Detailed Evaluation of Alternative Design Concepts Transitional (Rural to Urban) Area from Walker Road to Leamster Trail

Alternatives Criteria	Do Nothing	Reduced Lane Widths with Multi-Use Path on West Side and	Reduced Lane Widths with Multi-Use Path on West Side and
Criteria		Paved Shoulder and Rumble Strip on East Side	New Sidewalk and Buffered Bike Lane on East Side
Transportation			
Improves traffic operations	No change to traffic operations	Acceptable traffic operations	Acceptable traffic operations
Improves traffic safety	No change to traffic safety	Reduced lane widths to encourage slower traffic speeds	Reduced lane widths to encourage slower traffic speeds
Encourages some trucks to use other truck routes	No change to truck traffic	Slower traffic speeds may encourage truck diversion	Slower traffic speeds may encourage truck diversion
Improves road geometrics	No change to road alignment	No change to road alignment	No change to road alignment
Conforms to transportation planning policies and plans	Not consistent with transportation planning policies and plans	Generally consistent with transportation planning policies and plans	Generally consistent with transportation planning policies and plans
Maintains emergency response time	No change to emergency response time	 Two-way roads with raised centre median provide less sufficient space for emergency vehicles 	 Two-way roads without raised centre median provide sufficient space for emergency vehicles
		Design will accommodate emergency vehicles	Design will accommodate emergency vehicles
Natural Environment			
Complies with Provincial environmental planning policies	Located within Oak Ridges Moraine	 Consistent with policy 18.1a of the Oak Ridges Moraine Plan by providing active transportation facilities which contribute to a range of transportation options 	 Consistent with policy 18.1a of the Oak Ridges Moraine Plan by providing active transportation facilities which contribute to a range of transportation options
	Located within Greenbelt Plan Area; Caledon East is a Settlement Area under the Greenbelt Plan	Consistent with the Greenbelt Plan	Consistent with the Greenbelt Plan
Avoids or reduces negative impacts on natural heritage features and wildlife and wildlife habitat	No change to natural heritage features and wildlife and wildlife habitat	Encroaches into minimum protection zones and rare vegetation community; Potential indirect impacts to Butternut Tree	Encroaches into minimum protection zones and rare vegetation community; Potential indirect impacts to Butternut Tree
		Moderate tree removal	Minor tree removal
		Moderate to minor extensions to culverts	Moderate extensions to culverts
		No impacts anticipated to species at risk and their habitat	No impacts anticipated to species at risk and their habitat
Introduces opportunity to protect or enhance natural heritage features and wildlife and wildlife habitat	No opportunity to enhance natural heritage features and wildlife and wildlife habitat	Partially urbanizing corridor may increase potential for vehicle-wildlife conflicts	Urbanizing corridor may increase potential for vehicle-wildlife conflicts
Maintains or reduces risk for natural hazards	No opportunity to reduce risk for natural hazards	Increased impervious area contributing to stormwater runoff	Increased impervious area contributing to stormwater runoff
		May require stormwater management on west side to treat runoff; No change to treatment (existing ditch) on east side for stormwater runoff	May require stormwater management to treat stormwater runoff
		Sediment and erosion control plan will be applied during construction	Sediment and erosion control plan will be applied during construction
Protects sources of drinking water	 Majority of corridor is within Highly Vulnerable Aquifer Area Sections of corridor are within Significant Groundwater Recharge Areas 	Majority of corridor is within Highly Vulnerable Aquifer Area Sections of corridor are within Significant Groundwater Recharge Areas	 Majority of corridor is within Highly Vulnerable Aquifer Area Sections of corridor are within Significant Groundwater Recharge Areas
Provides opportunity to adapt to or mitigate the effects of climate change	No opportunity to adapt to or mitigate the effects of climate change	Potential for low impact development	Potential for low impact development
Hoolahy Communicies		No significant impact on greenhouse gas emissions anticipated	No significant impact on greenhouse gas emissions anticipated
Healthy Communities	No active transportation facilities	Multi-use path on west side for cyclists and pedestrians and paved	Multi-use path on west side and paved shoulder and buffered bike lane
Provides for active transportation	No active transportation facilities	shoulder on east side for cyclists going northbound	on east side to accommodate pedestrians and cyclists
		Continues to provide walkway between Walker Road and Leamster Trail	 Provides sidewalk on east side between Walker Road and Leamster Trail, however nearest crossing is at Walker Road
		 Compatible with design guidelines for roads with design speed greater than 50 km/h or designated for trucks 	 Compatible with design guidelines for roads with design speed greater than 50 km/h or designated for trucks
Reduces risk of chronic conditions through active transportation	No opportunity to promote healthy (active) environments	Non-continuous pedestrian and cycling facilities between rural and urban areas	 Continuity of paved buffered bike lane to paved shoulder on east side for cyclists entering rural area
		Separation between pedestrians and cyclists	No separation between pedestrians and cyclists
		Wide separation between pedestrians and roadway on west side; Rumble strips deter vehicles from crossing over to shoulder on east side	Wide separation between pedestrians and roadway on west side; Buffer (separation) between cyclists and travel lane on east side
		 Paved shoulders improve surface accessibility compared to granular shoulders 	 Paved buffered bike lanes improve surface accessibility compared to granular shoulders
		Increased access to destinations within Study corridor by active means	Increased access to destinations within Study corridor by active means
		No reduction in design speed	No reduction in design speed

