

## **Decision Statement**

### **Issued under Section 54 of the *Canadian Environmental Assessment Act, 2012***

to  
Canadian National Railway Company  
c/o Sean Finn, Executive Vice-President, Corporate Services and Chief Legal Officer

16<sup>th</sup> Floor, 935 de La Gauchetière Street West  
Montreal, Quebec  
H3B 2M9

for the  
**Milton Logistics Hub Project**

### **Description of the Designated Project**

The Canadian National Railway Company (the Proponent) is proposing the construction and operation of an intermodal logistics hub designed to transfer containers between trucks and railcars in an area of rapid urban growth. The Project would include a railway yard with more than 20 kilometres of track and be located in Milton, Ontario, about 50 kilometres west of Toronto.

### **Conduct of the environmental assessment**

The former Minister of the Environment referred the Milton Logistics Hub Project to a review panel on July 20, 2015. The Review Panel was established on December 6, 2016. The Review Panel conducted its review in a manner that met the requirements of the *Canadian Environmental Assessment Act, 2012* and submitted its report to me in my capacity as Minister of Environment and Climate Change on January 27, 2020.

### **Decision on environmental effects referred to in subsection 5(1) of the *Canadian Environmental Assessment Act, 2012***

In accordance with paragraph 52(1)(a) of the *Canadian Environmental Assessment Act, 2012*, after considering the report of the Joint Review Panel on the Designated Project and the implementation of mitigation measures that I consider appropriate, I have determined that the Designated Project is not likely to cause significant adverse environmental effects referred to in subsection 5(1) of the *Canadian Environmental Assessment Act, 2012*.

In accordance with subsection 53(1) of the *Canadian Environmental Assessment Act, 2012*, I have established the conditions below in relation to the environmental effects referred to in subsection 5(1) of the *Canadian Environmental Assessment Act, 2012*, with which the Proponent must comply.

**Decision on environmental effects referred to in subsection 5(2) of the *Canadian Environmental Assessment Act, 2012***

The carrying out of the Designated Project may require the following federal authorities to exercise a power or perform a duty or function conferred on them under an Act of Parliament other than the *Canadian Environmental Assessment Act, 2012*:

- The Canadian Transportation Agency may approve the construction of a railway line under section 98(1) of the *Canada Transportation Act*;
- The Minister of Fisheries and Oceans may issue authorization(s) under paragraph 35(2)(b) of the *Fisheries Act* that was in force as of August 27, 2019; and
- The Minister of Industry may approve a communication system under subsection 5(1)(f) of the *Radiocommunication Act*.

In accordance with paragraph 52(1)(b) of the *Canadian Environmental Assessment Act, 2012*, after considering the report of the Joint Review Panel on the Designated Project and the implementation of mitigation measures that I consider appropriate, I have determined that the Designated Project is likely to cause significant adverse environmental effects referred to in subsection 5(2) of the *Canadian Environmental Assessment Act, 2012*.

In accordance with subsection 52(2) of the *Canadian Environmental Assessment Act, 2012*, I referred to the Governor in Council the matter of whether those significant adverse environmental effects were justified in the circumstances.

In accordance with paragraph 52(4)(a) of the *Canadian Environmental Assessment Act, 2012*, the Governor in Council decided that the significant adverse environmental effects that the Designated Project is likely to cause are justified in the circumstances.

In accordance with subsection 53(2) of the *Canadian Environmental Assessment Act, 2012*, I have established the conditions below in relation to the environmental effects referred to in subsection 5(2) of the *Canadian Environmental Assessment Act, 2012*, with which the Proponent must comply.

**Decision Statement under the Impact Assessment Act**

Pursuant to section 184 of the *Impact Assessment Act*, a Decision Statement issued by me under subsection 54(1) of the *Canadian Environmental Assessment Act, 2012* is deemed to be a Decision Statement issued under subsection 65(1) of the *Impact Assessment Act*, other than for the purposes of section 70.

