasons:</p> <ul style="list-style-type: none"> • The projected noise level increase at one receiver is projected to be higher with A2 than with A1, therefore A1 is slightly preferred. • With regard to community effects, although it has a higher impact on the snowmobile trail system, A1 is preferred over A2 because it does not displace any residences or significantly impact recreational areas. A2 potentially displaces one residence and impacts a hunting area, displacing one hunt camp and negatively impacting traditional uses.
Economic	<p>A1 is strongly preferred over A2 for economic benefits to the Parry Sound Industrial Park at Woods Road, which is the only major industrial area within the study area:</p> <ul style="list-style-type: none"> • A1 minimizes out of way travel to the industrial park and maximizes visibility, whereas A2 would result in a loss of visibility from the highway for 5 businesses. • Overall, there would be a positive economic benefit for the industrial park with A1, and a negative impact with A2. This is associated with maintaining proximity and visibility to the new highway for the industrial park with A1, as well as improving overall convenience and travel time for goods movement. • While both alternatives impact forestry access roads, A1 results in less disruption and greater opportunities to provide alternate access. • A1 impacts 3 properties with known or high potential waste/contamination problems (associated with the industrial park and an abandoned gas station adjacent to the existing highway), while A2 impacts none.
Transportation	<p>A1 is preferred over A2 for the following reasons:</p> <ul style="list-style-type: none"> • There is no significant difference in terms of physical features for the two alternatives, with only one additional road bridge under A1 (similar number of watercourse bridges), and similar corridor length and travel time. A1 is preferred over A2 in terms of indicative cost, as the cost of twinning (A1) is generally less than new alignment (A2). • A1 is slightly preferred in terms of traffic operations. Although A1 has a higher risk of temporary impacts during construction (due to potential delays and disruption during construction of the twinned lanes and interchanges while maintaining traffic), it provides significantly higher flexibility in establishing contract limits by not requiring temporary connections from new alignment sections to the existing highway. • Although it has slightly greater extent of swamp/soft ground and slightly poorer drainage potential, A1 has more open topography and fewer potential unknown or deep foundations. A1 is therefore preferred over A2 with regard to geotechnical features.

