

**Attachment A**  
**Updated Consolidated Table of**  
**Mitigation Measures and**  
**Proponent Commitments**

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
<b>Fish and Fish Habitat – Change in Fish Habitat</b>								
	✓	✓	<ul style="list-style-type: none"> <li>Alteration or removal of habitat or riparian vegetation (including critical habitat of SAR) during construction of water management facilities/buildings/ infrastructure and watercourse realignments.</li> <li>Temporary or longer-term degradation of habitat quality from increased sediment input (and sediment load).</li> <li>Reduction of cover through removal of riparian vegetation may, increase water temperature and negatively affect invertebrate populations.</li> </ul>	<ul style="list-style-type: none"> <li>CN will implement a Habitat Compensation Plan to compensate for the loss of freshwater fish habitat as part of the process of obtaining the authorization of a harmful alteration, disruption or destruction of fish habitat under section 35(2) of the <i>Fisheries Act</i> (Appendix E.2, page 51).</li> </ul>	<ul style="list-style-type: none"> <li>Off-setting strategies are an effective environmental management approach and standard practice.</li> </ul>	<ul style="list-style-type: none"> <li>Tributary A to Indian Creek:                             <ul style="list-style-type: none"> <li>Net loss of approximately 2,800 m<sup>2</sup> of low-quality fish habitat for YOY Largemouth Bass and White Sucker and small bodied fish</li> <li>Reduction in rearing and foraging habitat, except for White Sucker where spawning habitat conditions are not present</li> <li>Reduction in productive capacity of the CRA fishery within the PDA. Further offsetting will occur following a discussion with DFO. Implementation of the final offsetting plan will result in there being no significant residual effects to a CRA fishery in Tributary A</li> </ul> </li> <li>Tributary C to Indian Creek                             <ul style="list-style-type: none"> <li>The installation of approximately a 30 m long culvert on this feature will result in the alteration of poorly defined channel the contributes indirectly to fish habitat, or supports fish habitat during spring freshet</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>Implementation of Habitat Compensation / Off-setting Plan.</li> <li>Verified through environmental monitoring as determined through DFO Authorization.</li> <li>Under the supervision of CN, a third-party Contractor / consultant will conduct fisheries monitoring for three years following the completion of channel construction in order to demonstrate that offsetting measures are functioning, and that productivity has been maintained or enhanced.</li> <li>Under the supervision of CN, a third-party Contractor / consultant (qualified fisheries biologists) will conduct post-construction fish collection (follow-up program) to determine habitat usage and productivity, once per year (in the late spring/early summer) for 3 years.</li> <li>Channel Stabilization and Restoration Report to be submitted to CEAA and DFO.</li> <li>Fisheries and Fish Habitat monitoring report to be submitted to CEAA and DFO.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>Before the commencement of in-water activity, the Contractor will ensure that all necessary equipment and materials are available and are on-site, including contingency equipment and materials (App G, page G.4).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best management practice for in water work and supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Under the supervision of CN, a third-party Contractor / consultant will schedule in-water work in advance.</li> <li>Confirmed through construction monitoring during in-water work performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
✓				<ul style="list-style-type: none"> <li>CN will apply natural channel design principles to the design and dimension of the realigned channels, including incorporating natural bed morphology (pools, riffles) and planform geometry (Appendix E.2, page 3).</li> </ul>	<ul style="list-style-type: none"> <li>Reach surveys were conducted to obtain detailed measurements of the channel cross-section, longitudinal profile, and channel planform. Channel morphology was quantified by a detailed topographic survey using a survey grade GPS. The field investigation measurements were processed using RIVERMorph (Version 5.1, 2012).</li> </ul>		<ul style="list-style-type: none"> <li>Final Channel Design Drawings to be reviewed and approved by DFO.</li> <li>Adherence to channel design.</li> </ul>	Contractor / CN Design Team
✓				<ul style="list-style-type: none"> <li>CN will design the channel realignments such that they do not excessively aggrade or degrade, convey existing flows so that flood elevations are not increased and bankfull frequency is maintained, downstream channel morphology is not altered and to limit barriers to fish migration (Appendix E.2, page 3).</li> </ul>	<ul style="list-style-type: none"> <li>Reach surveys were conducted to obtain detailed measurements of the channel cross-section, longitudinal profile, and channel planform. Channel morphology was quantified by a detailed topographic survey using a survey grade GPS. The field investigation measurements were processed using RIVERMorph (Version 5.1, 2012).</li> </ul>		<ul style="list-style-type: none"> <li>Final Channel Design Drawings to be reviewed and approved by DFO.</li> <li>Adherence to channel design.</li> </ul>	Contractor / CN Design Team
✓				<ul style="list-style-type: none"> <li>CN will design the Project so that it provides aquatic and riparian habitat that is functional over a range of flows with an increase in diversity of habitat types (Appendix E.2, page 3).</li> </ul>	<ul style="list-style-type: none"> <li>Reach surveys were conducted to obtain detailed measurements of the channel cross-section, longitudinal profile, and channel planform. Channel morphology was quantified by a detailed topographic survey using a survey grade GPS. The field investigation measurements were processed using RIVERMorph (Version 5.1, 2012).</li> </ul>		<ul style="list-style-type: none"> <li>Final Channel Design Drawings to be reviewed and approved by DFO.</li> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>Adherence to channel design.</li> </ul>	Contractor / CN Design Team
	✓			<ul style="list-style-type: none"> <li>When clearing vegetation to accommodate channel realignment, the Contractor will fell trees away from watercourses and water bodies. The contractor will immediately remove trees, debris or soil inadvertently deposited below the high watermark of a watercourse (App G, page G.5).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best management practice around watercourses and water bodies and supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document the vegetation clearing activities.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>The Contractor shall develop a detailed site-specific mitigation plan that meets all applicable requirements and submit the plan to CN prior to initiating any watercourse or water body crossing activities not already approved as part of channel realignments (App G, page G.6).</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with approved plans is a requirement of contracting with CN, which will be monitored by on-site construction monitors.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Implement site specific mitigation plan.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor

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Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>CN will not permit fording of watercourses or water bodies unless approved by the applicable regulatory authority (App G, page G.6).</li> </ul>	<ul style="list-style-type: none"> <li>Machinery crossing through a watercourse disturbs habitat, fish and water quality.</li> <li>Fording will be avoided unless the appropriate approvals are in place (i.e., where the need to gain access to the opposite bank cannot be obtained through other means). No fording ensures corresponding effects are avoided.</li> </ul>		<ul style="list-style-type: none"> <li>Detailed Construction Sequencing Plan to be reviewed and approved by DFO.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document any fording activities.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>CN will re-establish vegetation on disturbed areas as soon as practicable (i.e., following construction; in areas not subject to further construction activity / disturbance) (App G, page G.3).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best practice on constructions sites and supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Erosion and Sediment Control Plan to be submitted to CEAA and reviewed and approved by DFO.</li> <li>Planting Plan to be submitted to CEAA, circulated to ECCC, and submitted to DFO for review and approval.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Vegetation Assessment conducted as follow-up monitoring.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>CN will buffer wetland and riparian areas by up to 30 m (final buffer size subject to final design) (App G, page G.3).</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining buffers between construction activities / grading and natural areas (i.e., wetlands, watercourses) reduces potential disruption (disturbance) to species and existing vegetative cover that acts to stabilize riparian areas, filter nutrients and minimize erosion of fish habitat.</li> <li>Demarcating construction work areas reduces potential incidental encroachment into adjacent areas (i.e., to be protected / undisturbed).</li> <li>Standard best management practices for work around wetlands and watercourses and supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Soil Management Plan to be submitted to CEAA and reviewed and approved by DFO.</li> <li>Erosion and Sediment Control Plan submitted to CEAA and reviewed and approved by DFO.</li> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>Confirmed through monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>CN will construct the channel realignment predominantly outside of the existing channels and will be commissioned upon</li> </ul>	<ul style="list-style-type: none"> <li>The channel realignment has been designed to avoid or</li> </ul>		<ul style="list-style-type: none"> <li>Detailed Construction Sequencing Plan to be</li> </ul>	<p>CN Responsible for Design Plans</p>

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Design	Construction	Operation						
				completion of all works to minimize the time period for diversion of flows within the existing channel. (Appendix E.15, page 75).	minimize potential effects to fish and fish habitat. <ul style="list-style-type: none"> <li>Constructing the new channel off-line prior to receiving flows minimizes the need for in-water work (i.e., to avoid disruption to the movement of fish and habitat) and allows the new channel to be vegetated (stabilized) prior to receiving flows (i.e., to reduce erosion and degradation of water quality).</li> </ul>		reviewed and approved by DFO. <ul style="list-style-type: none"> <li>Project design implementation and confirmed through monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document the results of stream diversions and isolation activities.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will plan the landscape and culvert installation to maintain drainage to and from wetlands (App G, page G.3).</li> </ul>	<ul style="list-style-type: none"> <li>Drainage features around the Terminal and culverts beneath the mainline, have been designed to accommodate existing flows.</li> <li>Hydrologic regime of riparian wetlands along proposed channels in Tributary A and Indian Creek will support wetland vegetation.</li> </ul>		<ul style="list-style-type: none"> <li>Stormwater Management Plan to be submitted to CEAA.</li> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>Inspections of culverts and drainage features during operation and maintenance.</li> </ul>	CN Responsible for Design Plans  Contractor / CN Environmental Monitor
<b>Fish and Fish Habitat – Change in Fish Movement, Migration and Fish Passage</b>								
	✓		<ul style="list-style-type: none"> <li>Fish migration and movement passages may temporarily be partially or completely blocked during removal of earthen plugs to change flow of realignments</li> <li>Acoustic emissions associated with construction may alter fish behaviour, affecting movement patterns by causing fish to temporarily avoid or move out of the PDA and LAA.</li> </ul>	<ul style="list-style-type: none"> <li>CN will construct the new channel associated with Indian Creek and Tributary A in the dry, while leaving earthen plugs in the connection points. Any in-water work associated with channel realignment activities will be conducted outside the RAP (EIS Section 3.4.1.6, page 58).</li> </ul>	<ul style="list-style-type: none"> <li>Constructing the new channel off-line prior to receiving flows minimizes the need for in-water work (i.e., to avoid disruption to the movement of fish and habitat) and allows the new channel to be vegetated (stabilized) prior to receiving flows (i.e., to reduce erosion and degradation of water quality).</li> <li>Complying with established RAP avoids work in waters frequented by fish during periods when they are most sensitive to disturbance / disruption (i.e., migration, spawning).</li> <li>Based on the warmwater characteristics of the channel through the Project site, in-stream construction will only be permitted between July 1 and March 14 unless otherwise negotiated with DFO. Off-line channel construction is not restricted by this timing window. (Appendix E.2, page 51)</li> </ul>	<ul style="list-style-type: none"> <li>The use of mitigation measures and removal of temporary blockage from periods of channel realignment immediately following construction will mean that there will be no change in fish movement, migration, or fish passage as a result of Project-related activities.</li> </ul>	<ul style="list-style-type: none"> <li>Detailed Construction Sequencing Plan to be reviewed and approved by DFO.</li> <li>Project design implementation and confirmed through monitoring of in-water work during construction performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document stream diversions and isolation activities.</li> </ul>	CN Responsible for Design Plans  Contractor / CN Environmental Monitor

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Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>CN will conduct stream diversions and culvert installation in isolation of stream flows (e.g., dam and pump, flume, diversion) (App G, page G.5).</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining flows downstream is essential to maintain the supply of water to areas frequented by fish so that fish can maintain their life processes. Cutting off the flow of water could reduce flows available for fish passage (and in extreme cases dry up downstream areas).</li> <li>Isolating work areas during periods of in-water work prevents direct effects on fish (i.e., harm, mortality) and recues potential release of sediments to downstream areas.</li> </ul>		<ul style="list-style-type: none"> <li>Final Isolation and Dewatering Plan to be reviewed and approved by DFO.</li> <li>Confirmed through monitoring of in-water work during construction performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document stream diversions and isolation activities.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>CN will maintain downstream flow at all times when conducting in-water construction activities. (EIS, Table 7.1, page 311)</li> </ul>	<ul style="list-style-type: none"> <li>Standard mitigation measure for in-water work and supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Final Isolation and Dewatering Plan to be reviewed and approved by DFO.</li> <li>Confirmed through monitoring of in-water work during construction performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<p>Contractor / CN Environmental Monitor</p>
<b>Fish and Fish Habitat – Change in Fish Mortality</b>								
	✓		<ul style="list-style-type: none"> <li>Potential increased mortality during construction and channel realignment, restoration, and naturalization from direct in-water</li> <li>Potential for fish mortality by the introduction of a deleterious substance</li> </ul>	<ul style="list-style-type: none"> <li>CN will carry out construction activities near water following DFO Measures to Avoid Causing Harm to Fish and Fish Habitat [DFO 2013b] (EIS Section 6.5.1.9.2, page 177).</li> </ul>	<ul style="list-style-type: none"> <li>Standard measures commonly employed on construction sites and supported by regulatory authorities including DFO.</li> </ul>	<ul style="list-style-type: none"> <li>The use of mitigation measures will limit the effects of the construction on fish mortality, such that adverse environmental effects are likely to be low.</li> </ul>	<ul style="list-style-type: none"> <li>Detailed Construction Sequencing Plan to be reviewed and approved by DFO.</li> <li>Final Isolation and Dewatering Plan to be reviewed and approved by DFO.</li> <li>Under the supervision of CN, a third-party Contractor / consultant will regularly monitor instream turbidity levels and sediment control measures during construction, particularly following major storm events.</li> <li>Construction Monitoring Reports will document results of monitoring activities.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>The Contractor shall notify CN 72 hours before construction of any watercourse or water body crossing or diversions to ensure any necessary fish salvage operations are conducted (i.e., all culvert installations, channel diversions or in-water work) (EIS Section 6.5.1.9.4, page 183).</li> </ul>	<ul style="list-style-type: none"> <li>Providing notice to CN allows for the coordination of a crew of qualified biologists to be present to remove any fish within isolated areas (i.e., between berms) prior to dewatering.</li> <li>The use of mitigation measures will limit the effects of the</li> </ul>		<ul style="list-style-type: none"> <li>Final Isolation and Dewatering Plan to be reviewed and approved by DFO.</li> <li>Construction Monitoring Reports will document any fish captured during dewatering activities.</li> </ul>	<p>Contractor / CN Environmental Monitor</p>



Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					construction on fish mortality, such that adverse environmental effects are likely to be low.			
	✓			<ul style="list-style-type: none"> <li>Under the supervision of CN, a qualified aquatic biologist will conduct fish salvages prior to dewatering areas for in-stream work (EIS Section 6.5.1.9.4, page 183).</li> </ul>	<ul style="list-style-type: none"> <li>Fish salvages (i.e., fish rescues) allow for the capture and release of fish in areas to be dewatered</li> <li>Fish salvages are standard practice prior to in-water work and supported by regulatory authorities including DFO.</li> <li>Captured fish will be released to areas within the same watercourse, outside of the work, where suitable habitat exists.</li> </ul>		<ul style="list-style-type: none"> <li>Final Isolation and Dewatering Plan to be reviewed and approved by DFO.</li> <li>Aquatic biologists conducting fish salvage activities require approval from the MNRF under the <i>Fish and Wildlife Conservation Act</i>, and the results must be submitted to the MNRF.</li> <li>Confirmed through monitoring during construction performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document any fish captured during dewatering activities.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>Before the commencement of in-water activity, the Contractor will ensure that all necessary equipment and materials are available and are on-site, including contingency equipment and materials (Appendix G, p. G.4).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best management practice for in water work and supported by regulatory authorities including DFO.</li> <li>Ensuring all equipment is available prior to construction reduces the duration of in-water work and ensures the necessary materials are available if/when needed.</li> <li>In the event of a spill or other unforeseen event, contingency plans are most effective when implemented quickly.</li> </ul>		<ul style="list-style-type: none"> <li>Final Isolation and Dewatering Plan to be reviewed and approved by DFO.</li> <li>Under the supervision of CN, a third-party Contractor / consultant will schedule in-water work in advance.</li> <li>Confirmed through construction monitoring for any in-water work performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will ensure water and pump intakes reduce or avoid disturbance of the watercourse bed and are screened in accordance with DFO's Freshwater Intake End-of-Pipe Fish Screen Guideline (DFO 1995) (EIS Section 6.5.1.9.3, page 182).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best management practice around watercourses and water bodies and supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Final Isolation and Dewatering Plan to be reviewed and approved by DFO.</li> <li>Adherence to guidance.</li> </ul>	CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>When clearing vegetation to accommodate channel realignment, the Contractor will attempt to avoid fell trees from watercourses and water bodies. The Contractor will immediately remove trees, debris or soil inadvertently deposited below the high watermark of a watercourse (Appendix G, p. G.5).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best management practice around watercourses and water bodies and supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Confirm through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document the vegetation clearing activities.</li> </ul>	Contractor / CN Environmental Monitor