**Consultation with Indigenous groups**

In establishing the conditions below in relation to the environmental effects referred to in subsections 5(1) and 5(2) of the *Canadian Environmental Assessment Act, 2012*, I took into account the concerns and interests identified in the consultation processes with Indigenous groups. I also considered the measures to address these concerns and interests that have been identified in the environmental assessment and consultation processes. I am satisfied that the consultation processes undertaken are consistent with

the honour of the Crown and that the concerns and interests of Indigenous groups are appropriately accommodated for the purpose of issuing this Decision Statement.

## **1 Definitions**

- 1.1 *Adaptive management* means a planned and systematic process for continuously improving environmental management practices by learning about their outcomes.
- 1.2 *Agency* means the Impact Assessment Agency of Canada.
- 1.3 *Baseline* means the environmental conditions prior to initiating construction of the Designated Project.
- 1.4 *Canadian Transportation Agency* means the Canadian Transportation Agency as established under section 6 of the *Canada Transportation Act*.
- 1.5 *Construction* means the phase of the Designated Project during which the Proponent undertakes the site preparation, building or installation of any component of the Designated Project, including periods during which these activities may temporarily cease.
- 1.6 *Day* means calendar day.
- 1.7 *Daytime* means from 7:00 am to 10:00 pm.
- 1.8 *Designated Project* means the Milton Logistic Hub Project as described in sections 3.3 and 3.4 of the environmental impact statement, the revised conceptual design of the Lower Base Line Grade Separation, as described by the Proponent in response to IR3.45 (Canadian Impact Assessment Registry Reference Number 80100, Document Number 613), and the implementation of conditions 5.1, 5.2, 6.1, 6.2, 7.3, 8.3, 8.5 and 8.31.
- 1.9 *Designated Project Development Area* means the immediate area in which Designated Project activities and components may occur and within which direct physical disturbance, temporary or permanent, may occur because of the Designated Project, defined as the “Project Development Area” in figure 1-2 of the Joint Review Panel Report (Canadian Impact Assessment Registry Reference Number 80100, Document Number 985).
- 1.10 *Ecopassage* means a series of infrastructures (that may include guidewalls, fencing and tunnels) that allow wildlife to cross linear features.
- 1.11 *Environment and Climate Change Canada* means the Department of the Environment as established under subsection 2(1) of the *Department of the Environment Act*.
- 1.12 *Environmental assessment* means “environmental assessment” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.13 *Environmental effects* means “environmental effects” as described in section 5 of the *Canadian Environmental Assessment Act, 2012*.

- 1.14 *Environmental impact statement* means the December 2015 document entitled *Environmental Impact Statement – Milton Logistic Hub* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57).
- 1.15 *Fish* means “fish” as defined in subsection 2(1) of the *Fisheries Act*.
- 1.16 *Fish habitat* means “fish habitat” as defined in subsection 2(1) of the *Fisheries Act*.
- 1.17 *Fisheries and Oceans Canada* means the Department of Fisheries and Oceans as established under subsection 2(1) of the *Department of Fisheries and Oceans Act*.
- 1.18 *Follow-up program* means “follow-up program” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.19 *Full operational capacity* means the planned maximum capacity of containers that the Designated Project is designed to handle.
- 1.20 *Heritage value* means the aesthetic, historic, scientific, cultural, social or spiritual importance or significance for past, present or future generations.
- 1.21 *Joint Review Panel Report* means the report submitted on January 27, 2020 by the Joint Review Panel established by the Federal Minister of Environment and Climate Change and the Chair of the Canadian Transportation Agency (Canadian Impact Assessment Registry Reference Number 80100, Document Number 985).
- 1.22 *Listed species at risk* means a species that is listed on the List of Wildlife Species at Risk set out in Schedule 1 of the *Species at Risk Act*.
- 1.23 *Migratory bird* means “migratory bird” as defined in subsection 2(1) of the *Migratory Birds Convention Act, 1994*.
- 1.24 *Mitigation measures* means “mitigation measures” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.25 *Offsetting plan* means “offsetting plan” as defined in section 1 of the *Applications for Authorization under Paragraph 35(2)(b) of the Fisheries Act Regulations*.
- 1.26 *Operation* means the phase of the Designated Project starting when the Designated Project begins receiving containerized goods for handling by truck and train, including periods during which these activities may temporarily cease.
- 1.27 *Potentially affected party* means a party that is identified as such by the Proponent pursuant to condition 3.1.
- 1.28 *Progressive reclamation* means reclamation that is carried out by the Proponent concurrently with all phases of the Designated Project to return progressively any physically disturbed area not intended for planned future use to a state as close to the baseline of the surrounding undisturbed landscape as possible, as soon after the disturbance as practical.

