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Evaluation Tables

Evaluation of Alternative Solutions
Township of Scugog: Seagrave Bridge
Municipal Class Environmental Assessment

ASSESSMENT CRITERIA AND SUBFACTOR	Description/Measure	Do Nothing	Rehabilitate Existing Bridge	Construct a New Bridge
CULTURAL				
Aboriginal Peoples	<ul style="list-style-type: none"> Potential to affect Aboriginal Rights or Interests 	<ul style="list-style-type: none"> No disturbance to Aboriginal Peoples 	<ul style="list-style-type: none"> Not expected to affect Aboriginal Rights or Interests due to the small project footprint and little to no impacts to the Nonquon River. 	<ul style="list-style-type: none"> Not expected to affect Aboriginal Rights or Interests due to the new bridge would be within the existing right-of-way and navigable waterway openings would be maintained or increased.
Archaeological Resources	<ul style="list-style-type: none"> Potential to affect archaeological resources 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Not anticipated to affect archaeological resources. 	<ul style="list-style-type: none"> Not anticipated to affect archaeological resources.
Heritage Resources	<ul style="list-style-type: none"> Potential to impact built and/or cultural heritage resources 	<ul style="list-style-type: none"> Retains existing built cultural heritage resource 	<ul style="list-style-type: none"> Implements minor changes to an existing cultural heritage resource but retains the overall appearance of the bridge. 	<ul style="list-style-type: none"> Removes the cultural heritage of the bridge. Some elements of the cultural heritage could be incorporated into the new bridge, or by use of a historical plaque near the project site.
Conclusion		Most Preferred	Most Preferred	Moderately Preferred
NATURAL ENVIRONMENT				
Aquatic Species/Habitat	<ul style="list-style-type: none"> Potential to affect fish species Potential to affect aquatic Species at Risk (SAR) Potential to affect fish habitat 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Moderate potential to affect aquatic species/habitat due to abutment rehabilitation work. 	<ul style="list-style-type: none"> Moderate potential to affect aquatic species/habitat due to new abutment construction, which would be mitigated by constructing new abutments behind the existing abutments, and further away from the watercourse
Vegetation and Woodlots	<ul style="list-style-type: none"> Potential to affect vegetation and/or woodlot areas Potential to affect vegetative SAR 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> May require some limbing of trees for construction access to bridge and repair work 	<ul style="list-style-type: none"> Some tree removal required on north west side for abutment construction. Impacts can be mitigated through new tree planting.
Wildlife/Habitat	<ul style="list-style-type: none"> Potential to affect natural wildlife habitat Potential to affect SAR 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> May temporarily impact wildlife habitat Impacts can be mitigated by carrying out construction activities during appropriate timing windows, best management practices during construction and enhanced plantings following construction. 	<ul style="list-style-type: none"> May temporarily impact wildlife habitat Impacts can be mitigated by carrying out construction activities during appropriate timing windows, best management practices during construction and enhanced plantings following construction.
Conclusion		Most Preferred	Moderately Preferred	Moderately Preferred
SOCIAL/LAND USE				
Consistency with Federal (National Historic Sites Policy)/Provincial (Greenbelt Plan, Provincial Policy Statement) Planning Policies	<ul style="list-style-type: none"> Potential to support federal/provincial policies/plans/goals/objectives 	<ul style="list-style-type: none"> Inconsistent with provincial policies to: <ul style="list-style-type: none"> Encourage provision of safe and efficient transportation infrastructure; 	<ul style="list-style-type: none"> Consistent with provincial policy and Greenbelt plan to: <ul style="list-style-type: none"> Encourage provision of safe and efficient transportation infrastructure, Facilitate access to Hamlets by a wide range of transportation options Impacts to Natural Heritage System can be mitigated 	<ul style="list-style-type: none"> Consistent with provincial policy and Greenbelt plan to: <ul style="list-style-type: none"> Encourage provision of safe and efficient transportation infrastructure, Facilitate access to Hamlets by a wide range of transportation options Impacts to Natural Heritage System can be mitigated