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Design	Construction	Operation						
	✓	✓		<ul style="list-style-type: none"> <li>CN will not permit Project personnel to fish on the work site (EIS Section 6.5.1.9.4, page 183).</li> </ul>	<ul style="list-style-type: none"> <li>While such activities are not anticipated during construction or operation, preventing workers from fishing while on-site would prevent fish mortality.</li> </ul>		<ul style="list-style-type: none"> <li>Confirmed through construction monitoring performed by CN Environmental Monitor.</li> </ul>	CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will plan construction activities to avoid or minimize the extent and duration of watercourse diversions required during the realignment of Indian Creek and Tributary A (Appendix G, p. G.3).</li> </ul>	<ul style="list-style-type: none"> <li>The channel realignment has been designed to avoid or minimize potential effects to fish and fish habitat.</li> <li>The preliminary channel construction phasing plans follow common practices to avoid extended periods of disturbance to fish and reduce potential effects on fish.</li> <li>Reducing the duration and the number of diversions necessary to conduct of in-water work reduces the potential for direct effects on fish, including mortality.</li> </ul>		<ul style="list-style-type: none"> <li>Final Isolation and Dewatering Plan to be reviewed and approved by DFO.</li> <li>Project design implementation and confirmed through monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document channel diversion activities.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
<b>Fish and Fish Habitat – Change in Water Quality</b>								
	✓		<ul style="list-style-type: none"> <li>Potential to induce a wide range of biological effects, including behavioural changes in fish, sub-lethal effects, and fish mortality.</li> <li>Reduce overall fish production in a watercourse or water body due to turbidity-related reductions in algae and in benthic and aquatic invertebrate production.</li> <li>Smothering of benthic invertebrate communities or fish eggs and larvae from suspended sediment settling when water velocities slow.</li> </ul>	<ul style="list-style-type: none"> <li>CN will remove the on-line agricultural pond, which, combined with the construction and implementation of a stormwater management system, will improve water quality (EIS section 3.3.12, page 51).</li> </ul>	<ul style="list-style-type: none"> <li>The Bronte Creek Watershed Study recommends that on-line agricultural ponds within watercourses in the Indian Creek subwatershed be taken off-line or eliminated altogether (Conservation Halton 2002).</li> <li>The existing agricultural pond has thermal impacts on Indian Creek.</li> <li>The existing berm structure has failed, causing erosion and sedimentation.</li> <li>The SWM ponds will be designed to remove 70% and 80% of the phosphorus and sediment, respectively, for all the run-off from the 100 ha SWM pond drainage area.</li> </ul>	<ul style="list-style-type: none"> <li>Localized, positive changes to surface water and sediment quality with respect to in-water concentrations of sediment, nutrients, metals and hydrocarbons within Tributary A and Indian Creek.</li> <li>Following project completion, a low magnitude increase in water quality is expected through construction of SWM facilities and channel alteration/riparian enhancements.</li> <li>Change in water quality from the introduction of hydrocarbons or other deleterious substances related to equipment use is expected to be low.</li> <li>Change in water quality from introduction of hydrocarbons or other deleterious substances from construction activities is expected to be low.</li> </ul>	<ul style="list-style-type: none"> <li>Final Channel Designs Drawings to be reviewed and approved by DFO.</li> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>Confirmed through water quality monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<p>Contractor / CN Environmental Monitor</p>
✓				<ul style="list-style-type: none"> <li>To mitigate thermal impacts, CN will consider a combination of various measures during the detailed design stage including but not limited to:                             <ul style="list-style-type: none"> <li>Plantation along the wet ponds and outlet channel to provide dense shading;</li> <li>Reverse bottom draw outlet pipe with installation of cooling towers/cooling trenches;</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Assuming water temperatures are maintained within organism's tolerance levels, potentially negative effects would be minimized.</li> </ul>		<ul style="list-style-type: none"> <li>Stormwater Management Plan to be submitted to CEAA.</li> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>Appropriate design implementation and confirmed through monitoring during</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>



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Design	Construction	Operation						
				<ul style="list-style-type: none"> <li>- Vegetated berms. (Appendix E.15, Appendix B, page 10)</li> </ul>			operation, performed by third-party Contractor / CN Environmental Monitor.	
✓	✓			<ul style="list-style-type: none"> <li>• CN will develop and implement a Stormwater Management (SWM) Strategy that collects and treats all stormwater run-off from the Terminal prior to release to Indian Creek or Tributary A, which includes the following key design features (Appendix E.15, page 74-75):                             <ul style="list-style-type: none"> <li>- diversion of Tributary A for the Regional event around the PDA and into Indian Creek via interception with a perimeter ditch;</li> <li>- two SWM ponds that contain and attenuate flows up to 1:100 year storm event;</li> <li>- a minimum of 0.6 m of pond freeboard during the 1:100 year storm event;</li> <li>- low flow orifice outlets in the ponds for the 25 mm return period storm event that release the detention volumes over an approximately 12-day period in order to mitigate against receiving water erosion;</li> <li>- oil grit separators proposed for the administration and maintenance buildings, gate area and work pad areas to capture sediments, oil and grease before discharge to the wet ponds;</li> <li>- shut off valves will be installed on the SWM pond outlets;</li> <li>- channel realignment plantings and live stakes within the banks and riparian areas and instream features (i.e., woody debris toe protection) to provide shading for watercourse channels;</li> <li>- surface water quality controls to provide Enhanced Level 1 Protection; and,</li> <li>- winter road salt mitigation measures to be implemented to reduce salt run-off</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• SWM measures are standard and accepted practices to control the quality and quantity of surface run-off prior to discharging into downstream environments.</li> <li>• Design criteria exist to address specific requirements of the local system, including Tributary A and Indian Creek.</li> <li>• All components of the SWM system will be designed (i.e., sized) appropriately (i.e., in accordance with established SWM criteria for water quality and quantity control.</li> <li>• A treatment train approach to SWM is an effective way to prevent the contamination of stormwater, reduce the amount of stormwater run-off and improve the overall quality of stormwater discharging to receiving waters.</li> <li>• OGS units are proposed for the administration, maintenance buildings, gate area and work pad areas to capture sediments, oil and grease before discharge to the grassed swales and wet ponds.</li> <li>• A storm sewer network is proposed to collect and convey the storm runoff from the yard, administration and maintenance buildings and gate area for events up to and including the 5-year storm event.</li> <li>• Drainage swales are proposed along the southwestern side of the yard to collect, store, treat and convey storm runoff from the yard to the wet ponds.</li> <li>• Potential operational effects will be mitigated through successful implementation of the SWM plan.</li> </ul>		<ul style="list-style-type: none"> <li>• Stormwater Management Plan to be submitted to CEAA.</li> <li>• Salt Management Plan to be submitted to CEAA.</li> <li>• Surface water quantity and quality follow-up monitoring program to be implemented.</li> <li>• Vegetation Assessment conducted as follow-up monitoring.</li> <li>• Maintenance of SWM during operation.</li> </ul>	<p>CN Responsible for Design Plans and Maintenance Activities</p> <p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>• CN will build permanent SWM during the first stage of the construction phase to manage</li> </ul>	<ul style="list-style-type: none"> <li>• SWM ponds act as sediment basins during construction as a</li> </ul>		<ul style="list-style-type: none"> <li>• Erosion and Sediment Control Plan to be submitted to CEAA</li> </ul>	CN Responsible for Design Plans

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
				<p>construction site surface run-off and drainage (Appendix E.15, page 75).</p>	<p>component of erosion and sediment control.</p> <ul style="list-style-type: none"> <li>• Sediment basins capture sediment prior to discharge to the downstream watercourses.</li> <li>• Prior to operation, final construction of the SWM ponds and associated appurtenances (i.e., inlet, outlet, shut-off valve, forebay / permanent pool) are created in accordance with final plans.</li> </ul>		<ul style="list-style-type: none"> <li>• and reviewed and approved by DFO.</li> <li>• Stormwater Management Plan to be submitted to CEAA.</li> </ul>	
	✓			<ul style="list-style-type: none"> <li>• A rainwater collection and distribution system will be installed to collect rainwater from administration and maintenance buildings and distribute it for the irrigation of landscaped areas and washing of equipment (Appendix E.15, Appendix B, p. 22).</li> </ul>	<ul style="list-style-type: none"> <li>• A rainwater capture system will provide the primary source of non-potable water, which will be utilized for non-drinking uses (i.e., irrigation, wash-water, and grey water systems).</li> <li>• Harvesting would reduce the volume of run-off directed to the downstream SWM system.</li> <li>• The rainwater capture system will be a third-party system installed at the facility, with the final selection to take place during the detailed design phase.</li> </ul>		<ul style="list-style-type: none"> <li>• Final selection of the rainwater capture system will take place during the detailed design phase.</li> </ul>	CN Responsible for Design Plans
	✓			<ul style="list-style-type: none"> <li>• CN will establish and clearly identify a riparian buffer before the start of clearing activities. Disturbance in this area will be restricted to activities associated with realignment, restoration and naturalization (EIS section 6.5.1.9.5, page 185).</li> </ul>	<ul style="list-style-type: none"> <li>• Maintaining buffers between construction activities / grading and natural areas (i.e., wetlands, watercourses) reduces potential disruption (disturbance) to existing vegetative cover that acts to stabilize riparian areas, filter nutrients and minimize erosion of fish habitat.</li> <li>• Avoiding vegetation clearing, cutting or maintenance in areas proposed for restoration and naturalization reduces disturbance and rehabilitation requirements.</li> <li>• Demarcate construction work area to avoid incidental encroachment into adjacent areas.</li> <li>• Change in water quality from the introduction of sediment, or other deleterious substances related to construction activities is expected to be low.</li> </ul>		<ul style="list-style-type: none"> <li>• Soil Management Plan to be submitted to CEAA.</li> <li>• Confirmed through construction monitoring performed by CN Environmental Monitor.</li> <li>• Construction Monitoring Reports will document the vegetation clearing activities</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>The Contractor will install erosion and sediment control measures at appropriate locations adjacent to all watercourses and/or water bodies, or as directed by the Environmental Monitor(s). Appropriate temporary erosion and sediment control structures shall be installed, maintained and monitored through all phases of construction (EIS section 6.5.1.9.5, page 185).</li> </ul>	<ul style="list-style-type: none"> <li>Sediment and erosion control measures are standard best practices for construction sites and are supported by regulatory authorities including DFO.</li> <li>Change in water quality from the introduction of sediment or other deleterious substances related to equipment use or construction activities is expected to be low.</li> </ul>		<ul style="list-style-type: none"> <li>Erosion and Sediment Control Plan to be submitted to CEAA and reviewed and approved by DFO.</li> <li>Confirmed through construction monitoring performed by CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document erosion and sediment controls.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
				<ul style="list-style-type: none"> <li>CN will implement stabilized construction access and roadways to reduce the tracking of construction sediment (mud and dirt) onto public roads by construction equipment (Appendix E.1, page 91).</li> </ul>	<ul style="list-style-type: none"> <li>Sediment and erosion control measures are standard best practices for construction sites and are supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Erosion and Sediment Control Plan to be submitted to CEAA and reviewed and approved by DFO.</li> <li>Confirmed through construction monitoring performed by CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document erosion and sediment controls.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>CN will ensure water from flumes, dam and pumps, diversion or other methods do not cause erosion or introduce sediment into the channel (EIS section 6.5.1.9.5, page 185).</li> </ul>	<ul style="list-style-type: none"> <li>Sediment and erosion control measures are standard best practices for construction sites and are supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Final Channel Designs Drawings to be reviewed and approved by DFO.</li> <li>Confirmed through monitoring of in-water work during construction performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>CN will restrict grubbing, stripping and grading on approach slopes to watercourses and water bodies to the amount required to allow safe passage of equipment and completion of the relevant work (EIS section 6.5.1.9.5, page 186).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best practice around watercourses and supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Soil Management Plan to be submitted to CEAA.</li> <li>Erosion and Sediment Control Plan to be submitted to CEAA and reviewed and approved by DFO.</li> <li>Confirmed through monitoring and inspections performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>CN will delay grading of the primary banks of watercourses and water bodies until immediately before construction of temporary crossings and watercourse realignment, where practicable (EIS section 6.5.1.9.5, page 186).</li> </ul>	<ul style="list-style-type: none"> <li>Best management practices around watercourses supported by regulatory authorities including DFO.</li> <li>Delaying disturbance to areas adjacent to watercourses until access of required allows existing vegetative cover that acts to</li> </ul>		<ul style="list-style-type: none"> <li>Final Channel Designs Drawings to be reviewed and approved by DFO.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					<ul style="list-style-type: none"> <li>stabilize soils and minimize erosion potential to be maintained.</li> <li>Reducing the duration of disturbance minimizes the potential for erosion in areas adjacent to watercourses.</li> </ul>			
	✓			<ul style="list-style-type: none"> <li>CN will complete dewatering in a manner that does not cause erosion or allow sediment to re-enter a watercourse or water body through the use of appropriate sediment control devices (EIS section 6.5.1.9.5, page 186).</li> </ul>	<ul style="list-style-type: none"> <li>Sediment and erosion control measures are standard best practices for construction sites and are supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Erosion and Sediment Control Plan to be submitted to CEAA and reviewed and approved by DFO.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
		✓		<ul style="list-style-type: none"> <li>CN will establish designated refueling areas for yard equipment at a safe distance (30 m setback minimum distance from top of bank) from fish habitat (EIS section 6.6.2.4.3, page 294).</li> </ul>	<ul style="list-style-type: none"> <li>Refueling is an activity with an increased potential to result in a spill.</li> <li>Designated refueling areas within the Terminal ensure refueling activities are located in an area designed to accommodate such activities (i.e., appropriate refueling equipment, proximity to spill kits).</li> <li>Spill kits are most effective when located in areas of greater spill potential.</li> <li>Increasing the separation between a potential spill and a sensitive component of the environment (i.e., watercourse) increases the potential for spill containment.</li> <li>Managing spills and minimizing their likelihood of reaching downstream watercourses reduces the potential for adverse effects on fish and fish habitat.</li> </ul>		<ul style="list-style-type: none"> <li>Final Plans for the Terminal will be submitted and approved by the CTA.</li> <li>CN Milton Logistics Hub Emergency Response Plan (Operational ERP) to be submitted to CEAA for the operations phase.</li> </ul>	<p>CN Responsible for Design Plans</p>
	✓			<ul style="list-style-type: none"> <li>The Contractor will protect concrete pours from rainfall with an impermeable cover for a minimum of 48 hours, or until the concrete cures, in order to prevent high pH run-off (Appendix G, page G.6).</li> </ul>	<ul style="list-style-type: none"> <li>Uncured concrete runoff has a high pH value.</li> <li>Protecting freshly poured concrete from rain reduces the potential pH of runoff from such areas until such time as the concrete is allowed to cure.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan will be submitted to CEAA.</li> <li>Confirmed through monitoring during construction performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>The Contractor will isolate in-stream cast-in-place concrete from fish-bearing waters until the concrete has properly cured (minimum of</li> </ul>	<ul style="list-style-type: none"> <li>It is anticipated that pre-fabricated concrete culverts will be used to construct the Tributary A culverts beneath the Terminal.</li> </ul>		<ul style="list-style-type: none"> <li>Final Culvert Design Drawings will be reviewed and approved by DFO.</li> </ul>	<p>Contractor / CN Environmental Monitor</p>

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
				<p>48 hours). Alternatively, pre-fabricated concrete will be used for culverts (Appendix G, page G.6).</p>	<ul style="list-style-type: none"> <li>• However, in the event that cast-in-place concrete is used, such areas would be isolated from fish bearing waters to reduce potential pH contributions of freshly poured concrete.</li> <li>• The realigned Tributary A channel and associated culverts will be constructed off-line so that construction in these areas is isolated from flowing water.</li> </ul>		<ul style="list-style-type: none"> <li>• Detailed Construction Sequencing Plan to be reviewed and approved by DFO.</li> <li>• Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	
	✓			<ul style="list-style-type: none"> <li>• The Contractor will use accelerants as appropriate to shorten curing times (Appendix G, page G.6).</li> </ul>	<ul style="list-style-type: none"> <li>• Curing accelerants reduce the time required for freshly poured concrete to cure and stabilize, thereby reducing potential pH contributions of freshly poured concrete.</li> <li>• The applicability of accelerants will be based on the design requirements of the concrete.</li> </ul>		<ul style="list-style-type: none"> <li>• Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>• The Contractor will store open bags of concrete mix in a protected dry area (Appendix G, page G.6).</li> </ul>	<ul style="list-style-type: none"> <li>• Uncured concrete runoff has a high pH value.</li> <li>• Proper storage of construction materials is considered a best practice for construction.</li> <li>• Storing open bags of concrete in a dry area (i.e., protected from the rain) prevents premature curing of concrete prior to use and minimizes the potential for uncured concrete runoff entering a watercourse.</li> </ul>		<ul style="list-style-type: none"> <li>• Environmental Protection Plan will be submitted to CEAA.</li> <li>• Confirmed through monitoring during construction performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>• The Contractor will have a CO<sub>2</sub> tank with regulator, hose, and diffuser available onsite during concrete work to neutralize pH levels (Appendix G, page G.6).</li> </ul>	<ul style="list-style-type: none"> <li>• Uncured concrete runoff has a high pH value.</li> <li>• Use of CO<sub>2</sub> can neutralize pH levels</li> </ul>		<ul style="list-style-type: none"> <li>• Environmental Protection Plan will be submitted to CEAA.</li> <li>• Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>• The Contractor will treat wastewater and wash waters to PAL criteria (between pH 6.5 and 9.0) and the turbidity will be less than 25 NTU above background when it is discharged (Appendix G, page G.6).</li> </ul>	<ul style="list-style-type: none"> <li>• Uncured concrete runoff has a high pH value.</li> <li>• Collecting and retaining concrete washout water prevents this caustic material from reaching the soil surface or migrating to downstream surface water.</li> </ul>		<ul style="list-style-type: none"> <li>• Environmental Protection Plan will be submitted to CEAA.</li> <li>• Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>• The Contractor/CN will have spill containment kits present on site in designated locations where there is a significant risk of spill (e.g.,</li> </ul>	<ul style="list-style-type: none"> <li>• Managing spills and minimizing their likelihood of reaching downstream watercourses</li> </ul>		<ul style="list-style-type: none"> <li>• Environmental Protection Plan to be submitted to CEAA (which will include Spill</li> </ul>	Contractor / CN Environmental Monitor



Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
				refueling areas) (EIS section 6.5.3.9.3, page 216.	<ul style="list-style-type: none"> <li>reduces the potential for adverse effects on fish and fish habitat.</li> <li>Plans will identify mitigation and contingency measures to be implemented to prevent spills from occurring during construction and the steps to be taken if a spill of hazardous materials occurs.</li> <li>Spill kits are most effective when located in areas of greater spill potential.</li> </ul>		<ul style="list-style-type: none"> <li>Response &amp; Contingency Plan measures).</li> <li>Confirmed through monitoring for spills performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	
	✓			<ul style="list-style-type: none"> <li>When implementing erosion and sediment control mitigation is not practicable (e.g., due to weather conditions), CN will reduce the number of vehicles on access roads or cleared work areas to limit erosion risks (EIS, Table 7.1, page 312).</li> </ul>	<ul style="list-style-type: none"> <li>During wet weather events, reducing the number of vehicles on access roads will reduce disturbance to soils or access roads made more susceptible to erosion due to excess moisture.</li> </ul>		<ul style="list-style-type: none"> <li>Erosion and Sediment Control Plan to be submitted to CEAA.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<ul style="list-style-type: none"> <li>CN Responsible for Design Plans</li> <li>Contractor / CN Environmental Monitor</li> </ul>
	✓			<ul style="list-style-type: none"> <li>Should dewatering of excavated area be required (due to rain or minor amounts of groundwater), any water pumped from the excavated area will be pumped through a filter bag or into an area of undisturbed vegetation at least 30 meters from the watercourse or an alternate area approved by the engineer and fisheries biologist (Appendix E.2, page 52).</li> </ul>	<ul style="list-style-type: none"> <li>Sediment and erosion control measures are standard practice on construction sites supported by regulatory authorities including DFO.</li> <li>Filter bags remove and contain sediment in water prior to discharge to the ground surface.</li> <li>Ensuring that discharge flows across a vegetated area prior to draining into a watercourse provides an added level of sediment removal and reduces the potential for erosion as discharge flows across the ground surface.</li> </ul>		<ul style="list-style-type: none"> <li>Erosion and Sediment Control Plan to be submitted to CEAA and reviewed and approved by DFO.</li> <li>Confirmed through monitoring and inspections during construction performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<ul style="list-style-type: none"> <li>CN Responsible for Design Plans</li> <li>Contractor / CN Environmental Monitor</li> </ul>
	✓			<ul style="list-style-type: none"> <li>CN will reduce grubbing near watercourses and water bodies, and other wet areas to facilitate the restoration of shrub communities (Appendix G, page G.3).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best practice around watercourses and supported by regulatory authorities including DFO.</li> </ul>		<ul style="list-style-type: none"> <li>Erosion and Sediment Control Plan to be submitted to CEAA and reviewed and approved by DFO.</li> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>Confirmed through monitoring and inspections performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<ul style="list-style-type: none"> <li>CN Responsible for Design Plans</li> <li>Contractor / CN Environmental Monitor</li> </ul>



Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>• CN will construct the channel realignment predominantly outside of the existing channels and will be commissioned upon completion of all works to minimize the time period for diversion of flows within the existing channel. (Appendix E.15, page 75).</li> </ul>	<ul style="list-style-type: none"> <li>• Constructing the new channel off-line prior to receiving flows minimizes the need for in-water work (i.e., to minimize erosion and suspension of sediment) and allows the new channel to be vegetated (stabilized) prior to receiving flows (i.e., to reduce erosion and degradation of water quality).</li> </ul>		<ul style="list-style-type: none"> <li>• Detailed Construction Sequencing Plan to be reviewed and approved by DFO.</li> <li>• Project design implementation and confirmed through monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>• Construction Monitoring Reports will document stream diversions and isolation activities.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>
	✓			<ul style="list-style-type: none"> <li>• As part of the erosion and sediment control measures, the following specific erosion and sediment control measures will be implemented (Response to IR3.31, page 109):                             <ul style="list-style-type: none"> <li>– Vegetation seeding and planting would be stabilized, where necessary, by erosion control matting and blankets.</li> <li>– Erosion and sediment control measures around channel realignments will remain in place, at least until vegetation has established.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Erosion control matting and/or erosion control blankets provide an added layer of stability / control between seeding and the establishment of vegetation.</li> <li>• These measures are designed to protect soil from the impact of precipitation and overland flow, and retain moisture to facilitate the establishment of vegetation.</li> <li>• Such measures are typically used on slopes where runoff has the potential to erode unvegetated soil.</li> </ul>		<ul style="list-style-type: none"> <li>• Erosion and Sediment Control Plan to be submitted to CEAA and reviewed and approved by DFO.</li> <li>• Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	<p>Contractor / CN Environmental Monitor</p>
				<ul style="list-style-type: none"> <li>• Prior to construction, the following agricultural row crop management activities will be implemented:                             <ul style="list-style-type: none"> <li>– Prior to the fallow period, the crops would be harvested from the fields. The agricultural crop fields would be left in an untilled condition with a cover crop for this fallow period.</li> <li>– Prior to ground disturbance as part of construction activities for the Terminal, the agricultural fields within the PDA will be harvested and planted with an erosion protection and nitrogen scavenging cover crop (e.g., winter wheat, cereal rye, barley) and remain fallow with no active agricultural or construction activities for a minimum six-month fall/winter period. (Response to IR7.3, page 14)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Pre-construction row crop management activities are designed to allow time for increased die-off of pathogenic organisms and volatilization of herbicides/pesticides prior to soil disturbance and removal of nutrient compounds through plant harvesting.</li> </ul>		<ul style="list-style-type: none"> <li>• CN will work with farmer to implement row crop management activities prior to construction.</li> <li>• Soil Management Plan to be submitted to CEAA.</li> <li>• Confirmed through construction monitoring performed by CN Environmental Monitor.</li> </ul>	<p>CN</p>
✓				<ul style="list-style-type: none"> <li>• At final design, CN will apply specific measures in the context of final grading plans and sequences, and incorporated into the</li> </ul>	<ul style="list-style-type: none"> <li>• This guideline provides measures for the prevention of erosion during the construction process,</li> </ul>		<ul style="list-style-type: none"> <li>• Erosion and Sediment Control Plan to be submitted to CEAA</li> </ul>	<p>CN Responsible for Design Plans</p>

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
				EPP (Erosion and Sediment Control Plan), based on the Erosion and Sediment Control Guideline for Urban Construction" (Greater Golden Horseshoe Area Conservation Authorities 2006) (Response to IR3.41, page 173).	including dealing with suspended sediment at the source and minimizing sediment transport from leaving the construction site. <ul style="list-style-type: none"> <li>Recommendations are provided specific to erosion and sediment control at urban construction sites within the GTHA.</li> </ul>		and reviewed and approved by DFO. <ul style="list-style-type: none"> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	
<b>Migratory Birds – Change in Migratory Bird Mortality</b>								
	✓		<ul style="list-style-type: none"> <li>Bird mortality could occur during the site preparation and watercourse realignment, including removing vegetation, clearing trees, grubbing, and blasting (e.g., bird fatalities through nest destruction).</li> <li>Bird mortality from vehicular collisions due to increased construction equipment and operation activities in and around the Project.</li> <li>Mortality of migratory birds during operations from SWM facilities, in the event they encounter floating hydrocarbons.</li> <li>Site buildings and associated infrastructure pose the potential risk of migratory bird collisions.</li> </ul>	<ul style="list-style-type: none"> <li>CN will avoid construction activities with the potential to remove migratory bird habitat during the breeding season (end of March to end of August). Should vegetation clearing activities be unavoidable during this window, a program will be implemented to avoid effects on migratory birds and their nests (EIS, section 6.5.2.9.1, page 199).</li> </ul>	<ul style="list-style-type: none"> <li>Avoidance of the breeding season is standard mitigation supported by regulatory authorities including ECCC.</li> <li>The removal of trees, shrubs and/or agricultural fields used by migratory birds is proposed to accommodate construction of the Terminal.</li> <li>Damage to active bird nests during the breeding season can cause bird mortality (i.e., eggs, young birds that have not fledged the nest).</li> <li>Avoiding vegetation removal during the active breeding season avoids potential mortality by avoiding periods when migratory birds are most susceptible / vulnerable.</li> </ul>	<ul style="list-style-type: none"> <li>Migratory bird mortality in the LAA during construction is expected to be low though mitigation implementation.</li> <li>During operation, it is expected that birds will avoid vehicular traffic in the area, based on limited suitable habitat availability and changes in bird mortality in the LAA should be low.</li> <li>Bird mortality during operation, including SWM pond contamination and strikes with buildings and infrastructure, should be greatly reduced through applicable mitigation measures and should not result in any reduction in species diversity within the LAA.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Confirmed through construction monitoring to adhere to timing windows to be performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>Should vegetation clearing activities be unavoidable during the breeding season, CN will conduct nest sweeps and avoid clearing during key sensitive periods and in key locations (EIS, Table 7.1, page 313).</li> </ul>	<ul style="list-style-type: none"> <li>In circumstances where clearing during the breeding season is unavoidable (i.e., overall project schedule, targeted clearing to accommodate construction), a nest search (nest sweep) of the area would be completed by a qualified ecologist prior to clearing.</li> <li>The purpose of a nest sweep is to confirm whether any active nests occur within the area to be cleared.</li> <li>Nest searches are completed within three days prior to clearing.</li> <li>In the event that active nests are identified, protection measures (i.e., buffers to protect against</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Under the supervision of CN, a third-party Contractor / consultant (qualified ecologist) will conduct a nest sweep prior to any clearing during the breeding season.</li> <li>Confirm through construction monitoring to adhere to timing windows performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					damage or disturbance of nesting birds) will be established.			
		✓		<ul style="list-style-type: none"> <li>• CN will implement speed limits for vehicles on internal roads (EIS, section 6.5.2.9.1, page 199).</li> </ul>	<ul style="list-style-type: none"> <li>• Vehicle related bird strikes cause mortality to birds while flying.</li> <li>• Slower moving vehicles provide greater time for birds to avoid a collision.</li> <li>• Speed limits are enforced for safety reasons within the Terminal independent of bird mortality; however, a consequence of speed limits is a reduction in the potential for bird mortality.</li> </ul>		<ul style="list-style-type: none"> <li>• Signage of posted speed limits will be installed within the Terminal.</li> <li>• Enforcement by CN Police.</li> </ul>	CN
		✓		<ul style="list-style-type: none"> <li>• CN will implement a Spill Response Plan to contain contamination, including shut-off valves on SWM ponds in the event of an accidental spill to protect the downstream environment. In the event a SWM pond becomes contaminated with a spill, bird deterrents will be implemented to prevent use of the pond by birds until cleanup measures have been completed (EIS, section 6.5.2.9.1, page 199).</li> </ul>	<ul style="list-style-type: none"> <li>• Discussion on spill response is provided below under "Emergency Response Plans"</li> <li>• While a spill on site would be contained as close to the source as possible, bird deterrents would be employed in the event that the SWM Pond shut-off valves are engaged to encourage waterfowl to avoid the area.</li> <li>• Based on the field investigations, waterfowl are expected to be uncommon breeders in the LAA, so their presence on a SWM Pond during a spill is unlikely (however deterrents will be employed as a precaution).</li> </ul>		<ul style="list-style-type: none"> <li>• An Emergency Response Plan will be submitted as part of the EPP to CEAA for the construction phase.</li> <li>• CN Milton Logistics Hub Emergency Response Plan (Operational ERP) to be submitted to CEAA for the operations phase.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>• CN will retain natural habitat features such as wildlife trees; vegetation will be retained wherever practicable to provide nesting opportunities for cavity-dependent birds (EIS, section 6.5.2.9.2, page 202).</li> </ul>	<ul style="list-style-type: none"> <li>• To determine potential effects, the EIS assumed the entire PDA would be disturbed to accommodate construction of the Terminal; however, the footprint of construction (as well as areas to be avoided) will be confirmed during detailed design.</li> <li>• Avoiding disturbance of areas outside of required grading activities (i.e., vegetated areas adjacent to Indian Creek and Tributary A outside of proposed channel realignments) provides the opportunity to retain habitat features or existing vegetated areas.</li> <li>• Natural features on CN property have been avoided through the design of the Terminal (i.e.,</li> </ul>		<ul style="list-style-type: none"> <li>• Environmental Protection Plan to be submitted to CEAA.</li> <li>• Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>• Demarcate construction work area to avoid incidental encroachment into adjacent areas.</li> </ul>	CN Responsible for Design Plans

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					woodland feature to the south of the PDA).			
		✓		<ul style="list-style-type: none"> <li>CN will provide employees with sensitivity education for on-site wildlife encounters (EIS, section 6.5.2.9.1, page 199).</li> </ul>	<ul style="list-style-type: none"> <li>Education/training increases awareness and action.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan, which includes education during construction, to be submitted to CEAA.</li> <li>Training of CN employees.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will implement BMPs, including locating vegetation or greenery away from glass to minimize risk of avian collision with windows, (refer to the Bird Friendly Development Guidelines, City of Toronto 2007) (EIS, Table 7.1, page 314).</li> </ul>	<ul style="list-style-type: none"> <li>Best Management Practices used for revegetation of sites.</li> <li>This guidance document identifies alternative standard measures to reduce potential bird collisions with buildings.</li> </ul>		<ul style="list-style-type: none"> <li>Planting Plan to be submitted to CEAA.</li> </ul>	CN Responsible for Design Plans
<b>Migratory Birds – Change in Migratory Birds Use of Area</b>								
	✓		<ul style="list-style-type: none"> <li>Loss or alteration of terrestrial habitat.</li> <li>Displacement of some migratory bird residences.</li> <li>No changes in use of migratory bird habitat are anticipated due to fragmentation.</li> <li>Construction noise may cause a change in migratory bird use within the LAA.</li> <li>Birds nesting near construction areas may abandon their nests.</li> <li>Acoustic emissions during operation may result in changes to habitat use.</li> <li>Disturbance from human presence may result in indirect disturbance to adjacent migratory bird habitat use during operation.</li> </ul>	<ul style="list-style-type: none"> <li>Wherever practicable, CN will avoid unnecessary vegetation clearing around the Terminal, access roads and rail (EIS, section 6.5.2.9.2, page 201).</li> <li>CN will enhance wetlands or create new ones to improve breeding opportunities for wetland birds (EIS, section 6.5.2.9.2, page 201).</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining naturalized vegetation encourages the use by birds.</li> <li>Demarcating construction work area avoids incidental encroachment into adjacent areas.</li> <li>Restoration and enhancement is proposed in targeted areas outside of the Terminal within the PDA.</li> <li>Avoid clearing in these areas to allow for naturalization.</li> <li>Wetland creation and enhancement is proposed as part of the Project to compensate for clearing of habitat during site preparation, resulting in not net loss of habitat.</li> <li>A conceptual habitat enhancement plan has been prepared to address wetland migratory birds, including new creek channels, riparian meadow marsh wetlands and shallow marsh communities.</li> <li>Riparian wetlands will facilitate connectivity and will be established with native wetland plant species, which are expected to increase the potential to support higher species diversity compared to the existing wetlands.</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of applicable mitigation measures is expected to reduce or eliminate any change in use of migratory bird habitat.</li> <li>Grassland offsets measures will be implemented to result in no net loss of habitat.</li> <li>Disturbance impacts during construction may result in a decrease in bird density, however, this is likely to be short term in nature and be restricted to the two-year construction period.</li> <li>Change in acoustic emissions at grassland and forest habitats within the LAA from baseline conditions expected to be low.</li> </ul>	<ul style="list-style-type: none"> <li>Soil Management Plan, which will identify the limit of grading, to be submitted to CEAA.</li> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>Construction Monitoring Reports will document the vegetation clearing activities.</li> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p> <p>Contractor / CN Environmental Monitor</p>

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					<ul style="list-style-type: none"> <li>Preliminary restoration and enhancement plans have been submitted to the Panel and ECCC.</li> </ul>			
	✓	✓		<ul style="list-style-type: none"> <li>CN will create or protect off-site grassland habitat as an offset for loss of grassland habitat (EIS, section 6.5.2.9.2, page 201).</li> </ul>	<ul style="list-style-type: none"> <li>Offsetting, including the creation and management of grassland habitat for migratory birds is a standard mitigation measure for effects to habitat and is supported by authorities.</li> <li>Creating an area that is managed for the protection of migratory grassland birds enhances habitat availability while removing common threats to these species (i.e., hay cutting during sensitive periods).</li> </ul>		<ul style="list-style-type: none"> <li>Off-site grassland bird habitat and use survey results will be submitted to CEAA.</li> </ul>	Ducks Unlimited Canada on behalf of CN.
	✓			<ul style="list-style-type: none"> <li>CN will demarcate construction work area to avoid incidental encroachment into adjacent areas (EIS, section 6.5.2.9.2, page 202).</li> </ul>	<ul style="list-style-type: none"> <li>Avoiding vegetation clearing, cutting or maintenance in areas proposed for restoration and naturalization reduces disturbance and rehabilitation requirements.</li> <li>Standard mitigation is to demarcate the footprint of construction activities.</li> </ul>		<ul style="list-style-type: none"> <li>Soil Management Plan to be submitted to CEAA.</li> <li>Erosion and Sediment Control Plan to be submitted to CEAA and reviewed and approved by DFO.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with soil management plan.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will retain natural vegetation along the boundaries of the Project to act as a buffer from the Project (EIS, section 6.5.2.9.2, page 202).</li> </ul>	<ul style="list-style-type: none"> <li>While not the primary measure for mitigating noise effects, maintaining natural vegetation provides some added benefit.</li> </ul>		<ul style="list-style-type: none"> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	CN Responsible for Design Plans  Contractor / CN Environmental Monitor
	✓	✓		<ul style="list-style-type: none"> <li>The Contractor will maintain construction equipment in good working order (e.g., mufflers on vehicles) (EIS, section 6.5.2.9.2, page 202).</li> </ul>	<ul style="list-style-type: none"> <li>Regular maintenance of equipment and use of muffler systems is a standard best management practice during construction projects.</li> </ul>		<ul style="list-style-type: none"> <li>Construction Acoustic Audit results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> <li>Construction Acoustic Audit results will be submitted to CEAA.</li> </ul>	Contractor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>CN will maintain Terminal equipment in good working order (e.g., mufflers on vehicles) (EIS, section 6.5.2.9.2, page 202).</li> </ul>	<ul style="list-style-type: none"> <li>Regular maintenance of equipment and use of muffler systems is a standard best management practice during construction projects.</li> </ul>		<ul style="list-style-type: none"> <li>Operational Acoustic Audit results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> <li>Operational Acoustic Audit results will be submitted to CEAA.</li> </ul>	CN
✓				<ul style="list-style-type: none"> <li>CN will design Project layout to avoid effects on natural features, including (EIS, section 6.5.2.9.2, page 202):                             <ul style="list-style-type: none"> <li>Trafalgar Moraine Earth Science ANSI;</li> <li>North Oakville-Milton West Wetland Complex; and,</li> <li>Protected Countryside land use designation under the Greenbelt Plan.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Standard mitigation is to reduce direct effects by avoiding areas to be protected.</li> <li>A portion of the existing mainline overlaps the Trafalgar Moraine Earth Science ANSI. No changes to the geological landforms are proposed in the portion of the PDA that overlaps this ANSI.</li> <li>The North Oakville-Milton West Provincially Significant Wetland Complex is located 64 m from the PDA, which avoids direct effects.</li> <li>A portion of the existing mainline overlaps the Greenbelt Protected Countryside. Natural features associated with the Greenbelt are avoided through project design.</li> <li>Indirect effects on these features are mitigated through avoidance, with disturbance to migratory birds anticipated to be low as a result of separation from the Terminal.</li> </ul>		<ul style="list-style-type: none"> <li>Final Plans for the Terminal will be submitted and approved by the CTA.</li> </ul>	CN Responsible for Design Plans
		✓		<ul style="list-style-type: none"> <li>CN will provide employees with sensitivity education for on-site wildlife encounters (EIS, section 6.5.2.9.1, page 199).</li> </ul>	<ul style="list-style-type: none"> <li>Education/training increases awareness and action.</li> </ul>		<ul style="list-style-type: none"> <li>Training of CN employees.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>During construction, CN will ensure all equipment brought on site is thoroughly cleaned (e.g., remove dirt from other work sites that has accumulated on the tracks, undercarriage, tires) prior to arrival (Appendix G, page G.3).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best management practices for construction sites.</li> </ul>		<ul style="list-style-type: none"> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will avoid using imported fill from known sites of invasive plant infestation (Appendix G, page G.3).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best management practices for construction sites.</li> </ul>		<ul style="list-style-type: none"> <li>Confirmed through monitoring and inspections performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will minimize the size and extent of disturbed soil and vegetation during construction, including brushing, pruning and clearing activities, and preserve existing</li> </ul>	<ul style="list-style-type: none"> <li>Standard mitigation is to reduce footprint of construction activities.</li> </ul>		<ul style="list-style-type: none"> <li>Demarcate construction work area to avoid incidental encroachment into adjacent areas.</li> </ul>	CN Environmental Monitor



Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
				habitat conditions wherever and whenever possible (Appendix G, page G.3).				
<b>Migratory Birds – Sensory Disturbance</b>								
	✓		<ul style="list-style-type: none"> <li>Artificial lighting may create sensory disturbance to migratory landbirds by influencing bird behaviour.</li> <li>Within the PDA, any project components that are lit at night have the potential to attract birds, including buildings, light standards or other external lights.</li> </ul>	<ul style="list-style-type: none"> <li>CN will schedule construction activities during daylight hours whenever practicable to minimize the need for staging lights (Appendix G, page G.4).</li> </ul>	<ul style="list-style-type: none"> <li>Avoiding (or minimizing) night time construction reduces the need for artificial lighting, and therefore reduces potential to influence bird behaviour.</li> <li>Periodic night time construction may be required during some components of Project work (i.e., paving of the work pad will occur around-the-clock to minimize the number of joints and reduce daily startup/shutdown lags).</li> <li>Standard mitigation measure to reduce construction during night.</li> </ul>	<ul style="list-style-type: none"> <li>The construction and operation of the Project facility could result in sensory disturbance to migrating birds through</li> <li>Attraction to Project lighting, however the effect is anticipated to be minimized with the implementation of mitigation measures.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Protection Plan, which includes revised project schedule and mitigation for night time construction, to be submitted to CEAA.</li> <li>Construction Monitoring Reports will document night time construction activities.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>During construction, CN will limit the use of site flood lighting during the migration periods (i.e., April to May and late August through October) (EIS, Table 7.1, page 315).</li> </ul>	<ul style="list-style-type: none"> <li>Use of flood lights during migration periods is not anticipated to significantly influence migratory bird behaviour.</li> <li>However, reducing (or avoiding) the use of flood lighting during migration periods will minimize potential effects to migratory birds from sensory disturbance.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan, which includes revised project schedule and mitigation for night time construction, to be submitted to CEAA.</li> <li>Confirm through construction monitoring to adhere to timing windows performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document night time construction activities.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>If nighttime construction is required, lighting will be directed at the specific construction location (Appendix G, page G.2).</li> </ul>	<ul style="list-style-type: none"> <li>Minimizing light pollution using lighting design is a standard practice during construction.</li> <li>Directing lights at specific areas will reduce overall lighting requirements and minimize excess light spill, and/or sky glow.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan, which includes construction schedule and light mitigation, to be submitted to CEAA.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will complete paving operations after the berms are constructed, which will mitigate off-property light effects. (Appendix E.8, page 2 and 15)</li> </ul>	<ul style="list-style-type: none"> <li>While light mitigation is not the primary purpose of the berms, which are to be installed as noise mitigation, some additional benefits will be achieved by constructing berms prior to night time construction activities.</li> <li>The berms will help to reduce or minimizing light trespass / light</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan, which includes revised project schedule, to be submitted to CEAA.</li> </ul>	Contractor / CN Environmental Monitor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					glare during night time construction activities. <ul style="list-style-type: none"> <li>Barriers are an effective means of blocking or obscuring direct lighting (i.e., glare or trespass).</li> </ul>			
		✓		<ul style="list-style-type: none"> <li>CN will direct perimeter lighting inward towards the Terminal to minimize light trespass to the environment and surrounding areas (Appendix G, page G.2).</li> </ul>	<ul style="list-style-type: none"> <li>Minimizing light trespass using lighting design is a standard practice during construction and operations.</li> <li>Inward facing perimeter lights target areas to be lit for the safe operation of the Terminal, while reducing backlighting minimizes trespass.</li> <li>Technologies are available to effectively minimize backlighting, which include the fixtures proposed for the Terminal.</li> <li>During installation of the Terminal lighting, the orientation and shielding of light fixtures will be refined to target Terminal working areas and minimize trespass.</li> </ul>		<ul style="list-style-type: none"> <li>Lighting Design Plans to be completed during detailed design.</li> <li>Mitigation and predictive modelling assessment will be reviewed after the Terminal design layout and Lighting Design Plan to ensure that mitigation measures remain effective.</li> </ul>	CN Responsible for Design Plans
		✓		<ul style="list-style-type: none"> <li>CN will shield outdoor lights (i.e., Terminal light standards) where appropriate to minimize light spillage beyond the required areas (Appendix G, page G.2).</li> </ul>	<ul style="list-style-type: none"> <li>The use of shielded light fixtures to minimize light trespass is an effective way to focus light on target areas.</li> <li>Technologies are available to effectively minimize backlighting, which include the fixtures proposed for the Terminal.</li> <li>During installation of the Terminal lighting, the shielding of light fixtures will be refined to target Terminal working areas and minimize trespass.</li> </ul>		<ul style="list-style-type: none"> <li>Lighting Design Plans to be completed during detailed design.</li> <li>Mitigation and predictive modelling assessment will be reviewed after the Terminal design layout and Lighting Design Plan for the rail car area, road ways, infrastructure and all additional minor lighting sources have been finalized to ensure that mitigation measures remain effective.</li> </ul>	CN Responsible for Design Plans
	✓			<ul style="list-style-type: none"> <li>The Contractor will maintain construction equipment in good working order (e.g., mufflers on vehicles) (EIS, section 6.5.2.9.2, page 202).</li> </ul>	<ul style="list-style-type: none"> <li>Regular maintenance of equipment and use of muffler systems is a standard best management practice during construction projects.</li> </ul>		<ul style="list-style-type: none"> <li>Construction Acoustic Audit results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> <li>Construction Acoustic Audit results will be submitted to CEEA.</li> </ul>	Contractor responsible for maintenance  CN Environmental Monitor responsible for audit
		✓		<ul style="list-style-type: none"> <li>CN will maintain Terminal equipment in good working order (e.g., mufflers on vehicles) (EIS, section 6.5.2.9.2, page 202).</li> </ul>	<ul style="list-style-type: none"> <li>Regular maintenance of equipment and use of muffler systems is a standard best management practice during construction projects.</li> </ul>		<ul style="list-style-type: none"> <li>Operational Acoustic Audit results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> </ul>	CN

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
							<ul style="list-style-type: none"> <li>Operational Acoustic Audit results will be submitted to CEAA.</li> </ul>	
<b>Species at Risk – Change in Species at Risk Mortality</b>								
	✓		<ul style="list-style-type: none"> <li>No mortality to Western Chorus Frog is anticipated during construction of the Project.</li> <li>Low risk of mortality to Western Chorus Frog in the event of future occupation of critical habitat within the LAA.</li> <li>No bird, fish, amphibian, mammal or reptile Schedule 1 SAR found within the PDA.</li> <li>Potential for mortality of bird SAR during the site preparation, including removing vegetation, clearing trees, and grubbing (e.g., fatalities through nest destruction).</li> <li>Low risk of grassland breeding bird mortality during operation due to collisions with vehicular traffic.</li> <li>During construction, potential for Snapping Turtle mortality during in-water works.</li> </ul>	<ul style="list-style-type: none"> <li>CN will restrict the clearing of vegetation within habitat of Bobolink, Eastern Meadowlark or Barn Swallow to periods outside of the breeding season (end of March to end of August) (Environment Canada 2014) (EIS, section 6.5.3.9.2, page 213).</li> </ul>	<ul style="list-style-type: none"> <li>During construction, the implementation of timing windows for site preparation is anticipated to result in a low risk of mortality in the LAA.</li> <li>Avoidance of the breeding season is standard mitigation supported by regulatory authorities including ECCC.</li> <li>The removal of trees, shrubs and/or agricultural fields used by migratory birds is proposed to accommodate construction of the Terminal.</li> <li>Damage to active bird nests during the breeding season can cause bird mortality (i.e., eggs, young birds that have not fledged the nest).</li> <li>Avoiding vegetation removal during the active breeding season avoids potential mortality by avoiding periods when migratory birds are most susceptible / vulnerable.</li> </ul>	<ul style="list-style-type: none"> <li>Mortality of Western Chorus Frog are anticipated to be very low to negligible.</li> <li>During construction, the implementation of timing windows for site preparation and reduced vehicle speeds is anticipated to result in a low risk of mortality in the LAA.</li> <li>It is expected that birds will avoid vehicular traffic in the area during operation, and mortality of bird SAR in the LAA will be low.</li> <li>Very low to negligible risk of Snapping Turtle mortality during construction with the implementation of mitigation measures.</li> <li>Low risk of vehicular collision with Snapping Turtles with implementation of mitigation measures.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Confirm through construction monitoring adherence to timing windows performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor
		✓	<ul style="list-style-type: none"> <li>Increased risk of mortality to Snapping Turtle during construction and operation from vehicular traffic.</li> <li>No anticipated risk of mortality to the Eastern Wood-Pewee or Little Brown Myotis.</li> </ul>	<ul style="list-style-type: none"> <li>CN will provide employees with sensitivity education for on-site wildlife encounters (EIS, section 6.5.2.9.2, page 213).</li> <li>CN will implement speed limits on internal roads (EIS, section 6.5.2.9.2, page 213).</li> </ul>	<ul style="list-style-type: none"> <li>Education/training increases awareness and action.</li> <li>Vehicle related bird strikes cause mortality to birds while flying.</li> <li>Slower moving vehicles provide greater time for birds to avoid a collision.</li> <li>Speed limits are enforced for safety reasons within the Terminal independent of bird mortality; however, a consequence of speed limits is a reduction in the potential for bird mortality.</li> </ul>		<ul style="list-style-type: none"> <li>Training of employees.</li> <li>Signage of posted speed limits will be installed within the Terminal.</li> <li>Enforcement by CN Police.</li> </ul>	CN
	✓		<ul style="list-style-type: none"> <li>Under direction from CN, a qualified biologists / ecologist will conduct turtle rescues to relocate Snapping Turtles before in-water works occur in their habitat. Exclusionary fencing will be installed to prevent individuals</li> </ul>	<ul style="list-style-type: none"> <li>Similar to fish salvage activities, rescuing Snapping Turtles that may be located within areas to be dewatered is an effective way to avoid mortality.</li> </ul>			<ul style="list-style-type: none"> <li>Snapping Turtle Management Plan to be submitted to ECCC.</li> <li>Ecologist / biologist conducting turtle rescue activities require approval from the MNRF under the Fish and Wildlife</li> </ul>	Contractor / CN Environmental Monitor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
				from re-entering until construction is complete (EIS, section 6.5.2.9.2, page 214).	<ul style="list-style-type: none"> <li>Turtle rescue and relocation would be conducted by qualified biologists or ecologists trained in animal care protocols.</li> <li>This measure would be employed prior to channel realignments and prior to restoration and enhancement activities associated with the removal of the on-line agricultural pond (Tributary A).</li> <li>Installing temporary fencing prevents turtles from relocating back to areas where they were captured, which reduces the likelihood of mortality.</li> <li>Very low to no risk of Snapping Turtle mortality during construction with the implementation of mitigation measures.</li> </ul>		Conservation Act, and the results submitted to the MRNF. <ul style="list-style-type: none"> <li>Confirmed through monitoring during construction performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document any turtles captured during dewatering activities.</li> </ul>	
		✓		<ul style="list-style-type: none"> <li>CN will place permanent exclusionary fencing between retained/enhanced turtle habitat and the Terminal to avoid interactions with turtles and Project vehicular traffic (EIS, section 6.5.2.9.2, page 214).</li> </ul>	<ul style="list-style-type: none"> <li>Following construction, installing fence around the Terminal will prevent potential movement of turtles into the Terminal where they would be at risk of a collision with trucks or other equipment.</li> <li>Low risk of vehicular collision with Snapping Turtles with implementation of mitigation measures.</li> </ul>		<ul style="list-style-type: none"> <li>Snapping Turtle Management Plan to be submitted to ECCC.</li> </ul>	CN

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>• CN will avoid construction in-water during Snapping Turtles overwintering period from October to April (EIS, Table 7.1, page 315).</li> </ul>	<ul style="list-style-type: none"> <li>• Snapping Turtles are presumed to use the existing on-line agricultural pond as overwintering habitat.</li> <li>• Once hibernation is started, disruptions or disturbance to this species may cause mortality during winter months (i.e., freezing temperatures reduce potential for relocation).</li> <li>• To avoid disruption to overwintering turtles, or disruption to their habitat while they are sensitive to disruption, avoiding construction activities that would reduce water volumes in the pond or result in in-water work prevents the potential for adverse effects.</li> <li>• During construction, the implementation of timing windows for site preparation is anticipated to result in a low risk of mortality in the LAA.</li> </ul>		<ul style="list-style-type: none"> <li>• Snapping Turtle Management Plan to be submitted to ECCC.</li> <li>• Environmental Protection Plan, which will include construction schedule, to be submitted to CEAA.</li> <li>• Monitoring and inspections to adhere to timing windows performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>• CN will employ a snake capture and relocation program using the coverboards already in place, prior to construction, to remove Eastern Milksnakes from the PDA, if present. Snakes will be relocated in accordance with wildlife care protocols to suitable habitat within the LAA (Response to IR1.6, page 8 (CEAR#574)).</li> </ul>	<ul style="list-style-type: none"> <li>• While scarce due to their behavioral traits, Eastern Milksnakes are confirmed within the LAA and are presumed to be present within the PDA.</li> <li>• Snake capture and relocation would be conducted by qualified biologists or ecologists trained in animal care protocols.</li> <li>• Existing coverboards used to determine presence / absence within the PDA and LAA (i.e., structures likely to be used in spring and fall for temperature regulation) will be targeted.</li> <li>• Capturing and relocating snakes elsewhere with the LAA prior to construction reduces the potential for disruption or mortality during construction.</li> </ul>		<ul style="list-style-type: none"> <li>• Environmental Protection Plan to be submitted to CEAA.</li> <li>• Ecologist / biologist conducting snake capture and relocation activities require approval from the MNRF under the Fish and Wildlife Conservation Act, and the results submitted to the MRNF.</li> <li>• Confirmed through monitoring during construction performed by third-party Contractor / CN Environmental Monitor.</li> <li>• Construction Monitoring Reports will document any snakes captured prior to construction.</li> </ul>	CN

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>CN will place exclusionary fencing between Western Chorus Frog habitat and the mainline to avoid interactions with frogs during construction (Response to IR8.20, page 8).</li> </ul>	<ul style="list-style-type: none"> <li>During construction, installing fence between areas of disturbance and adjacent habitats will prevent potential movement of frogs into the construction area where they would be at risk of mortality from a collision with construction equipment.</li> <li>Low risk of vehicular or equipment collision with Western Chorus Frog with implementation of mitigation measures.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> <li>Restoration and Enhancement Plan for Western Chorus Frogs to be submitted to ECCC. Plan will include preconstruction surveys for Western Chorus Frog</li> </ul>	Contractor / CN Environmental Monitor
<b>Species at Risk – Change in Species at Risk Critical Habitat and Residences</b>								
✓	✓		<ul style="list-style-type: none"> <li>Occurrence of Western Chorus Frogs critical habitat in the LAA and indirect acoustic emissions from Project operations may occur.</li> <li>Removal of Bobolink and Eastern Meadowlark habitat during construction and displacement of the residence of these species within the PDA.</li> <li>Removals of any barns within the PDA will displace Barn Swallow residence.</li> <li>Changes in water levels or water quality may affect the overwintering or summer life cycles of Snapping Turtle.</li> <li>During construction, human activity will occur in Snapping Turtle habitat, which is anticipated to result in temporary disturbance in portions of the habitat within the PDA.</li> </ul>	<ul style="list-style-type: none"> <li>Wherever practicable, CN will minimize the project footprint and avoid unnecessary vegetation clearing around the Terminal, access roads and rail (EIS, section 6.5.3.9.3, page 216).</li> </ul>	<ul style="list-style-type: none"> <li>To determine potential effects, the EIS assumed the entire PDA would be disturbed to accommodate construction of the Terminal; however, the footprint of construction (as well as areas to be avoided) will be confirmed during detailed design.</li> <li>Avoiding disturbance of areas outside of required grading activities (i.e., vegetated areas adjacent to Indian Creek and Tributary A outside of proposed channel realignments) provides the opportunity to retain habitat features or existing vegetated areas.</li> <li>Natural features on CN property have been avoided through the design of the Terminal (i.e., woodland feature to the south of the PDA).</li> <li>Maintaining naturalized vegetation encourages the use by birds, including SAR.</li> <li>Avoid clearing in these areas to allow for naturalization.</li> </ul>	<ul style="list-style-type: none"> <li>Construction and operation of the Project is not anticipated to directly affect critical habitat for SAR.</li> <li>Indirect affects during construction and operation to Western Chorus Frog should be negligible with mitigation.</li> <li>Habitat offsets will offset direct effects of the Project on the residences of Bobolink, Eastern Meadowlark.</li> <li>Residence of the Snapping Turtle will be temporary disturbed during construction of the Project. However, with mitigation and enhancement measures, the residences are anticipated to continue to be used during operation of the Project.</li> <li>Effects to the woodland habitat, which contain residences of Eastern Wood Pewee and Little Brown Myotis are anticipated to be very low to negligible.</li> </ul>	<ul style="list-style-type: none"> <li>Soil Management Plan, which will identify the limit of grading, to be submitted to CEAA.</li> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>Construction Monitoring Reports will document the vegetation clearing activities.</li> </ul>	<p>CN Responsible for Design Plans</p> <p>Contractor / CN Environmental Monitor</p>



Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>CN will demarcate construction work areas to avoid incidental encroachment into adjacent areas (EIS, section 6.5.3.9.3, page 216).</li> </ul>	<ul style="list-style-type: none"> <li>Standard mitigation is to demarcate the footprint of construction activities.</li> </ul>	<ul style="list-style-type: none"> <li>Indirect effects on woodland habitat are through acoustic emission expected to be negligible.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>CN will implement turtle habitat enhancements in Indian Creek and on-site ponds (EIS, Table 7.1, page 316).</li> </ul>	<ul style="list-style-type: none"> <li>Restoration and enhancement of natural features within the PDA will include measures to improve turtle habitat.</li> <li>A conceptual Snapping Turtle Management Plan has been prepared with input from ECCC, which includes habitat enhancements such as aquatic / riparian enhancements and the creation of turtle nesting mounds.</li> <li>Residence of the Snapping Turtle will be temporarily disturbed during construction of the Project. However, with mitigation and enhancement measures, the residences are anticipated to continue to be used during operation of the Project.</li> </ul>		<ul style="list-style-type: none"> <li>Snapping Turtle Management Plan to be submitted to ECCC for input.</li> <li>Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	CN Responsible for Design Plans  Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>CN will create/protect off-site grassland habitat as offsets for loss of Bobolink and Eastern Meadowlark residences, as well as Monarch habitat (EIS, section 6.5.3.9.3, page 216).</li> </ul>	<ul style="list-style-type: none"> <li>Offsetting, including the creation and management of grassland habitat for migratory birds is a standard mitigation measure for effects to habitat and is supported by authorities.</li> <li>Creating an area that is managed for the protection of migratory grassland birds enhances habitat availability while removing common threats to these species (i.e., hay cutting during sensitive periods).</li> </ul>		<ul style="list-style-type: none"> <li>Off-site grassland bird and Monarch habitat and use survey results will be submitted to CEAA.</li> </ul>	Ducks Unlimited Canada on behalf of CN

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>• CN will avoid replacement of the culvert adjacent to Western Chorus Frog habitat during the breeding season for Western Chorus Frogs from March to June (temperature dependent).</li> </ul>	<ul style="list-style-type: none"> <li>• Western Chorus Frogs have been observed adjacent to the mainline within the LAA for the Project (per Town of Milton).</li> <li>• Once the breeding season is started, disruptions or disturbance to this species may reduce mating recruitment (i.e., temporary noise during construction, siltation of surface water).</li> <li>• To avoid disruption to breeding frogs at this location, or disruption to their habitat while they are sensitive to disruption, avoiding construction activities (i.e., culvert replacement) that would temporarily disrupt mating calls or breeding habitat.</li> <li>• During construction, the implementation of timing windows for site preparation is anticipated to avoid disturbance to habitat in the LAA.</li> </ul>		<ul style="list-style-type: none"> <li>• Environmental Protection Plan, which will include construction schedule, to be submitted to CEAA.</li> <li>• Monitoring and inspections to adhere to timing windows performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>• CN will retain natural vegetation along the boundaries of the Project to provide noise buffers and to limit noise associated with clearing (EIS, section 6.5.3.9.3, page 216).</li> </ul>	<ul style="list-style-type: none"> <li>• While not the primary measure for mitigating noise effects, maintaining natural vegetation provides some benefit.</li> <li>• Indirect effects on woodland habitat are through acoustic emission expected to be negligible.</li> </ul>		<ul style="list-style-type: none"> <li>• Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>• CN will create/enhance 18.8 ha of Monarch habitat to offset the loss of 10.8 ha of Monarch habitat within the PDA, considering both breeding and nectaring components of the habitat (Response to IR4.56, page 112).</li> </ul>	<ul style="list-style-type: none"> <li>• The primary feature of the enhancement plan will be to plant milkweed species, which are necessary for Monarch breeding.</li> <li>• Enhancements areas will target new riparian wetlands and creek channels, as well as an additional habitat restoration area adjacent to SWM Pond 1 and Tributary D.</li> <li>• The Monarch enhancement habitat will be created on CN-owned lands outside of the Terminal. The lands will be fenced and signed to discourage public trespassing that may otherwise damage habitat or disturb wildlife.</li> </ul>		<ul style="list-style-type: none"> <li>• Final Restoration and Enhancement Plan to be circulated to ECCC and submitted to DFO for review and approval.</li> </ul>	CN Responsible for Design Plans

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					<ul style="list-style-type: none"> <li>Monarchs are also expected to benefit from incorporation of milkweed and nectaring plants in the design of the 40.7 ha grassland bird offset habitat.</li> </ul>			
		✓		<ul style="list-style-type: none"> <li>CN will shield outdoor lights (i.e., Terminal light standards) where appropriate to minimize light spillage beyond the required areas (Appendix G, page G.2).</li> </ul>	<ul style="list-style-type: none"> <li>The use of shielded light fixtures to minimize light trespass is an effective way to focus light on target areas.</li> <li>Technologies are available to effectively minimize backlighting, which include the fixtures proposed for the Terminal.</li> <li>During installation of the Terminal lighting, the shielding of light fixtures will be refined to target Terminal working areas and minimize trespass.</li> </ul>		<ul style="list-style-type: none"> <li>Lighting Design Plan to be completed during detailed design.</li> <li>Mitigation and predictive modelling assessment will be reviewed after the Terminal design layout and Lighting Design Plan for the rail car area, road ways, infrastructure and all additional minor lighting sources have been finalized to ensure that mitigation measures remain effective.</li> </ul>	CN Responsible for Design Plans
		✓		<ul style="list-style-type: none"> <li>CN will provide employees with sensitivity education for on-site wildlife encounters (EIS, section 6.5.2.9.2, page 213).</li> </ul>	<ul style="list-style-type: none"> <li>Education/training increases awareness and action.</li> </ul>		<ul style="list-style-type: none"> <li>Training of employees.</li> </ul>	CN
<b>Human Health – Change in Human Health</b>								
	✓		<ul style="list-style-type: none"> <li>Change in human health from short-term and long-term exposure via inhalation of chemicals from air emission sources during construction and operation phases. Primary Air emissions sources are expected to be from mobile or stationary equipment discharging emissions from combustion of fuel (e.g., gasoline, etc.). Mobile emission sources include locomotives, trucks, non-road equipment. Stationary emissions sources include the three future powerpack generators and one clip-on generator.</li> </ul>	<ul style="list-style-type: none"> <li>CN will control dust and implement dust control measures, including the use of dust suppressants (i.e., water or other approved materials), minimizing activities that generate large quantities of dust during high winds, covering truck-loads of materials which could generate dust (as necessary), and paving areas as required, to control fugitive dust emissions (Appendix E.1, page 52).</li> </ul>	<ul style="list-style-type: none"> <li>Dust (including PM) generated by the operation and movement of construction vehicles during dry conditions has the potential to migrate off-site.</li> <li>Managing dust through active and passive controls is a standard BMP for construction.</li> <li>Applying water or other dust suppressants to access roads reduces potential for generating dust as a means to control fugitive dust emissions.</li> <li>For semi-permanent or relatively long-term unpaved roads or parking lots, chemical stabilization will be used when necessary during construction to reduce fugitive dust emissions (as water is less effective over larger areas).</li> </ul>	<ul style="list-style-type: none"> <li>The implementation of applicable mitigation measures is expected to reduce potential human exposures to COPCs related to the construction and operation of the Project.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Under the supervision of CN, a third-party Contractor / consultant will implement a construction air quality monitoring program for fugitive dust (PM<sub>2.5</sub> and PM<sub>10</sub>) levels at two locations along the fence line of the PDA, upwind and downwind of the prevailing wind direction during the construction phase.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓		<ul style="list-style-type: none"> <li>Change in human health from exposure to fugitive dust emissions from road traffic during movement of mobile equipment (e.g., trucks).</li> <li>Noise resulting in annoyance/sensitivity.</li> </ul>	<ul style="list-style-type: none"> <li>CN will cover or wet materials stored on-site to prevent blowing dust, where practicable (Appendix E.1, page 91).</li> </ul>	<ul style="list-style-type: none"> <li>Covering or wetting the surface of storage materials, even temporary storage, that has the potential to blow in the wind is effective to manage fugitive dust emissions.</li> <li>The use of temporary barriers to prevent soil erosion and control wind flow during construction phases will also be considered and employed to reduce fugitive emissions.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Under the supervision of CN, a third-party Contractor / consultant will implement a construction air quality monitoring program for fugitive dust (PM<sub>2.5</sub> and PM<sub>10</sub>) levels at two locations along the fence line of the PDA, upwind and downwind of the prevailing wind direction during the construction phase.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will construct temporary access routes (i.e., gravel) and parking lots within the site to reduce PM emissions (Appendix E.1, page 91).</li> </ul>	<ul style="list-style-type: none"> <li>A gravel roadway and parking lot would reduce PM emissions relative to travelling over soil.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Under the supervision of CN, a third-party Contractor / consultant will implement a construction air quality monitoring program for fugitive dust (PM<sub>2.5</sub> and PM<sub>10</sub>) levels at two locations along the fence line of the PDA, upwind and downwind of the prevailing wind direction during the construction phase.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>CN will apply vacuum sweeping and water flushing of the on-site roads when necessary to remove the loose material present on the surface of roads that could be re-suspended by road traffic (Appendix E.1, page 92).</li> </ul>	<ul style="list-style-type: none"> <li>During operation, dust from debris and soil accumulates on roadways and parking areas from wind and vehicle movement.</li> <li>A standard measure to clean such areas is to remove built up material through vacuum sweeping or flushing to minimize</li> </ul>		<ul style="list-style-type: none"> <li>CN regular maintenance activity during operation.</li> </ul>	CN

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					the potential for fugitive dust emissions.			
	✓			<ul style="list-style-type: none"> <li>• CN will implement dust mitigation for the temporary portable concrete plant, including:                             <ul style="list-style-type: none"> <li>– Proper planning, design and construction of the portable concrete plant. The plant should be located away from residential areas. Excess material storage areas should be avoided.</li> <li>– Installation of temporary berms/barriers where appropriate around the concrete plant equipment (mixing, silos, transferring and storage areas) to prevent dust emissions.</li> <li>– Dust control equipment (e.g., fabric filter or suitable dust collector systems) for dry material transferring and handling.</li> <li>– Material transfer points, conveyors and mixing equipment will be adequately covered or enclosed to eliminate fugitive dust emission.</li> <li>– Movable and telescoping chutes will be used as appropriate for truck loading activities. The drop height of the cement/ aggregate mixture into the truck shall be minimized to minimize the visible emissions. (Appendix E.1, page 91-92)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• If a concrete plant is employed on site, it will operate temporarily during construction of the workpads (final material of the workpads to be confirmed through detailed design).</li> <li>• Controlling fugitive dust associated with a concrete plant requires targeted efforts beyond standard construction erosion and sediment control measures.</li> <li>• Standard measures for the management of concrete dust from such operations.</li> </ul>		<ul style="list-style-type: none"> <li>• Environmental Protection Plan to be submitted to CEAA.</li> <li>• Under the supervision of CN, a third-party Contractor / consultant will implement a construction air quality monitoring program for fugitive dust (PM2.5 and PM10) levels at two locations along the fence line of the PDA, upwind and downwind of the prevailing wind direction during the construction phase.</li> <li>• Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>• Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>• CN will incorporate BMPs to reduce CAC, HAP and GHG emissions into Project design wherever possible (Appendix E.1, page 91).</li> </ul>	<ul style="list-style-type: none"> <li>• BMPs provide standard measures accepted for construction and operation of Projects in Canada.</li> <li>• Reducing emissions through planning, selection of equipment and design of the Terminal will provide an opportunity for potential further reductions in air emissions than were assessed in the EIS.</li> <li>• Implementing a no idling policy is an example of a BMP to reduce emissions.</li> </ul>		<ul style="list-style-type: none"> <li>• BMPs will be incorporated into the design of the facility.</li> </ul>	CN Design Team
	✓			<ul style="list-style-type: none"> <li>• During construction, CN will implement a no idling policy to control mobile equipment and other vehicle emissions where applicable (i.e., construction equipment will be turned off when not in use) (Appendix E.1, page 91).</li> </ul>	<ul style="list-style-type: none"> <li>• Reducing idling times (i.e., operation of combustion engines while vehicles are not in use) when vehicles are stopped for periods of time or when vehicles are not in use will reduce unnecessary emissions.</li> </ul>		<ul style="list-style-type: none"> <li>• Environmental Protection Plan to be submitted to CEAA.</li> <li>• Under the supervision of CN, a third-party Contractor / consultant will implement a construction air quality monitoring program for fugitive dust (PM2.5 and PM10) levels at two locations along the fence</li> </ul>	Contractor / CN Environmental Monitor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
							line of the PDA, upwind and downwind of the prevailing wind direction during the construction phase. <ul style="list-style-type: none"> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	
	✓			<ul style="list-style-type: none"> <li>Outdoor work will be stopped by the Project manager or Site Supervisor when extreme weather events create unsafe working conditions (Appendix G, page G.8).</li> </ul>	<ul style="list-style-type: none"> <li>Standard best management practices and workplace health and safety standards.</li> <li>Wet weather shut-down protocols are standard practice for construction projects.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEEA.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>CN will use SmartStart® equipped locomotives as much as possible to reduce excessive idling during warm months. (Appendix E.1, page 92)</li> </ul>	<ul style="list-style-type: none"> <li>SmartStart® is a form of Automatic Engine Start Stop (AESS) technology developed and installed on newer locomotives, which turns the locomotive engine on and off to maintain cooling water temperature, lube oil and fuel temperature, air brake pressure, ambient temperature and battery charge within specific parameters.</li> <li>SmartStart® automatically shuts the engine down when the parameters are met again after a brief idle period.</li> <li>Terminal will be serviced by mainline locomotives, the majority of which will be equipped with SmartStart®.</li> </ul>		<ul style="list-style-type: none"> <li>CN will monitor operational efficiency</li> </ul>	CN
		✓		<ul style="list-style-type: none"> <li>CN will use non-road mobile and stationary equipment equipped with low emissions and high fuel combustion efficiency engines (EIS section 1.5.2, page 13), specifically Tier 4 reach stackers.</li> </ul>	<ul style="list-style-type: none"> <li>Low emission equipment in good working order will be used to minimize atmospheric emissions.</li> </ul>		<ul style="list-style-type: none"> <li>CN will monitor operational efficiency</li> </ul>	CN Intermodal



Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
		✓		<ul style="list-style-type: none"> <li>CN will streamline and further improve the operation process so that the out-going trucks could travel less distance on-site and expedite the container handling turnaround time (Appendix E.1, page 92).</li> </ul>	<ul style="list-style-type: none"> <li>Any reductions in travel distance that can be implemented will reduce potential emissions.</li> </ul>		<ul style="list-style-type: none"> <li>CN will monitor operational efficiency</li> </ul>	CN Intermodal
	✓			<ul style="list-style-type: none"> <li>The Contractor and CN will maintain construction and Terminal equipment in good working order, and will use ultra-low sulphur fuel when available (Appendix E.1, page 91).</li> </ul>	<ul style="list-style-type: none"> <li>Sulfur in diesel fuel forms sulfur dioxide (SO<sub>2</sub>) and sulfate (SO<sub>4</sub>) particulate matter (PM) during combustion, so using fuel with reduced Sulphur content is a standard approach to reduce emissions.</li> <li>Regular maintenance of equipment and use of muffler systems is a standard best management practice during construction projects.</li> <li>Compliance with approved plans is a requirement of contracting with CN, which will be monitored by on-site construction monitors.</li> <li>Modelling assumes operation of equipment in compliance with regulatory requirements.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Under the supervision of CN, a third-party Contractor / consultant will implement a construction air quality monitoring program for fugitive dust (PM<sub>2.5</sub> and PM<sub>10</sub>) levels at two locations along the fence line of the PDA, upwind and downwind of the prevailing wind direction during the construction phase.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN
	✓	✓		<ul style="list-style-type: none"> <li>CN will construct vegetated berms/barriers with a required minimum height of 5 m to mitigate noise effects during operation. These berms will be created during on-site grading activities (Appendix E.10, page 38)</li> </ul>	<ul style="list-style-type: none"> <li>Berms are a common measure to control noise.</li> <li>Assuming the minimum height of 5 m is achieved, a reduction in noise levels is expected.</li> <li>A noise model was run incorporating proposed noise mitigation measures, and the results from the predictive analysis indicate that implementation of the recommended measures will mitigate the potential impact of noise.</li> </ul>		<ul style="list-style-type: none"> <li>Operational Acoustic Audit results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> <li>Operational Acoustic Audit results will be submitted to CEAA.</li> </ul>	Contractor / CN
		✓		<ul style="list-style-type: none"> <li>If noise complaints occur, CN will log and investigate complaints to assess whether they are linked with Project activities, and take appropriate action to ensure that the issue is managed (Appendix E.10, page 63).</li> </ul>	<ul style="list-style-type: none"> <li>Investigating and responding to noise complaints is standard practice and regulated by the CTA.</li> </ul>		<ul style="list-style-type: none"> <li>Complaint resolution through CTA.</li> <li>Operational Acoustic Audit results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> <li>Operational Acoustic Audit results will be submitted to CEAA.</li> </ul>	CN