- 1.29 *Proponent* means Canadian National Railway Company and its successors or assigns.
- 1.30 *Qualified individual* means someone who, through education, experience and knowledge relevant to a particular matter, provides the Proponent with advice within their area of expertise. Knowledge relevant to a particular matter may include community and Indigenous knowledge.
- 1.31 *Record* means “record” as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.32 *Regulatory storm* means the greater of the 100-year and regional storm (the historical Hurricane Hazel storm event) that defines the extent of a riverine flood hazard in a given area.
- 1.33 *Relevant authorities* means federal and/or provincial authorities and/or municipal authorities that are in possession of specialist or expert information or knowledge, or that have a responsibility for the administration of a law or regulation, with respect to the subject matter of a condition set out in this Decision Statement.
- 1.34 *Reporting year* means January 1 of a calendar year through December 31 of the same calendar year.
- 1.35 *Stormwater management system* means a surface drainage collection system that consists of storm sewers, culverts, drainage ditches and stormwater management ponds and that temporarily detains stormwater and releases it gradually to manage the quality and quantity of stormwater run-off. A stormwater management pond is not a wetland or a waterbody for the purpose of the conditions set out in this Decision Statement.
- 1.36 *Structure, site or thing of historical, archaeological, paleontological or architectural significance* means a structure, site or thing that is determined by a qualified individual, on the basis of heritage value, to be associated with an aspect of the history or culture of the people of Canada, including Indigenous groups.
- 1.37 *Wetland* means land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation and various kinds of biological activity which are adapted to a wet environment and as further defined in the Canadian Wetland Classification System.
- 1.38 *Wetland functions* means the natural processes and derivation of benefits and values associated with wetland ecosystems, including economic production, fish and wildlife habitat, organic carbon storage, water supply and purification (e.g. groundwater recharge, flood control, maintenance of flow regimes, shoreline erosion buffering), and soil and water conservation, as well as tourism, heritage, recreational, educational, scientific, and aesthetic opportunities.

### **Conditions**

These conditions are established for the sole purpose of the Decision Statement issued under the *Canadian Environmental Assessment Act, 2012*. They do not relieve the Proponent from any obligation to comply with other legislative or other legal requirements of the federal, provincial, or local governments. Nothing in this Decision Statement shall be construed as reducing, increasing, or

otherwise affecting what may be required of the Proponent to comply with all applicable legislative or legal requirements.

## **2 General conditions**

- 2.1 The Proponent shall ensure that its actions in meeting the conditions set out in this Decision Statement during all phases of the Designated Project are considered in a careful and precautionary manner, promote sustainable development, are informed by the best information and knowledge including community and Indigenous knowledge, available at the time the Proponent takes action, are based on methods and models that are recognized by standard-setting bodies, are undertaken by qualified individuals, have applied the best available economically and technically feasible technologies to achieve continuous improvement and meet all engineering requirements for safe railway and facility operation.
- 2.2 The Proponent, when carrying out the Designated Project, shall do so as defined in condition 1.8 of this Decision Statement.
  - 2.2.1 The Proponent shall carry out the Designated Project such that no more than 450,000 containers are handled by the Designated Project per calendar year.
- 2.3 The Proponent shall ensure that its actions in meeting the conditions set out in this Decision Statement are taken in a way that is consistent with any applicable recovery strategy and action plans for listed species at risk.