Consistency with the Local Official Planning or Land Use (i.e., Township of Scugog and Region of Durham)	<ul style="list-style-type: none"> Potential to support local planning objectives/policies/plans/goals 	<ul style="list-style-type: none"> Inconsistent with the Township of Scugog Official Plan to provide infrastructure that accommodates various modes of transportation. 	<ul style="list-style-type: none"> Consistent with the Township of Scugog Official Plan to: <ul style="list-style-type: none"> Recognize, protect and conserve rural character and cultural heritage resources and sites Establish infrastructure that safely and efficiently accommodates various modes of transportation. 	<ul style="list-style-type: none"> Consistent with the Township of Scugog Official Plan to: <ul style="list-style-type: none"> Establish infrastructure that safely and efficiently accommodates various modes of transportation. Inconsistent with the Township of Scugog Official Plan to: <ul style="list-style-type: none"> Protect and conserve rural character and cultural heritage resources and sites
Conclusion		Least Preferred	Most Preferred	Moderately Preferred
TECHNICAL				
Constructability	<ul style="list-style-type: none"> Feasibility of Construction 	<ul style="list-style-type: none"> No effect. 	<ul style="list-style-type: none"> Rehabilitation of existing bridge is structurally feasible. 	<ul style="list-style-type: none"> Construction of a new bridge is feasible. New bridge can be constructed to current bridge code and accessibility requirements

Evaluation of Alternative Solutions
Township of Scugog: Seagrave Bridge
Municipal Class Environmental Assessment

ASSESSMENT CRITERIA AND SUBFACTOR	Description/Measure	Do Nothing	Rehabilitate Existing Bridge	Construct a New Bridge
Safety	<ul style="list-style-type: none"> Potential to affect vehicle/pedestrian/cyclist safety 	<ul style="list-style-type: none"> Load Restriction limits vehicles. Pedestrians/Cyclists continue to use roadway for travel, instead of dedicated sidewalk 	<ul style="list-style-type: none"> Pedestrian/cyclist improvements will be possible through rehabilitation of the bridge structure by the addition of a proper deck surface and handrails. Barrier for Low Volume Roads may be added. 	<ul style="list-style-type: none"> Pedestrian/cyclist safety would be greatly improved by the new crossing. All legal vehicles and emergency vehicles would be able to use the new bridge.
Cost	<ul style="list-style-type: none"> Estimated costs for initial capital expenditures and on-going maintenance 	<ul style="list-style-type: none"> On-going costs for maintenance 	<ul style="list-style-type: none"> Cost of rehabilitation expected to be somewhat moderate due to steel component replacement. On-going ordinary maintenance costs are anticipated to be minimal to moderate. Future major rehabilitation would be anticipated within 15-25 years. 	<ul style="list-style-type: none"> Cost of new construction the highest alternative. Ongoing ordinary maintenance costs are anticipated to be minimal. Future major rehabilitation would be anticipated within 50 to 75 years.
Conclusion		Least Preferred	Moderately Preferred	Most Preferred
ECONOMIC				
Economic Development	<ul style="list-style-type: none"> Ability to support economic development in community. Ability to support and/or promote tourism in the area. 	<ul style="list-style-type: none"> Does not support area economic development/tourism. Deteriorating structure provides gap in trail system and may deter tourist activity. 	<ul style="list-style-type: none"> Greatest ability to support economic development in surrounding communities Anticipated to attract tourist activity once the Trans Canada Trail is complete 	<ul style="list-style-type: none"> Greatest ability to support economic development in surrounding communities Anticipated to attract tourist activity once the Trans Canada Trail is complete
Construction Costs	<ul style="list-style-type: none"> Relative potential construction costs 	<ul style="list-style-type: none"> Not applicable. 	<ul style="list-style-type: none"> Anticipated to incur moderate construction costs. 	<ul style="list-style-type: none"> Anticipated to incur high construction costs.