Detailed Evaluation of Alternative Design Concepts Transitional (Rural to Urban) Area from Walker Road to Leamster Trail

Alternatives	Do Nothing	Reduced Lane Widths with	Reduced Lane Widths with
Criteria		Multi-Use Path on West Side and	Multi-Use Path on West Side and
		Paved Shoulder and Rumble Strip on East Side	New Sidewalk and Buffered Bike Lane on East Side
		Potential for tree planting on west side	Potential for tree planting on both sides
Supports age friendly and accessible living	No opportunity to support age friendly and accessible living	Paved shoulders may not be comfortable for all cyclists	 Multi-use path may not be comfortable for all pedestrians and cyclists
Reduces risk of respiratory and cardiovascular outcomes associated with exposure to traffic related air pollution	Avoids air quality impacts	Air quality impacts are similar to air quality impacts of future no-build scenario	Air quality impacts are similar to air quality impacts of future no-build scenario
		Increased dust during construction will be controlled by an Emissions Management Plan	 Increased dust during construction will be controlled by an Emissions Management Plan
Avoids or reduces noise impacts	Avoids noise impacts	Future sound levels are predicted to exceed threshold (60 dba) in some areas of sensitive receptors	 Future sound levels are predicted to exceed threshold (60 dba) in some areas of sensitive receptors
		Noise barriers will be implemented where warranted	Noise barriers will be implemented where warranted
		 Changes to future sound levels are expected to be small between Caledon Trailway and south of Walker Road 	 Changes to future sound levels are expected to be small between Caledon Trailway and south of Walker Road
		Increased noise during construction will be controlled by Construction Code of Practice	 Increased noise during construction will be controlled by Construction Code of Practice
Social, Cultural and Economic Environment			
Conforms to Municipal planning policies and community plans	Does not fully conform with Region of Peel and Town of Caledon Official Plans and Growth Management Policies	Conforms with Region of Peel and Town of Caledon Official Plans and Growth Management Policies	 Conforms with Region of Peel and Town of Caledon Official Plans and Growth Management Policies
Compatible with existing and planned future land uses	No impact to existing and planned future land uses	Rural cross-sections are generally upgraded to urban within settlement areas	Rural cross-sections are generally upgraded to urban within settlement areas
Avoids or reduces property impacts (including cultural heritage and local economic impacts)	Avoids property impacts	No impacts to property, buildings/structures and property access outside intersection improvements	 No impacts to property, buildings/structures and property access outside intersection improvements
	Avoids negative impacts on cultural heritage features	Adjacent to identified cultural heritage resources (one designated under Part IV of the Ontario Heritage Act, one potential built heritage resource)	 Adjacent to identified cultural heritage resources (one designated under Part IV of the Ontario Heritage Act, one potential built heritage resource)
		Stage 2 Archaeological Assessment required in areas beyond disturbed right-of-way	 Stage 2 Archaeological Assessment required in areas beyond disturbed right-of-way
	No opportunity to improve local economic sustainability	No impact on customer access to businesses	No impact on customer access to businesses
		No impact on public and customer parking	No impact on public and customer parking
		Potential for raised centre median with gateway feature between Walker Road and Leamster Trail	 No potential for raised centre median with gateway feature between Walker Road and Leamster Trail
		No grading impact on farm land/entrances	No grading impact on farm land/entrances
		Sufficient pavement width for farm vehicles and commercial trucks	Sufficient pavement width for farm vehicles and commercial trucks
Supports goods movement	Airport Road is a goods movement corridor	Airport Road will remain as a goods movement corridor	Airport Road will remain as a goods movement corridor
0		Design will accommodate transport trucks	Design will accommodate transport trucks
Reduces complexity of construction	No conflict with utility and municipal infrastructure	Utility and municipal infrastructure to be relocated	Utility and municipal infrastructure to be relocated; May require additional street lighting
	No construction staging	Minor temporary traffic impact due to construction staging	Moderate temporary traffic impact due to staging of storm sewers
	No construction cost	Moderate cost to construct due to drainage	High cost to construct due to drainage, street lighting and material
	No change to operations and maintenance cost	Moderate cost to operate and maintain	High cost to operate and maintain
Evaluation			
	Not Carried Forward	Preferred	Not Preferred
Summary	Does not address problem and opportunity	Suitable for transition from urban to rural area by retaining existing path on west side for northbound pedestrians and cyclists and improving existing conditions on east side with paved shoulders for cyclists, resulting in less cost to construct and operate/maintain than alternative with multiuse path, sidewalk and bike lanes	Higher cost to construct and operate/maintain than alternative with pathway and paved shoulders