### ***Consultation***

- 2.4 The Proponent shall, where consultation is a requirement of a condition set out in this Decision Statement:
  - 2.4.1 provide a written notice of the opportunity for the party or parties being consulted to present their views and information on the subject of the consultation;
  - 2.4.2 provide all information available and relevant to the scope and the subject matter of the consultation and a period of time not less than 15 days, or as otherwise agreed upon with the party or parties being consulted, to prepare their views and information;
  - 2.4.3 undertake an impartial consideration of all views and information presented by the party or parties being consulted on the subject matter of the consultation; and
  - 2.4.4 advise in a timely manner the party or parties being consulted on how the views and information received have been considered by the Proponent, including a rationale for why the views have, or have not, been integrated.
- 2.5 The Proponent shall, where consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and/or the Huron-Wendat Nation is a requirement of a condition set out in this Decision Statement, communicate with each Nation with respect to the manner to satisfy the consultation requirements referred to in condition 2.4, including methods of notification, the type of information and the period of time to be provided when seeking input, the process to be used by the Proponent to undertake impartial consideration of all views and information presented on the subject of the consultation, and the period of time and the means

to advise the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and/or the Huron-Wendat Nation of how their views and information were considered by the Proponent.

***Follow-up and adaptive management***

- 2.6 The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement, determine, as part of the development of each follow-up program and in consultation with the party or parties being consulted during the development, the following information:
  - 2.6.1 the methodology, location, frequency, timing and duration of monitoring associated with the follow-up program;
  - 2.6.2 the scope, content and frequency of reporting of the results of the follow-up program, including whether the reporting of any result may, if disclosed, cause specific harm to the environment;
  - 2.6.3 the frequency at which the follow-up program must be updated, unless otherwise required through the condition;
  - 2.6.4 the levels of environmental change relative to baseline that would require the Proponent to implement modified or additional mitigation measure(s), including instances where the Proponent may require Designated Project activities to be stopped; and
  - 2.6.5 the technically and economically feasible mitigation measures to be implemented by the Proponent if monitoring conducted as part of the follow-up program shows that the levels of environmental change referred to in condition 2.6.4 have been reached or exceeded.
- 2.7 The Proponent shall update the information determined for each follow-up program pursuant to condition 2.6 during the implementation of each follow-up program, at the minimum frequency determined pursuant to condition 2.6.3 and in consultation with the party or parties being consulted during the development of each follow-up program.
- 2.8 The Proponent shall provide the follow-up programs referred to in conditions 4.5, 4.10, 4.21, 5.9, 5.10, 5.13, 6.3, 6.10, 7.12, 8.4, 8.10, 8.13, 8.21, 8.25, 8.28, 8.32, 9.1 and 9.3, including the information determined for each follow-up program pursuant to condition 2.6, to the Agency and to the party or parties being consulted during the development of each follow-up program prior to the implementation of each follow-up program. The Proponent shall also provide any update made pursuant to condition 2.7 to the Agency and to the party or parties being consulted during the development of each follow-up program within 30 days of the follow-up program being updated.
- 2.9 The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement:
  - 2.9.1 implement the follow-up program according to the information determined pursuant to condition 2.6;
  - 2.9.2 conduct monitoring and analysis to verify the accuracy of the environmental assessment as it pertains to the particular condition and/or to determine the effectiveness of any mitigation measure;

- 2.9.3 determine whether modified or additional mitigation measure(s) are required based on the monitoring and analysis undertaken pursuant to condition 2.9.2;
  - 2.9.4 if modified or additional mitigation measures are required pursuant to condition 2.9.3, develop and implement these mitigation measure(s) in a timely manner and monitor them pursuant to condition 2.9.2. The Proponent shall notify the Agency within 24 hours of any modified or additional mitigation measure being implemented. If the Proponent implements any additional or modified mitigation measure not previously submitted to the Agency pursuant to condition 2.8, the Proponent shall submit a detailed description of the measure(s) to the Agency within 7 days of their implementation; and
  - 2.9.5 report all results of the follow-up program to the Agency no later than March 31 following any reporting year during which the follow-up program is implemented and, subject to information determined pursuant to 2.6.2, to the party or parties being consulted during the development of the follow-up program.
- 2.10 Where consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and/or the Huron-Wendat Nation is a requirement of a follow-up program, the Proponent shall discuss the follow-up program with each Nation and shall determine, in consultation with each Nation, opportunities for their participation in the implementation of the follow-up program, including the conduct of monitoring, the analysis and reporting of follow-up results and whether modified or additional mitigation measure(s) are required, as set out in condition 2.9.