Conclusion		Not Preferred	Most Preferred	Moderately Preferred
RECOMMENDATION		This alternative is not recommended because it: <ul style="list-style-type: none"> Does not address current safety issues 	This alternative is recommended because it: <ul style="list-style-type: none"> Has a minimal impact to the natural environment Retains the cultural heritage value of the bridge Has a moderate cost of construction Maintains use of the structure, although with a load limit. 	This alternative is not recommended because it: <ul style="list-style-type: none"> Has the most impact to the natural environment Has the highest cost

Evaluation of Alternative Solutions
Township of Scugog: Bridge No. 9
Municipal Class Environmental Assessment

ASSESSMENT CRITERIA AND SUBFACTOR	Description/Measure	Do Nothing	Rehabilitate Existing Bridge	Construct a New Bridge	Replace Structure with Pedestrian/cyclist Bridge	Remove Bridge	Repair Bridge to accommodate Pedestrian Traffic and limited vehicle traffic
CULTURAL							
Aboriginal Peoples	<ul style="list-style-type: none"> Potential to affect Aboriginal Rights or Interests 	<ul style="list-style-type: none"> No disturbance to Aboriginal Peoples 	<ul style="list-style-type: none"> Not expected to affect Aboriginal Rights or Interests due to the small project footprint and little to no impacts to the Nonquon River. 	<ul style="list-style-type: none"> Not expected to affect Aboriginal Rights or Interests due to the new bridge would be within the existing right-of-way and navigable waterway openings would be maintained or increased. 	<ul style="list-style-type: none"> Not expected to affect Aboriginal Rights or Interests due to the small project footprint and little to no impacts to the Nonquon River. 	<ul style="list-style-type: none"> No disturbance to Aboriginal Peoples 	<ul style="list-style-type: none"> No disturbance to Aboriginal Peoples
Archaeological Resources	<ul style="list-style-type: none"> Potential to affect archaeological resources 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Not anticipated to affect archaeological resources 	<ul style="list-style-type: none"> Not anticipated to affect archaeological resources. 	<ul style="list-style-type: none"> Not anticipated to affect archaeological resources. 	<ul style="list-style-type: none"> Not anticipated to affect archaeological resources. 	<ul style="list-style-type: none"> Not anticipated to affect archaeological resources.
Heritage Resources	<ul style="list-style-type: none"> Potential to impact built and/or cultural heritage resources 	<ul style="list-style-type: none"> No effect as existing bridge was not found to have any cultural heritage value. 	<ul style="list-style-type: none"> No effect. 	<ul style="list-style-type: none"> No effect. 	<ul style="list-style-type: none"> No effect. 	<ul style="list-style-type: none"> No effect. 	<ul style="list-style-type: none"> No effect.
Conclusion		Most Preferred	Most Preferred	Moderately Preferred	Most Preferred	Most Preferred	Most Preferred
NATURAL ENVIRONMENT							
Aquatic Species/Habitat	<ul style="list-style-type: none"> Potential to affect fish species Potential to affect aquatic Species at Risk (SAR) Potential to affect fish habitat 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Moderate potential to affect aquatic species/habitat due to abutment rehabilitation work. 	<ul style="list-style-type: none"> Moderate potential to affect aquatic species/habitat due to new abutment construction, which would be mitigated by constructing new abutments behind the existing abutments, and further away from the watercourse 	<ul style="list-style-type: none"> Moderate potential to affect aquatic species/habitat due to abutment removal work. 	<ul style="list-style-type: none"> Moderate potential to affect aquatic species/habitat due to abutment removal work. 	<ul style="list-style-type: none"> Moderate potential to affect aquatic species/habitat due to abutment rehabilitation work.
Vegetation and Woodlots	<ul style="list-style-type: none"> Potential to affect vegetation and/or woodlot areas Potential to affect vegetative SAR 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> May require some removal of vegetation for construction access to bridge and repair work 	<ul style="list-style-type: none"> May require some removal of vegetation for construction access to bridge and replacement work. 	<ul style="list-style-type: none"> May require some removal of vegetation for construction access to bridge and replacement work 	<ul style="list-style-type: none"> May require some removal of vegetation for construction access to bridge removal work 	<ul style="list-style-type: none"> May require some removal of vegetation for construction access to bridge and repair work
Wildlife/Habitat	<ul style="list-style-type: none"> Potential to affect natural wildlife habitat Potential to affect SAR 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> May temporarily impact wildlife habitat Impacts can be mitigated by carrying out construction activities during appropriate timing windows, best management practices during construction and enhanced plantings following construction. 	<ul style="list-style-type: none"> May temporarily impact wildlife habitat Impacts can be mitigated by carrying out construction activities during appropriate timing windows, best management practices during construction and enhanced plantings following construction. 	<ul style="list-style-type: none"> May temporarily impact wildlife habitat Impacts can be mitigated by carrying out construction activities during appropriate timing windows, best management practices during construction and enhanced plantings following construction. 	<ul style="list-style-type: none"> May temporarily impact wildlife habitat Impacts can be mitigated by carrying out construction activities during appropriate timing windows, best management practices during construction and enhanced plantings following construction. 	<ul style="list-style-type: none"> May temporarily impact wildlife habitat Impacts can be mitigated by carrying out construction activities during appropriate timing windows, best management practices during construction and enhanced plantings following construction.