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
		✓		<ul style="list-style-type: none"> <li>CN will enforce speed limits (for truck traffic) within the Terminal area to reduce the intensity of impulsive noise. (Appendix E.10, page 39)</li> </ul>	<ul style="list-style-type: none"> <li>Speed limits are enforced for safety reasons within the Terminal independent of noise; however, a consequence of speed limits is a reduction in the intensity of impulsive noise.</li> </ul>		<ul style="list-style-type: none"> <li>Signage of posted speed limits will be installed within the Terminal.</li> <li>Enforcement by CN Police.</li> </ul>	CN
		✓		<ul style="list-style-type: none"> <li>CN employees that operate container handling machines (e.g., reach stacker operators) will be trained/instructed to avoid excessive impulsive noise during their loading and unloading operations (Appendix E.10, page 39).</li> </ul>	<ul style="list-style-type: none"> <li>Excessive impulsive noise can be minimized with proper training and use of equipment.</li> </ul>		<ul style="list-style-type: none"> <li>Training of employees.</li> <li>Operational Acoustic Audit results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> <li>Operational Acoustic Audit results will be submitted to CEAA.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>CN will implement a temporary sound barrier around the concrete batch plant for Phase 3 paving operations. (Appendix E.10, page 63)</li> </ul>	<ul style="list-style-type: none"> <li>Temporary noise barriers during construction are effective and standard practice during construction where stationary noise sources are operating.</li> <li>The use of temporary barriers to minimize noise propagation during construction phases will further reduce noise effects.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Construction Acoustic Audit results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> <li>Construction Acoustic Audit results will be submitted to CEAA.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will implement a temporary sound barrier (hoarding) as needed for the construction of the Lower Base Line grade separation. (response to IR8.13, page 25)</li> </ul>	<ul style="list-style-type: none"> <li>Temporary noise barriers / hoarding during construction are effective and standard practice during construction.</li> <li>The use of temporary barriers to minimize noise propagation during construction phases will further reduce noise effects.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Construction Acoustic Follow-up program results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> <li>Construction Acoustic Follow-up program results will be submitted to CEAA.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
							<ul style="list-style-type: none"> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	
		✓		<ul style="list-style-type: none"> <li>Generators, including back-up generators or compressors, to be installed on-site during operation will be housed in-doors (i.e., inside a building or structure) to reduce noise</li> </ul>	<ul style="list-style-type: none"> <li>Installing generators inside of a building reduces noise emissions from the Project during operation.</li> </ul>		<ul style="list-style-type: none"> <li>Operational Acoustic Audit results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> <li>Operational Acoustic Audit results will be submitted to CEAA.</li> </ul>	Contractor / CN
	✓			<ul style="list-style-type: none"> <li>CN will limit the overall sound power level of generators used for construction activity to 107 dBA for each individual unit. (Appendix E.10, page 63)</li> </ul>	<ul style="list-style-type: none"> <li>Modelling of predicted effects utilized this assumption.</li> <li>Minimizing overall sound power level of generators used for construction activities will reduce overall noise generated during construction</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Construction Acoustic Audit results will determine compliance with predicted noise levels and effectiveness of noise mitigation measures.</li> <li>Construction Acoustic Audit results will be submitted to CEAA.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor
<b>Socio-Economic Conditions – Change in Demand for Community Services and Infrastructure</b>								
	✓		<ul style="list-style-type: none"> <li>Temporary lane closures or detours during construction may affect road users (e.g., motor vehicle operators, cyclists and others).</li> </ul>	<ul style="list-style-type: none"> <li>CN has committed to a communication protocol where the local community will be kept informed of planned construction activity (i.e., website, newspapers ads, mail) with dedicated ways to contact CN (i.e., CN Information Centre, 1-800 phone line, email address and website). Prior to initiating construction activities, CN will communicate the location and schedule of construction activities to the community and stakeholders (Appendix E.10, page 63).</li> </ul>	<ul style="list-style-type: none"> <li>This mitigation measure should allow for planning of the schedule to reduce disturbance to community members.</li> </ul>	<ul style="list-style-type: none"> <li>Road users may experience some level of inconvenience during construction.</li> <li>Once construction is completed, there will be a positive residual effect on vehicle movement compared to baseline conditions by reducing existing sources of road delays from train crossings.</li> </ul>	<ul style="list-style-type: none"> <li>Creation of a communication protocol and notifications to the public by CN.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>During construction, CN will advise nearby residents of significant noise-causing activities, and these will be scheduled to create the least disruption to receptors (Appendix G, page G.2).</li> </ul>	<ul style="list-style-type: none"> <li>This mitigation measure should inform local residents to reduce disturbance to community members.</li> </ul>		<ul style="list-style-type: none"> <li>Creation of a communication protocol and notifications to the public by CN.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>CN will work with the Town of Milton towards the construction of the underpass at Lower Base Line (EIS section 6.5.5.9.2, page 241).</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining discussions with Town of Milton is standard practice for CN to mitigate effects and</li> </ul>		<ul style="list-style-type: none"> <li>Discussions and agreements between CN and the Town of Milton.</li> </ul>	CN and Town of Milton

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					coordinate any crossing upgrades.			
	✓			<ul style="list-style-type: none"> <li>• CN will build a new two-lane private roadway in the PDA to accommodate truck queuing on CN property (EIS section 6.6.2.6.4, page 299).</li> </ul>	<ul style="list-style-type: none"> <li>• The approximately 1.7 km private entrance road and designated queuing area will accommodate up to 140 trucks within the Terminal on CN property.</li> <li>• Design of the access road will prevent back-ups onto regional roads and provide ample space for the queuing of trucks on CN property.</li> <li>• Based on a queuing assessment, and in combination with the proposed gate system, no truck queuing off CN property is expected.</li> </ul>		<ul style="list-style-type: none"> <li>• Confirmed through compliance monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>• Compliance Monitoring Report to be submitted to CEAA.</li> </ul>	Contractor / CN Environmental Monitor
<b>Socio-Economic Conditions – Change in the Quantity and Quality of Land and Resource Use</b>								
		✓	<ul style="list-style-type: none"> <li>• Loss of agricultural land 30 ha or 0.1% of the total agricultural land within the RAA).</li> <li>• Presence of the Project, including associated acoustic and atmospheric emissions may:                             <ul style="list-style-type: none"> <li>- reduce the quality of land use for users within the LAA;</li> <li>- change the views of the landscape; and,</li> <li>- reduce the quality of experience for cyclists in the region.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• CN will work with local farmers for agricultural lease opportunities where they may exist, to mitigate the loss of agricultural land as a result of Terminal activities (EIS section 6.5.5.9.3, page 243).</li> <li>• CN may include rehabilitation or improvement of adjacent lands or providing a contribution to agricultural research in the area (EIS Table 7.1, page 317).</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of designated agricultural land is 30 ha, and land use is of appropriate designation (i.e., planned for development), therefore the magnitude of this interaction is low.</li> <li>• Working with farmers to continue farming lands under CN control.</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of agricultural land is 31 ha, land use is of appropriate designation, therefore the magnitude of this interaction is low</li> <li>• Acceptable levels of acoustic and atmospheric emissions and light for recreational use.</li> </ul>	<ul style="list-style-type: none"> <li>• Lease agreements will be sought outside of the PDA.</li> <li>• Confirmed through compliance monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>• Compliance Monitoring Report to be submitted to CEAA.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>• As per Project design, CN will construct berms in key locations around the PDA and will be vegetated for aesthetics (EIS section 6.5.5.9.3, page 243).</li> </ul>	<ul style="list-style-type: none"> <li>• While not the primary purpose of the berms, which are proposed as acoustic mitigation, constructed berms and vegetating them with native species acts as a visual barrier between the Terminal and surrounding areas (and of the public using these areas for recreation).</li> </ul>		<ul style="list-style-type: none"> <li>• Confirmed through compliance monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>• Compliance Monitoring Report to be submitted to CEAA.</li> </ul>	Contractor / CN Environmental Monitor
<b>Archaeological and Heritage Resources – Unauthorized Disturbance or Destruction of Part or All of an Archaeological Site or Sites</b>								
✓			<ul style="list-style-type: none"> <li>• Site preparation and grading activities of trees, brush and other ground cover may cause disturbances to archaeological resources as the roots pull up soil and can cause displacement of artifacts and destroy features in archaeological sites</li> </ul>	<ul style="list-style-type: none"> <li>• A careful archeological investigation / assessment has been carried out. A Stage 3 and Stage 4 Archaeological Assessment has been completed prior to construction to ensure all archaeological artifacts have been carefully logged and removed (Appendix G, page G.7).</li> <li>• Controlled salvage excavations (Stage 4) conducted in accordance with industry standards, as confirmed by MTCS.</li> </ul>	<ul style="list-style-type: none"> <li>• Mitigation measures are standard practice and supported by regulatory authorities including MTCS, i.e., Stage 1 thru 4 archaeological assessment &amp; mitigation.</li> <li>• Follow MTCS suggested methods to minimize or avoid negative direct or indirect effects including salvage excavations.</li> </ul>	<ul style="list-style-type: none"> <li>• Project specific environmental effects on archaeological resources are continually mitigated. After implementation of the mitigation measures, there are no residual environmental effects.</li> <li>• With the accumulation of new knowledge from the</li> </ul>	<ul style="list-style-type: none"> <li>• Complete - Archaeological reports documenting all Stage 1 through Stage 4 activities reviewed by regulatory body (MTCS) and found to be compliant with industry standards.</li> <li>• Confirmed by compliance letters for archaeological work issued by MTCS.</li> </ul>	CN / Archaeological Consultant

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
✓			<ul style="list-style-type: none"> <li>Removal of vegetation can result in unstable soil conditions and could result in movement of artifacts and the soil matrix.</li> <li>Root disturbance during watercourse realignment, restoration and naturalization could displace artifacts or destroy features in archaeological sites</li> <li>Grading, excavation and removal of soils associated with the construction of roads, berms, yard tracks, storm water management facilities and buildings could cause disturbance and/ or removal of archaeological resources.</li> </ul>	<ul style="list-style-type: none"> <li>CN will conduct further assessment of changes to the PDA (EIS section 6.5.6.9.2, page 260).</li> </ul>	<ul style="list-style-type: none"> <li>Mitigation measures are standard practice and supported by regulatory authorities including MTCS, i.e., Stage 1 thru 4 archaeological assessment &amp; mitigation.</li> <li>Follow MTCS suggested methods to minimize or avoid negative direct or indirect effects including salvage excavations.</li> <li>Stage 2 archaeological assessment to be completed for any additional lands required for PDA.</li> <li>Results of Stage 2 may trigger further archaeological work in the form of Stage 3 and Stage 4.</li> </ul>	archaeological assessment and follow-up work, the residual effect of the project on archaeological resources would be positive.	<ul style="list-style-type: none"> <li>Adhere to PDA.</li> <li>Archaeological reports documenting necessary archaeological activities would be reviewed by regulatory body (MTCS).</li> <li>Confirmed by compliance letters for archaeological work issued by MTCS.</li> <li>Update report will be provided to CEAA as required.</li> </ul>	CN / Archaeological Consultant
	✓		<ul style="list-style-type: none"> <li>Disturbance to soil from grade separation construction (involves temporary relocation of tracks) and utility installation/relocation could lead to unstable soil conditions and movement of artifacts and/or destruction of archaeological resources.</li> </ul>	<ul style="list-style-type: none"> <li>CN will avoid disturbance of Archaeological and Heritage Resources wherever practicable. Avoidance options would also require the installation of a protective barrier around the site and a buffer zone. If avoidance and protection of archaeological resources is not feasible then controlled salvage excavations of the archaeological resources, or parts thereof as applicable, will be implemented (EIS section 6.5.6.9.2, page 259-260).</li> </ul>	<ul style="list-style-type: none"> <li>Avoidance of archaeological sites identified within the PDA was not feasible while accommodating the Project.</li> <li>Controlled salvage excavations (Stage 4) were conducted in accordance with industry (MTCS) standards.</li> <li>Project specific environmental effects on archaeological resources are continually mitigated to the standards established by the province. After implementation of the required mitigation measures issued by the regulatory agency, there will be no residual environmental effects.</li> </ul>		<ul style="list-style-type: none"> <li>Archaeological Resources Protection Plan to be prepared as part of the Environmental Protection Plan, which will be submitted to CEAA.</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>CN will implement an Archaeological Resources Protection Plan (EIS section 6.5.6.9.2, page 260), which will include worker awareness training regarding basic artifact identification and required next steps.</li> </ul>	<ul style="list-style-type: none"> <li>The plan will identify the various mitigation measures to be implemented during construction in the event that additional archaeological resources are encountered during construction.</li> <li>This plan will follow MTCS suggested methods to minimize or avoid negative direct or indirect effects including (Government of Ontario 2006).</li> </ul>		<ul style="list-style-type: none"> <li>Archaeological Resources Protection Plan to be prepared as part of the Environmental Protection Plan, which will be submitted to CEAA.</li> </ul>	Contractor / CN Environmental Monitor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>If an archaeological resource is discovered during the construction phase, the Contractor/CN will cease all construction within a 20 m radius of the archaeological resource. In the event of a discovery, CN will stop work immediately and inform MTCS prior to the implementation of procedures and mitigation. A licensed archaeologist will be retained by CN and a Stage 2 Archaeological Assessment will be conducted with the participation of any interested Aboriginal communities (EIS section 6.5.6.9.2, page 260).</li> </ul>	<ul style="list-style-type: none"> <li>Mitigation measures are standard practice during construction and supported by regulatory authorities including MTCS.</li> <li>follow MTCS suggested methods to minimize or avoid negative direct or indirect effects including (Government of Ontario 2006).</li> </ul>		<ul style="list-style-type: none"> <li>Confirmed through compliance monitoring performed by third-party Contractor / CN Archaeological Monitor.</li> <li>Compliance Monitoring Report to be submitted to CEAA.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>Any human remains encountered during construction will be treated with respect and CN will cease all construction around the area immediately; the police or coroner, Registrar or Deputy Registrar of the Cemeteries Regulations Section of the Ontario Ministry of Government and Consumer Services, and the Archaeology Programs Unit will be contacted. Work will not resume until they have cleared the site (EIS section 6.5.6.9.2, page 261).</li> </ul>	<ul style="list-style-type: none"> <li>Mitigation measures are standard practice during construction and supported by regulatory authorities including MTCS.</li> <li>Once confirmed through these regulatory bodies, work in affected areas will resume.</li> </ul>		<ul style="list-style-type: none"> <li>Confirmed through compliance monitoring performed by third-party Contractor / CN Archaeological Monitor.</li> <li>Compliance Monitoring Report to be submitted to CEAA.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>CN will implement a worker education program about appropriate protocols in case of accidental discoveries (EIS section 6.5.6.9.2, page 260).</li> </ul>	<ul style="list-style-type: none"> <li>Education/training increases awareness and action.</li> </ul>		<ul style="list-style-type: none"> <li>Archaeological Resources Protection Plan to be prepared as part of the Environmental Protection Plan, which will be submitted to CEAA.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>CN will train key construction staff in the recognition of basic archaeological artifacts such as Aboriginal material culture (e.g., clay ceramics, lithic artifacts, and faunal remains), and Euro-Canadian material culture (e.g., refined ceramics, glassware, construction debris, and personal effects) (EIS section 6.5.6.9.2, page 260).</li> </ul>	<ul style="list-style-type: none"> <li>Education/training increases awareness and action.</li> <li>This measure is a component of the appropriate protocols to be implemented in case of accidental discoveries</li> </ul>		<ul style="list-style-type: none"> <li>Training of employees.</li> <li>Archaeological Resources Protection Plan to be prepared as part of the Environmental Protection Plan, which will be submitted to CEAA.</li> </ul>	CN



Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
<b>Archaeological and Heritage Resources – Unauthorized Disturbance or Destruction of Part or All of a Heritage Resource</b>								
	✓		<ul style="list-style-type: none"> <li>Land disturbances during the construction phase of the project (site preparation and grading activities, grade separations, utilities, watercourse realignment, restoration and naturalization, and construction equipment and operation) may result in the removal of resources of cultural heritage value and interest.</li> <li>Construction activities may cause vibration effects on cultural heritage resources within 50 m of the construction activities in the PDA.</li> </ul>	<ul style="list-style-type: none"> <li>During construction, CN will maintain 50 m setbacks from cultural heritage structures (Appendix E.3, page 31).</li> <li>In order to reduce the potential for indirect effects as a result of vibration from Project activities, the Contractor/CN will avoid construction activities within 50 m of the barn structure contained within CHR-1 and the residence and barn structures contained within CHR-4. A buffer zone of 50 m will be used to isolate the resources from Project construction activities. Where Project activities must occur within the 50 m buffer, maximum acceptable vibration, or PPV, levels will be determined by a qualified engineer prior to Project activities (Appendix E.3, page 31).</li> <li>CN-owned properties within the PDA with heritage value that are or will be vacated prior to construction (i.e., CHR-3, the house and barn at CHR-4 and CHR-5), will be secured until such time as an adaptive re-use is identified for the structures (Response to IR7.9, page 39).</li> </ul>	<ul style="list-style-type: none"> <li>The 50 m buffer represents a conservative approach to effects identification.</li> <li>With the mitigation measure of a 50 m buffer around the resource, the effects from indirect vibration will be negligible.</li> <li>Closing up or securing a building for an extended period of time will temporarily protect the structure from weather and secure it from vandalism (i.e., boarding windows and doors) until such time as an adaptive re-use is identified for the structures, if appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>With the mitigation measure of a 50 m buffer around the resource, the effects from indirect vibration will be negligible.</li> <li>Areas where a structure will be removed (e.g., 5269 Tremaine Road (CHR-4)), mitigation measures will document and salvage the resource.</li> <li>As project specific effects on heritage resources are continually mitigated, there will be no residual environmental effects.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Barriers around 50 m setback. Where disturbance (i.e., grading) is required less than 50 m from these structures, vibration monitoring will be implemented by third-party Contractor.</li> <li>Project construction activities should be monitored to confirm that maximum PPV levels are not exceeded. (Appendix E.3, page 31)</li> <li>Compliance Monitoring Report to be submitted to CEAA.</li> </ul>	Contractor / CN Environmental Monitor
	✓		<ul style="list-style-type: none"> <li>CN will avoid disturbance of Archaeological and Heritage Resources wherever practicable. Avoidance options would also require the installation of a protective barrier around the site and a buffer zone. If avoidance and protection of archaeological resources is not feasible then controlled salvage excavations of the archaeological resources, or parts thereof as applicable, will be required (EIS section 6.5.6.9.2, page 259-260).</li> </ul>	<ul style="list-style-type: none"> <li>Avoidance of cultural heritage resources was accommodated, and such buildings will be avoided and protected during construction.</li> <li>Project specific environmental effects on archaeological resources are continually mitigated to avoid residual environmental effects.</li> </ul>		<ul style="list-style-type: none"> <li>CN will monitor areas in proximity to known archaeological resources during construction.</li> <li>Confirmed through compliance monitoring performed by third-party Contractor / CN Archaeological Monitor.</li> <li>Compliance Monitoring Report to be submitted to CEAA.</li> </ul>	Contractor / CN Environmental Monitor	
	✓		<ul style="list-style-type: none"> <li>CHR-2, CHR-3 and CHR-5 are located less than 50 m from the PDA where potential grading, staging or other construction activities may occur (subject to confirmation during detailed design). If it is determined through detailed design that a 50 m construction buffer cannot be maintained from these cultural heritage resources, CN will implement construction vibration monitoring (Response to IR4.35, page 46).</li> </ul>	<ul style="list-style-type: none"> <li>Vibration monitoring is standard practice for construction in proximity to cultural heritage resources.</li> <li>Where Project activities cannot ensure a 50-m buffer adjacent to CHR-2, CHR-3 and CHR-5, maximum acceptable vibration, or PPV, levels will be monitored by a third-party Contractor / CN Environmental Monitor to confirm that maximum PPV levels are not exceeded.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Confirmed through construction vibration monitoring performed by third-party Contractor / CN Vibration Monitor.</li> <li>Construction Monitoring Report to be submitted to CEAA.</li> </ul>	Contractor / CN Environmental Monitor	