Conclusion		Most Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred
SOCIAL/LAND USE							
Consistency with Federal (National Historic Sites Policy)/Provincial (Greenbelt Plan, Provincial Policy Statement) Planning Policies	<ul style="list-style-type: none"> Potential to support federal/provincial policies/plans/goals/objectives 	<ul style="list-style-type: none"> Inconsistent with provincial policies to: <ul style="list-style-type: none"> Encourage provision of safe and efficient transportation infrastructure; 	<ul style="list-style-type: none"> Consistent with provincial policy and Greenbelt plan to: <ul style="list-style-type: none"> Moderately provides safe and efficient transportation infrastructure, Impacts to Natural Heritage System can be mitigated 	<ul style="list-style-type: none"> Consistent with provincial policy and Greenbelt plan to: <ul style="list-style-type: none"> Encourage provision of safe and efficient transportation infrastructure, Impacts to Natural Heritage System can be mitigated 	<ul style="list-style-type: none"> Consistent with provincial policy and Greenbelt plan to: <ul style="list-style-type: none"> Encourage provision of safe and efficient transportation infrastructure for limited modes, Impacts to Natural Heritage System can be mitigated 	<ul style="list-style-type: none"> Consistent with provincial policy and Greenbelt plan to: <ul style="list-style-type: none"> Remove impacts to Natural Heritage System 	<ul style="list-style-type: none"> Consistent with provincial policy and Greenbelt plan to: <ul style="list-style-type: none"> Moderately provides provision of safe and efficient transportation infrastructure, Impacts to Natural Heritage System can be mitigated

Evaluation of Alternative Solutions
Township of Scugog: Bridge No. 9
Municipal Class Environmental Assessment

ASSESSMENT CRITERIA AND SUBFACTOR	Description/Measure	Do Nothing	Rehabilitate Existing Bridge	Construct a New Bridge	Replace Structure with Pedestrian/cyclist Bridge	Remove Bridge	Repair Bridge to accommodate Pedestrian Traffic and limited vehicle traffic
Consistency with the Local Official Planning or Land Use (i.e., Town of New Tecumseth and County of Simcoe))	<ul style="list-style-type: none"> Potential to support local planning objectives/policies/plans/goals 	<ul style="list-style-type: none"> Inconsistent with the Township of Scugog Official Plan to: <ul style="list-style-type: none"> Provide infrastructure that accommodates various modes of transportation. 	<ul style="list-style-type: none"> Consistent with the Township of Scugog Official Plan to: <ul style="list-style-type: none"> Conserve the rural character Moderately provides infrastructure that safely and efficiently accommodates various modes of transportation. 	<ul style="list-style-type: none"> Consistent with the Township of Scugog Official Plan to: <ul style="list-style-type: none"> Establish infrastructure that safely and efficiently accommodates various modes of transportation. 	<ul style="list-style-type: none"> Consistent with the Township of Scugog Official Plan to: <ul style="list-style-type: none"> Establish infrastructure that safely and efficiently accommodates various modes of transportation. 	<ul style="list-style-type: none"> Inconsistent with the Township of Scugog Official Plan to: <ul style="list-style-type: none"> Provide infrastructure that accommodates various modes of transportation. 	<ul style="list-style-type: none"> Consistent with the Township of Scugog Official Plan to: <ul style="list-style-type: none"> Conserve the rural character Moderately provides infrastructure that safely and efficiently accommodates various modes of transportation.
Conclusion		Least Preferred	Most Preferred	Most Preferred	Most Preferred	Moderately Preferred	Moderately Preferred
TECHNICAL							
Constructability	<ul style="list-style-type: none"> Feasibility of Construction 	<ul style="list-style-type: none"> No effect. 	<ul style="list-style-type: none"> Rehabilitation of existing bridge is structurally feasible. Environmental mitigation required. 	<ul style="list-style-type: none"> Construction of a new bridge is feasible. 	<ul style="list-style-type: none"> Construction of a new bridge is feasible. 	<ul style="list-style-type: none"> Removal of the existing bridge is feasible 	<ul style="list-style-type: none"> Repair of the existing bridge for pedestrian traffic is feasible. Repair of the bridge to limited vehicle traffic to be determine during detailed design
Safety	<ul style="list-style-type: none"> Potential to affect vehicle/pedestrian/cyclist safety 	<ul style="list-style-type: none"> Pedestrians/Cyclists continue to use deteriorated bridge for travel. 	<ul style="list-style-type: none"> Rehabilitated Bridge Load Limit would likely not meet current standards 	<ul style="list-style-type: none"> Pedestrian/cyclist safety would be improved by the new crossing. New bridge can be constructed to current bridge code and accessibility requirements 	<ul style="list-style-type: none"> Pedestrian/cyclist safety would be improved by the new crossing. 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Pedestrian/Cyclist safety improved. Vehicle Load Limit would remain.
Cost	<ul style="list-style-type: none"> Estimated costs for initial capital expenditures and on-going maintenance 	<ul style="list-style-type: none"> On-going costs for maintenance 	<ul style="list-style-type: none"> Cost of complete rehabilitation expected to be significant On-going ordinary maintenance costs are anticipated to be minimal to moderate. Future major rehabilitation would be anticipated within 15-25 years. 	<ul style="list-style-type: none"> Cost of new construction the highest alternative. Ongoing ordinary maintenance costs are anticipated to be minimal. Future major rehabilitation would be anticipated within 50 to 75 years. 	<ul style="list-style-type: none"> Cost of new construction of pedestrian bridge to be moderate. Ongoing ordinary maintenance costs are anticipated to be minimal. Future major rehabilitation would be anticipated within 50 to 75 years 	<ul style="list-style-type: none"> Cost of removal of existing bridge to be somewhat low. 	<ul style="list-style-type: none"> Cost to repair to accommodate pedestrian traffic low. Cost to provide limited vehicular traffic moderate to high
Conclusion		Least Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred
ECONOMIC							
Economic Development	<ul style="list-style-type: none"> Ability to support economic development in community. Ability to support and/or promote tourism in the area. 	<ul style="list-style-type: none"> Does not support area economic development/tourism. 	<ul style="list-style-type: none"> Moderate ability to support economic development in surrounding communities 	<ul style="list-style-type: none"> Greatest ability to support economic development in surrounding communities 	<ul style="list-style-type: none"> Moderate ability to support economic development in surrounding communities 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Moderate ability to support economic development in surrounding communities
Construction Costs	<ul style="list-style-type: none"> Relative potential construction costs 	<ul style="list-style-type: none"> Not applicable. 	<ul style="list-style-type: none"> Anticipated to incur moderate construction costs. 	<ul style="list-style-type: none"> Anticipated to incur high construction costs. 	<ul style="list-style-type: none"> Anticipated to incur moderate construction costs. 	<ul style="list-style-type: none"> Anticipated to incur low construction costs. 	<ul style="list-style-type: none"> Anticipated to incur moderate construction costs.
Conclusion		Not Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred	Moderately Preferred
RECOMMENDATION		<p>This alternative is not recommended because it:</p> <ul style="list-style-type: none"> Does not address current safety issues 	<p>This alternative is not recommended because it:</p> <ul style="list-style-type: none"> Has a moderate to high cost of construction 	<p>This alternative is not recommended because it:</p> <ul style="list-style-type: none"> Has the most impact to the natural environment Has the highest cost 	<p>This alternative is not recommended because it:</p> <ul style="list-style-type: none"> Has a moderate cost of construction Provides infrastructure that accommodates limited transportation modes. 	<p>This alternative is not recommended because it:</p> <ul style="list-style-type: none"> Removes infrastructure that could accommodate various transportation modes 	<p>This alternative is recommended because it:</p> <ul style="list-style-type: none"> Has a low to moderate cost of construction Provides infrastructure that accommodates various transportation modes.