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					<ul style="list-style-type: none"> <li>In the event maximum PPV levels are exceeded, construction activities within these areas would be modified to meet the appropriate thresholds.</li> <li>Avoiding construction that creates vibration levels above the PPV threshold reduces the potential for structural damage or disruption of cultural heritage resources.</li> </ul>			
	✓			<ul style="list-style-type: none"> <li>Given the determination of indirect effects related to potential vibration effects, CN will use fencing around protective buffer-zones. For the direct effects to the shed, mitigation in the form of relocation or documentation and salvage has been recommended (Appendix G, page G.8).</li> </ul>	<ul style="list-style-type: none"> <li>Demarcate construction work area to avoid incidental encroachment into adjacent areas.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	CN Environmental Monitor
<b>Light – Change in Light</b>								
✓			<ul style="list-style-type: none"> <li>Increase in light emissions</li> </ul>	<ul style="list-style-type: none"> <li>Terminal lighting design will be as efficient as possible, while providing enough light for on site safety.</li> <li>Any perimeter lighting will be directed inward towards the Terminal to minimize potential light trespass (EIS Appendix G).</li> <li>Lighting equipment selection and design will use down-cast, full cut-off fixtures that are 'dark sky friendly' and minimize horizontal component of light (EIS Appendix E.8).</li> </ul>	<ul style="list-style-type: none"> <li>The location, design, equipment and mitigation features will be refined and confirmed through the lighting design plan to balance safety with reductions in light trespass, glare and skyglow effects.</li> </ul>	<ul style="list-style-type: none"> <li>The Terminal will add additional background light to the area, but the additional light is estimated to be well below (less than 10%) of the allowable light trespass standard at nearby residences.</li> <li>The combined lighting impacts on nearby residences (i.e., glare, trespass, sky glow) will be minimized.</li> </ul>	<ul style="list-style-type: none"> <li>Modelling project illuminations using predictive light models</li> <li>Project lighting plan – based on anticipated terminal fixtures.</li> <li>Confirmatory light measurements during commissioning and start up.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>Construction lighting will be directed at the specific construction location (nighttime construction) (EIS Appendix G).</li> <li>Lighting will be reduced in areas not being used for construction activities (EIS Appendix G).</li> </ul>	<ul style="list-style-type: none"> <li>Limiting construction lighting to specific work areas reduces overall lighting requirements across the site, thereby reducing the amount of light requiring mitigation.</li> </ul>			
		✓		<ul style="list-style-type: none"> <li>Individual fixtures will be fitted with specific glare mitigation (i.e., side shields), as required (EIS Appendix E.8).</li> </ul>	<ul style="list-style-type: none"> <li>Disrupting the path between the light source and receptor through the use of glare shields reduces potential effects.</li> </ul>			
		✓		<ul style="list-style-type: none"> <li>To supplement mitigation through lighting design, strategic shading elements (berms, barriers and vegetation) (EIS Appendix E.8).</li> </ul>	<ul style="list-style-type: none"> <li>the acoustic berms / barriers and vegetation will further reduce glare and trespass from low level lighting</li> </ul>			
<b>Traffic – Change in Traffic</b>								

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓		<ul style="list-style-type: none"> <li>Increased truck traffic on areas roadways</li> </ul>	<ul style="list-style-type: none"> <li>CN will seek collaboration with Halton Region to install a signalized intersection, as necessary, on Britannia Road with a turning lane for trucks entering the terminal from the east to manage vehicle movements and the safety of other road users, including motor vehicle operators, cyclists and pedestrians (EIS section 6.6.2.6.4, page 299).</li> <li>CN is committed to continuing to work with the Region and the Town to identify and mitigate the impacts of the change in truck traffic on the Region's arterial road network (EIS section 2.2.2, page 28).</li> </ul>	<ul style="list-style-type: none"> <li>Standard mitigation to manage traffic at busy intersections.</li> <li>Preliminary intersection plan prepared and submitted to the Region.</li> </ul>		<ul style="list-style-type: none"> <li>Discussions between CN and Halton Region.</li> <li>Agreement between CN and Halton Region on construction of the Intersection.</li> </ul>	CN / Halton Region
		✓		<ul style="list-style-type: none"> <li>On all sections of Britannia Road and Tremaine Road, it is anticipated that standard conventional measures can be implemented by Halton Region. Such measures may include (Appendix E.17, page 24):                             <ul style="list-style-type: none"> <li>Adjustment to traffic signal control timing and phasing plans;</li> <li>Provision of advisory and/or regulatory signage;</li> <li>Adjustments to the lengths of left turn lanes for added vehicular queue storage length; and</li> <li>Addition of auxiliary right turn lanes or left turn lanes.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Standard mitigation to manage traffic at busy intersections.</li> <li>CN traffic information to be shared with Halton Region to inform transportation planning.</li> </ul>		<ul style="list-style-type: none"> <li>Discussions with municipality to confirm implementation of recommended measures.</li> </ul>	Halton Region
		✓		<ul style="list-style-type: none"> <li>In order to reduce potential impact of project-generated truck traffic on the Town of Milton, CN will direct trucks within their care and control (i.e., those operated by CNTL), to utilize Highway 407 when its use would be practical and feasible (EIS section 2.2.2, page 27)</li> </ul>	<ul style="list-style-type: none"> <li>Routing traffic along Britannia Road, which is scheduled to be a 6-lane road at the time of Terminal opening, trucks would stay at the periphery of Milton.</li> <li>This commitment was made to address specific comments raised by project stakeholders.</li> </ul>		<ul style="list-style-type: none"> <li>CN through CNTL and its contractual agreements with independent truck owner-operators.</li> </ul>	CN
	✓			<ul style="list-style-type: none"> <li>CN will build a new two-lane private roadway in the PDA to accommodate truck queuing on CN property (EIS section 6.6.2.6.4, page 299).</li> </ul>	<ul style="list-style-type: none"> <li>The approximately 1.7 km private entrance road and designated queuing area will accommodate up to 140 trucks within the Terminal on CN property.</li> <li>Design of the access road will prevent back-ups onto regional roads and provide ample space for the queuing of trucks on CN property.</li> <li>Based on a queuing assessment, and in combination with the proposed gate system, no truck queuing off CN property is expected.</li> </ul>		<ul style="list-style-type: none"> <li>Confirmed through compliance monitoring performed by third-party Contractor / CN Environmental Monitor.</li> <li>Compliance Monitoring Report to be submitted to CEAA.</li> </ul>	Contractor / CN Environmental Monitor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
<b>Groundwater – Change in Groundwater</b>								
	✓	✓	<ul style="list-style-type: none"> <li>Private wells affected by dewatering</li> </ul>	<ul style="list-style-type: none"> <li>CN will install anti-seepage collars in trenches to prevent the preferential movement of groundwater along the servicing alignments and, subsequently, maintain pre-construction groundwater flow patterns. (Appendix E.6, page 24)</li> </ul>	<ul style="list-style-type: none"> <li>This is the most common (and very effective) mitigation measure employed to prevent preferential movement of groundwater.</li> </ul>		<ul style="list-style-type: none"> <li>Monitoring to verify that pre-construction groundwater flow patterns are maintained. To be performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor
✓	✓			<ul style="list-style-type: none"> <li>CN will complete a groundwater dewatering assessment following preliminary design, to estimate project dewatering needs (Appendix E.6, page 25).</li> <li>In the event of dewatering, CN will monitor private wells expected to be located within the dewatering cone of depression, if any (as estimated from the dewatering assessment) for drawdown interference, which could potentially affect the operation of private wells with regards to water quantities (Appendix E.6, page 25).</li> </ul>	<ul style="list-style-type: none"> <li>Given the excavations will be relatively shallow and completed in soils characterized by hydraulic conductivities in the range of 10<sup>-8</sup> m/s, low volumes of groundwater inflow to the excavation are expected.</li> <li>The amount of drawdown is expected to be low and isolated to a small distance around the excavation.</li> <li>Groundwater levels will recover as local groundwater levels re-equilibrate with the local water table.</li> <li>Overall, the residual effects of dewatering will be reversible once pumping ceases.</li> <li>Based on detailed design, a groundwater dewatering assessment will determine the extent of potential drawdown effects based on the depth and location of excavations to identify wells within the cone of influence.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan will be submitted to CEAA.</li> <li>Conduct a groundwater dewatering assessment based on construction details.</li> <li>Construction monitoring of private wells during dewatering performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	CN Responsible for Design Plans  Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>Should construction dewatering volumes be projected in excess of 50,000 L/day, a Groundwater Discharge Management Plan will be prepared (Appendix E.6, page 25).</li> <li>CN will establish an appropriate dewatering system that will dissipate the energy and reduce the sediment content of discharging water for the purpose of limiting potential erosion effects (Appendix E.6, page 25).</li> </ul>	<ul style="list-style-type: none"> <li>Common measures include the use of sediment control basins, erosion pads, geotextile filter bags and the positioning of straw bale/filter cloth barriers downgradient of the discharge point.</li> <li>For dewatering activities, CN will pump water onto stable, well vegetated areas, tarpaulins, sheeting, rocks, sand bags, or into settling ponds, filter bags, or other appropriate sediment filtering devices, as determined by the Environmental Monitor(s) or the mitigation plan.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan will be submitted to CEAA.</li> <li>Confirmed through construction monitoring performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	CN Responsible for Design Plans  Contractor / CN Environmental Monitor

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					<ul style="list-style-type: none"> <li>Erosion and sediment controls will minimize erosion from the discharge of any dewatering activities.</li> </ul>			
<b>Waste Management</b>								
		✓		<ul style="list-style-type: none"> <li>CN will implement on-site water recycling and capture where possible (EIS section 6.5.5.8, page 240).</li> </ul>	<ul style="list-style-type: none"> <li>Potential operational effects will be mitigated through successful implementation of the SWM Plan.</li> </ul>		<ul style="list-style-type: none"> <li>Implement Stormwater Management Plan during operation.</li> </ul>	Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>CN will collect and store sanitary wastewater in a holding tank onsite. The contents of the tank will be pumped out and taken to a licensed disposal facility offsite (Appendix G, page G.9).</li> </ul>	<ul style="list-style-type: none"> <li>Provides a technically feasible alternative for the management of wastewater at this site.</li> </ul>		<ul style="list-style-type: none"> <li>Disposal records.</li> </ul>	Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>CN will collect, store and dispose all solid waste produced at the Terminal according to all applicable regulations (Appendix G, page G.9).</li> </ul>	<ul style="list-style-type: none"> <li>All wastes will be disposed of off-site in accordance with provincial regulations.</li> </ul>		<ul style="list-style-type: none"> <li>Disposal records.</li> </ul>	Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>CN will track the amount of solid waste and an emphasis will be placed on reduction, reusing and recycling of all solid waste materials (Appendix G, page G.10).</li> </ul>	<ul style="list-style-type: none"> <li>All wastes will be disposed of off-site in accordance with provincial regulations.</li> </ul>		<ul style="list-style-type: none"> <li>Disposal records.</li> </ul>	Contractor / CN Environmental Monitor
	✓	✓		<ul style="list-style-type: none"> <li>CN will not burn waste materials on site (Appendix G, page G.10).</li> </ul>	<ul style="list-style-type: none"> <li>All wastes will be disposed of off-site in accordance with provincial regulations.</li> </ul>		<ul style="list-style-type: none"> <li>Disposal records.</li> </ul>	Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>CN will collect, transport, store and dispose hazardous wastes produced during the operation of the Terminal according to all applicable legislation (Appendix G, page G.10).</li> </ul>	<ul style="list-style-type: none"> <li>All wastes will be disposed of off-site in accordance with provincial regulations.</li> </ul>		<ul style="list-style-type: none"> <li>Disposal records.</li> </ul>	Contractor / CN Environmental Monitor
		✓		<ul style="list-style-type: none"> <li>CN will dispose all waste at an approved disposal facility (Appendix G, page G.10).</li> </ul>	<ul style="list-style-type: none"> <li>All wastes will be disposed of off-site in accordance with provincial regulations.</li> </ul>		<ul style="list-style-type: none"> <li>Disposal records.</li> </ul>	Contractor / CN Environmental Monitor
<b>Equipment Maintenance</b>								
		✓		<ul style="list-style-type: none"> <li>Regular maintenance of all transfer equipment (reach stackers, rail transfer equipment) will be conducted to avoid potential equipment malfunction (EIS section 6.6.2.5.3, page 297).</li> <li>Equipment will be inspected and properly maintained to avoid potential malfunction. Infrastructure will be regularly maintained as per Transport Canada requirements (EIS section 6.6.2.4.3, page 294).</li> </ul>	<ul style="list-style-type: none"> <li>This is a standard best management practice for equipment on construction sites.</li> <li>This is a standard best management practice for equipment on construction sites.</li> </ul>		<ul style="list-style-type: none"> <li>Regular maintenance schedule and records.</li> <li>Regular maintenance schedule and records in accordance with TC requirements.</li> </ul>	Contractor / CN Environmental Monitor
<b>Effects of the Environment on the Project - Severe Weather</b>								

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>When severe weather is anticipated for the construction area, the contractor shall complete the following (under the supervision of CN), which will be incorporated into the EPP (Response to IR3.41):                             <ul style="list-style-type: none"> <li>Contractor must subscribe to a meteorological alert service, ensuring that there is advance warning of flood-producing severe rainfall events; those producing more than 25mm of rainfall precipitation in a 6-hour period, for example. Warning area to be focused upon areas upstream of the site, to the limits of the Indian Creek Watershed;</li> <li>Regularly ensure all erosion and sediment control devices are secure and in good working order;</li> <li>Backfill any open excavations where feasible;</li> <li>Contractor shall provide a plan to the owner of working areas within flood prone areas, including but not limited to proposed stormwater ponds, existing and proposed channels of Indian Creek, and swales;</li> <li>Monitor erosion control measures during rainfall event;</li> <li>Provide a post-event inspection and recovery plan. Inspect all erosion control measures, re-establish if damaged, and provide a repair or restoration plan outline. Planned erosion control measures are effective when applied (i.e., installed and maintained) appropriately, but may be damaged by severe rainfall events, and so need to be identified (i.e., monitored regularly and following rainfall events during all phases of construction); and,</li> <li>All prevention, monitoring, and mitigation plans along with corresponding inspection results will be communicated to CN (Response to IR3.41).</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Standard best management practices and workplace health and safety standards.</li> <li>Wet weather shut-down protocols are standard practice for construction projects.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA.</li> <li>Confirmed through construction monitoring to adhere to timing windows to be performed by third-party Contractor / CN Environmental Monitor.</li> <li>Construction Monitoring Reports will document compliance with EPP.</li> </ul>	Contractor / CN Environmental Monitor
<b>Soil Management</b>								



Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
	✓			<ul style="list-style-type: none"> <li>CN will follow the proper screening and disposal requirements for excess soils if any is deemed to require off-site disposal. (Appendix E.13, page 13)</li> </ul>	<ul style="list-style-type: none"> <li>Provincial standards will be followed to make soils acceptable before they are taken off-site for disposal.</li> </ul>		<ul style="list-style-type: none"> <li>Soil Management Plan to be submitted to CEAA.</li> <li>Documentation of soil testing in accordance with provincial standards.</li> </ul>	CN Responsible for Design Plans  CN / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>When soils suspected of being potentially contaminated are observed during construction, additional testing should be conducted to further characterize these types of soils to determine suitability for re-use on-site. (Appendix E.13, page 13)</li> </ul>	<ul style="list-style-type: none"> <li>Based on the results of the soils analysis, as compared to the provincial standard and federal guidelines for commercial and industrial land use, excess soils can be reused in the construction of the Project.</li> </ul>		<ul style="list-style-type: none"> <li>Soil Management Plan to be submitted to CEAA.</li> <li>Documentation of soil testing in accordance with MOECC and CCME guidelines.</li> </ul>	CN Responsible for Design Plans  CN / CN Environmental Monitor
<b>Emergency Response, Accidents and Malfunctions</b>								
		✓		<ul style="list-style-type: none"> <li>CN will create and implement a Hazardous Materials Action Plan to be implemented during operation (EIS section 6.6.2.4.3, page 293).</li> </ul>	<ul style="list-style-type: none"> <li>As a component of the Emergency Response Plan, this plan identifies specific measures to address the risks and response to the potential spill of hazard materials.</li> </ul>		<ul style="list-style-type: none"> <li>CN Milton Logistics Hub Emergency Response Plan (Operational ERP) to be submitted to CEAA.</li> </ul>	CN Responsible for Design Plans
		✓		<ul style="list-style-type: none"> <li>CN will update the CN Emergency Response Plan to include the Milton Logistics Hub, which will include the location of spill equipment on site, methods to prevent containerized material spills from spreading and for recovering the materials in the water. The plan will also identify any sensitive habitats to best direct response efforts (EIS section 6.6.2.4.3, page 293).</li> </ul>	<ul style="list-style-type: none"> <li>Spill response plans are standard best management practices during operations.</li> <li>These standards will guide the safe and proper handling and storage of hazardous materials, and implementation of spill contingency procedures.</li> <li>Emergency Response Plans provide guidance on prevention and response to potential spills, which identify methods and procedures to respond to an incident to prevent or minimize potential adverse effects on fish, SAR and public health and safety.</li> <li>Identifying procedures to be followed in the event of a spill reduces response time to further reduce potential adverse effects.</li> <li>Should a hazardous materials spill occur, the primary goal is to ensure safety, and, if safe to do so, contain the material and to keep it out of the drainage system. At any time, if a hazardous material is seen to be</li> </ul>		<ul style="list-style-type: none"> <li>CN Milton Logistics Hub Emergency Response Plan (Operational ERP) to be submitted to CEAA.</li> </ul>	CN Responsible for Design Plans

Project Phase			Potential Effects	Proposed Mitigation Measures	Effectiveness	Residual Effects	Verification (Plans, Monitoring and Follow-up)	Responsibility
Design	Construction	Operation						
					leaking on-site, the CN Emergency Response Program will be initiated, and the site will be secured.			
	✓			<ul style="list-style-type: none"> <li>The Contractor will create and implement an Emergency Response Plan during construction, which will include hazardous materials storage and handling procedures (EIS section 6.6.2.4.3, page 294).</li> </ul>	<ul style="list-style-type: none"> <li>Spill response plans are standard best management practices during construction.</li> </ul>		<ul style="list-style-type: none"> <li>Construction Emergency Response Plan (Construction ERP) to be submitted to CEAA.</li> </ul>	Contractor
		✓		<ul style="list-style-type: none"> <li>Storage of hazardous materials will be restricted to designated areas with proper containment and in accordance with appropriate safety procedures and requirements (EIS section 6.6.2.4.3, page 294).</li> </ul>	<ul style="list-style-type: none"> <li>Storing hazardous materials in designated areas allows for proper containment and in accordance with appropriate safety procedures and requirements.</li> <li>Spill response plans are standard best management practices during construction.</li> </ul>		<ul style="list-style-type: none"> <li>Implement Hazardous Materials Action Plan outlined in the CN Milton Logistics Hub Emergency Response Plan.</li> <li>Implement Construction Emergency Response Plan (Construction ERP)</li> <li>Identify designated areas and regular monitoring of hazardous material handling performed by third-party Contractor / CN Environmental Monitor.</li> <li>Implement Spill Response &amp; Contingency Plan outlined in the CN Milton Logistics Hub Emergency Response Plan (Operational ERP).</li> </ul>	Contractor / CN Environmental Monitor
	✓			<ul style="list-style-type: none"> <li>The Contractor will develop and implement a Spill Response &amp; Contingency Plan during the construction phase, which will require spill containment kits to be present on site in designated locations where the risk of spill is deemed the greatest (e.g., refueling areas) (EIS section 6.6.2.4.4, page 296).</li> </ul>	<ul style="list-style-type: none"> <li>Spill response plans are standard best management practices during construction.</li> <li>Managing spills and minimizing their likelihood of reaching downstream watercourses reduces the potential for adverse effects on fish and fish habitat.</li> <li>Plans will identify mitigation and contingency measures to be implemented to prevent spills from occurring during construction and the steps to be taken if a spill of hazardous materials occurs.</li> <li>Spill kits are most effective when located in areas of greater spill potential.</li> </ul>		<ul style="list-style-type: none"> <li>Environmental Protection Plan to be submitted to CEAA (which will include Spill Response &amp; Contingency Plan measures).</li> <li>Confirmed through construction monitoring for spills performed by third-party Contractor / CN Environmental Monitor.</li> </ul>	Contractor / CN Environmental Monitor

**Attachment B**  
**Updated Environmental Management**  
**Plan and Detailed Design Plan**  
**Commitments**

Project Phase			Proposed Plan	Purpose / Description	Agency Submission
Design	Construction	Operation			
<b>Environmental Management Plans</b>					
✓			Environmental Protection Plan	To finalize the proposed environmental protection measures and commitments to be carried out by CN, their contractor and subcontractors, during construction to avoid or reduce potential effects. The measures and commitments identified in Table A form the basis of the EPP, which will be documented following the outline provided as Attachment IR5.17-1 (CEAR#647).	Canadian Environmental Assessment Agency (CEAA)
✓			Detailed Construction Sequencing Plan	As a component of the EPP, to confirm the overall construction schedule for the Terminal, including timing of proposed culvert installation and channel realignment activities with reference to fisheries timing windows.	Fisheries and Oceans Canada (DFO)
✓			Soil Management Plan	As a component of the EPP, to retain and preserve suitable soil for use in Project reclamation/restoration, and to identify and manage soil impacted by existing or historical anthropogenic activities that require removal to allow development of the Project, which will be documented following the outline provided as Attachment IR5.17-3 (CEAR#647).	Canadian Environmental Assessment Agency (CEAA)
✓			Planting Plan	As a component of the EPP, to outline the revegetation efforts for the long-term establishment of vegetation within the Project, specifically for restoration and naturalization areas, SWM ponds and other areas to be naturally vegetated. Species selected will include native Ontario species and non-invasive grass species for the seed mixes.	Canadian Environmental Assessment Agency (CEAA)
✓			Erosion and Sediment Control Plan	As a component of the EPP, to provide details regarding the implementation of site specific measures to minimize site erosion and protect watercourses and other sensitive receptors from sedimentation during construction of the Project which will be documented following the outline provided as Attachment IR5.17-4 (CEAR#647).	Canadian Environmental Assessment Agency (CEAA) Fisheries and Oceans Canada (DFO)
✓			Archaeological Resources Protection Plan	As a component of the EPP, to identify monitoring and applicable protocols should additional archaeological artifacts and/or human remains be encountered during construction.	Canadian Environmental Assessment Agency (CEAA)
✓			Habitat Compensation / Offsetting Plan	To provide confirmation of the proposed measures to compensate for the loss of freshwater fish habitat to obtain Authorization under section 35(2) of the <i>Fisheries Act</i> .	Fisheries and Oceans Canada (DFO)
✓			Channel Design Drawings	To provide final channel realignment plans (i.e., updates to those included in EIS Appendix E.2) to obtain Authorization under section 35(2) of the <i>Fisheries Act</i> , including confirmation of the alignment of the channels and in-stream habitat components / structures.	Fisheries and Oceans Canada (DFO)
✓			Isolation and Dewatering Plan	As a component of the overall construction schedule, to provide details for the sequencing of events for the realignment of Indian Creek, Tributary A and Tributary C, including mitigation measures to isolate and dewater work areas.	Fisheries and Oceans Canada (DFO)
✓			Final Restoration and Enhancement Plans	To describe the proposed on-site wildlife habitat restoration and enhancement measures for: <ul style="list-style-type: none"> <li>• Wetland migratory birds</li> <li>• Grassland migratory birds, including species at risk</li> <li>• Snapping Turtle</li> <li>• Monarch</li> </ul>	Environment and Climate Change Canada (ECCC) Fisheries and Oceans Canada (DFO)
✓			Snapping Turtle Management Plan	As a component of the Restoration and Enhancement Plans, to describe the proposed habitat restoration and enhancement plans as well as measures to mitigate risk of Snapping Turtle mortality through in-water works (watercourse crossings and realignments) during construction, and from vehicular collisions during construction and operation. To mitigate risk of change in residences due to habitat disturbance / alteration.	Environment and Climate Change Canada (ECCC)
✓			Salt Management Plan	To describe measures that will mitigate salt loading into the SWM system, which will identify snow storage areas and measures to manage salt application within the Terminal.	Canadian Environmental Assessment Agency (CEAA)
✓			Stormwater Management Plan	To provide the detailed design of proposed stormwater management measures, including lot-level, conveyance and end-of-pipe (SWM Ponds) controls for water quality and quantity.	Canadian Environmental Assessment Agency (CEAA)

Project Phase			Proposed Plan	Purpose / Description	Agency Submission
Design	Construction	Operation			
<b>Emergency Response Plans</b>					
✓			Construction Emergency Response Plan (Construction ERP)	To establish an organizational structure and procedures for response to emergencies during construction, which will be documented following the outline provided as Attachment IR5.17-2 (CEAR#647).	Canadian Environmental Assessment Agency (CEAA)
✓			Spill Response & Contingency Plan	As a component of the Construction ERP, this plan outlines the procedures, processes and management practices to handle and respond to spills.	Canadian Environmental Assessment Agency (CEAA)
✓			Hazardous Materials Action Plan	As a component of the Construction ERP, this plan identifies specific measures to address the risks and response to the potential spill of hazard materials.	Canadian Environmental Assessment Agency (CEAA)
✓			Operational Emergency Response Plan (Operational ERP)	To establish an organizational structure and procedures for response to emergencies during operation of the CN Milton Logistics Hub.	Canadian Environmental Assessment Agency (CEAA)
✓			Hazardous Materials Action Plan	As a component of the Operational ERP, this plan identifies specific measures to address the risks and response to the potential spill of hazard materials.	Canadian Environmental Assessment Agency (CEAA)
<b>Other Terminal Design Plans</b>					
✓			Final Terminal Design Plans	Final design drawings confirming the location and design of terminal infrastructure / project components.	Canadian Transportation Agency (CTA)
✓			Culvert Design Drawings	As a component of the terminal design, to provide details of the proposed culverts conveying Tributary A and C beneath the terminal / access roads, including location, dimensions, and protection measures.	Fisheries and Oceans Canada (DFO)
✓			Lighting Design Plans	As a component of the terminal design, to provide detailed design plans confirming the location and fixtures for the Terminal, including light mitigation measures.	Canadian Environmental Assessment Agency (CEAA)
✓			Lower Base Line Design Drawings	As a component of the terminal design, to provide detailed design of the proposed underpass beneath the Terminal at Lower base Line Road, including details on roadway and rail line diversions during construction.	Canadian Transportation Agency (CTA) Town of Milton
✓			Entrance / Intersection Design Plans	To provide detailed design plans for the proposed intersection upgrades on Britannia Road and Tremaine Road to provide access to the Terminal and employee parking area.	Region of Halton (Britannia Rd) Town of Milton (Tremaine Rd)
✓			SunCanadian Pipeline Design and Construction Drawings	To provide detailed design plans for the construction and operation of the realigned pipelines, including location, depth, footprint of construction and mitigation measures.	SunCanadian

Note: '-' identify the plans and drawings that are a sub-set of the above described plans / drawings, identified based on specific commitments made in the EIS and responses to IRs.

**Attachment C**  
**Updated Follow-up and**  
**Monitoring Programs**



Project Phase			Follow-up / Monitoring to be Conducted	Purpose	Frequency of Monitoring	Duration of Monitoring	Agency Submission
Design	Construction	Operation					
<b>Follow-up Programs</b>							
	✓		Air Quality (construction)	To monitor dust (PM <sub>2.5</sub> and PM <sub>10</sub> ) levels and meteorological conditions (wind speed, wind direction, temperature, relative humidity) at two locations (one upwind / one downwind of PDA) at or near the property line based on prevailing winds. This will confirm the effectiveness of mitigation measures. If complaints are submitted, adaptive management review may be initiated.	24hr samples, once every 6 days following NAPs schedule Visual observations continuous	Duration of construction	CEAA ECCC
		✓	Air Quality (operation)	Ambient concentrations of NO <sub>2</sub> , PM <sub>2.5</sub> , PM <sub>10</sub> , benzene, B(a)P and meteorological conditions (wind speed, wind direction, temperature, relative humidity). This will confirm the effectiveness of mitigation measures. If complaints are submitted, adaptive management review may be initiated.	Continuous sampling on a 5-minute basis, 24 hours per day, with initial daily review of data, once proven, move to less frequent review timing	First year of Operation	CEAA ECCC
	✓		Acoustics (construction)	Sound levels (L <sub>dn</sub> dBA) will be measured at locations identified in the Noise TDR after noise barriers / berms are constructed. To verify compliance with predicted noise effects of the project and effectiveness of mitigation measures.	Single event following construction of noise barriers / berms	Continuous for 4 weeks	CTA CEAA
		✓	Acoustics (operation)	Sound levels (L <sub>dn</sub> dBA) will be measured at locations identified in the Noise TDR after noise barriers / berms are constructed. To verify compliance with predicted noise effects of the project and effectiveness of mitigation measures.	Single event following commencement of operations	Continuous for 1 week	CTA CEAA
		✓	Low Frequency Noise	To ensure concerns regarding low frequency noise are addressed if they arise in the future, CN proposes to implement confirmatory noise monitoring for low frequency noise from idling locomotives at the locomotive idling location.	Single Event (as required)	1 hour	CEAA
	✓	✓	Surface Water Quantity and Quality	To monitor water levels and water quality within Tributary A and Indian Creek during construction and operation.	Continuous using datalogging instrumentation Quarterly for in-situ channel depth, velocity and flow measurements (when ice free)	3 years	CEAA
		✓	SWM Pond Effluent	To monitor stormwater effluent to determine water quality draining from the Terminal into Tributary A and Indian Creek.	Quarterly (when ice free)	3 years	CEAA
		✓	Geomorphic Assessment (Channel Stabilization and Restoration)	To confirm that installed channel features are stable and that no excessive erosion is occurring throughout the Project reach based on stream characteristics within the realigned channels, including profile, pattern, dimensions and pebble count at established monitoring locations and photo points, as follows: <ul style="list-style-type: none"> <li>• Spring Assessment – visual assessment, including photo documentation of instream structures for geomorphic conditions</li> <li>• Fall Assessment – geomorphic assessment of stream characteristics (profile, pattern, dimensions, pebble counts)</li> </ul>	Bi-Annually (spring and fall)	Years 0, 1, 2, and 3 after construction of the realigned channels	CEAA Fisheries and Oceans Canada (DFO)

Project Phase			Follow-up / Monitoring to be Conducted	Purpose	Frequency of Monitoring	Duration of Monitoring	Agency Submission
Design	Construction	Operation					
		✓	Fisheries and fish habitat monitoring (Fisheries Assessment)	To confirm that fisheries offsetting measures have been implemented and meet their intended objectives: <ul style="list-style-type: none"> <li>Compliance monitoring to confirm that planned habitat offsets are constructed according to approved plans; and,</li> <li>Habitat effectiveness monitoring to confirm habitat offsets are functioning as intended after construction.</li> </ul>	Annually (spring)	Years 0, 1, 2, and 3 after construction of the realigned channels	CEAA Fisheries and Oceans Canada (DFO)
		✓	Vegetation Assessment (Channel Stabilization and Restoration)	To verify the installation of plant materials as per planting plan and successful propagation of native plant species.	Annually	Years 0, 1, 2, and 3 after construction	CEAA Fisheries and Oceans Canada (DFO)
		✓	Migratory Birds and Species at Risk	Off-site monitoring will include verifying the establishment and use of grassland habitat by Bobolink and Eastern Meadowlark through an agreement with Ducks Unlimited.	Off-site: Annually (3 surveys / year)	5 years	CEAA ECCC Ducks Unlimited Canada (DUC)
				On-site monitoring will include verifying the establishment of wetlands and Monarch habitat.	On-site: To be determined through consultation with ECCC	3 years	CEAA ECCC
	✓		Cultural Heritage – Salvage	A documentation and salvage report for the removal of the shed at 5269 Tremaine Road will be completed to provide a record of activities completed in compliance with recommended mitigation strategy.	Single Event	Duration of salvage of the shed	CEAA
	✓		Confirmatory Light Measurements	Site observations / measurements will be conducted at the time of installing the light standards by the contractor (under the direction of CN) to ensure that the lighting of the Terminal is properly installed, adjusted and commissioned to minimize light spill (e.g., adjustments to glare shields on specific luminaires).	Single Event	1 day	CEAA
<b>Monitoring Programs</b>							
	✓	✓	Compliance monitoring	To monitor for compliance with project commitments, approvals and corresponding conditions.	Weekly, monthly, seasonally or annually (as appropriate)	Based on environmental approvals, permits and authorizations.	CEAA
	✓		Construction / environmental monitoring	To verify whether mitigation measures implemented during the construction of the project are functional and whether any of these measures were revised during construction (i.e., monitoring of construction activities by a qualified Environmental Monitor(s)).	2 to 3 days per week, and during key construction activities	Duration of construction (18 to 24 months)	CEAA
	✓		Cultural Heritage - Vibration	As a component of construction monitoring, to monitoring vibration levels if construction occurs within 50 m of CHR-1, CHR-2, CHR-4, CHR-5, or CHR-6.	Continuous	Duration of construction activity if within 50 m of identified cultural heritage resources	CEAA
	✓		Archaeological Monitoring	As a component of construction monitoring, to monitoring for the presence of undocumented archaeological resources during ground disturbance activities.	Continuous	Duration of ground disturbance activities	CEAA

**Attachment D**  
**New CN Commitments to Engagement**  
**Made During the Hearing**

Community Working Group (CWG)

1. A CWG will be established by CN prior to construction to inform, identify and discuss potential issues that may arise during construction and initial operation of the Terminal.
2. The CWG would be guided by a terms of reference that would be established to identify the purpose, make-up and logistics on the group, such as the frequency and duration of meetings, the members / participants who will attend, and the roles and responsibilities of the group members.
3. CN would have an independent facilitator to run those meetings, as well as administrative support to take minutes and circulate information to all committee members.
4. The CWG would seek representatives from a cross-section of project stakeholders, including CN representatives, municipal / agency staff, residents most closely related to terminal operations and construction phase, business community and First Nation participants (if interested).

Aboriginal Communities

1. CN is committed to reviewing the construction sequencing plan with the Aboriginal communities so that we can better understand how they can participate and be a part of the construction program moving forward.
2. CN is committed to working with the Huron Wendat Nation and other Aboriginal groups during construction to ensure that issues specifically related to ossuaries are meaningfully and respectfully addressed.

Environment and Climate Change Canada (ECCC)

1. CN is committed to consult with ECCC during the detailed design phase of the project to refine the follow-up monitoring programs for air quality and water quality monitoring, including location, frequency and parameters to be monitored.
2. CN is committed to consult with ECCC and is willing to explore options to determine appropriate types and locations for Western Chorus Frog habitat, including the completion of pre-construction surveys for Western Chorus Frog within the PDA.

Health Canada

1. CN will consider Health Canada's input during the refinement of the air quality monitoring program during the detailed design phase of the Project.
2. CN welcomes engagement with Health Canada in the efforts to further reduce emissions from our activities.

Halton Region

1. CN is committed to work with the Halton Region on the planned intersection on Britannia Road and to pay for the incremental upgrades to the intersection necessary for the Project.
2. CN will continue to work with the Town of Milton on the Lower Base Line grade separation and will be funding the full cost of the grade separation.
3. CN would be interested in the Town of Milton's input into possible opportunities for reuse of cultural heritage buildings.

Conservation Halton (CH)

1. CN is committed to working constructively with CH on technical matters pertaining to the Project, including through a memorandum of understanding). Ongoing dialogue with them will help us to understand and address their technical concerns regarding the management of flood and erosion risks, including natural channel designs and stormwater management during the detail stage of the Project.