***Annual reporting***

- 2.11 The Proponent shall, commencing in the reporting year during which the Minister issues the Decision Statement for the Designated Project, prepare an annual report that sets out, for that reporting year:
- 2.11.1 the activities undertaken by the Proponent to comply with each of the conditions set out in this Decision Statement;
  - 2.11.2 how the Proponent complied with condition 2.1;
  - 2.11.3 for conditions set out in this Decision Statement for which consultation is a requirement, how the Proponent considered any view and information that the Proponent received during or as a result of the consultation;
  - 2.11.4 the information referred to in conditions 2.6 and 2.7 for each follow-up program;
  - 2.11.5 a summary of the results of the follow-up program requirements identified in conditions 4.5, 4.10, 4.21, 5.9, 5.10, 5.13, 6.3, 6.10, 7.12, 8.4, 8.10, 8.13, 8.21, 8.25, 8.28, 8.32, 9.1 and 9.3;
  - 2.11.6 for any plan that is a requirement of a condition set out in this Decision Statement, any update made to the plan;
  - 2.11.7 any modified or additional mitigation measure implemented or proposed to be implemented by the Proponent, as determined pursuant to condition 2.9; and
  - 2.11.8 any change to the Designated Project for which the Proponent determined that conditions 2.16 and 2.17 did not apply, including a rationale for that determination, and any change to the Designated Project for which the Proponent determined that conditions 2.16 and 2.17 did apply.



- 2.12 The Proponent shall submit to the Agency the annual report referred to in condition 2.11, including a plain language executive summary in both official languages, no later than March 31 following the reporting year to which the annual report applies.

***Information sharing***

- 2.13 The Proponent shall publish on the Internet, or any medium which is publicly available, the annual reports and the executive summaries referred to in conditions 2.11 and 2.12, the air pollutant emissions reduction plans referred to in conditions 4.16 and 4.17, the final offsetting plan(s) referred to in condition 7.6, the wildlife management and connectivity plan referred to in condition 8.33, the cultural heritage property maintenance and re-use plan referred to in condition 11.5, the archaeological resources protection plan referred to in condition 11.8, the reports related to accidents and malfunctions referred to in conditions 14.5.4 and 14.5.5, the accident and malfunction communication plan referred to in condition 14.6, the schedules referred to in conditions 15.1 and 15.2, and any update or revision to the above documents, upon submission of these documents to the party or parties referenced in the respective conditions. The Proponent shall keep these documents publicly available for 15 years following their publication. The Proponent shall notify the Agency, the party or parties referenced in each respective condition, potentially affected parties, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation of the availability of these documents within 48 hours of their publication.
- 2.14 When the development of any plan is a requirement of a condition set out in this Decision Statement, the Proponent shall submit the final plan to the Agency prior to construction, unless otherwise required through the condition.

***Change of Proponent***

- 2.15 The Proponent shall notify the Agency, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation, Halton Region, Conservation Halton, the Town of Milton and other relevant authorities in writing no later than 30 days after the day on which there is any transfer of ownership, care, control or management of the Designated Project in whole or in part.

***Change to the Designated Project***

- 2.16 The Proponent shall consult with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation, Halton Region, Conservation Halton and other relevant authorities prior to notifying the Agency, pursuant to condition 2.17, of any potential change to the Designated Project.
- 2.17 The Proponent shall notify the Agency in writing of any potential change to the Designated Project that would result in a change to the Designated Project description included in this Decision Statement or that may result in adverse environmental effects. In notifying the Agency, the Proponent shall provide a description of the change(s) to the Designated Project, the predicted adverse environmental effects and the proposed mitigation measures and follow-up requirements to be implemented by the Proponent in relation to the predicted adverse environmental effects. The Proponent shall also describe the results of the consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation, Halton Region, Conservation Halton and other relevant authorities.

### **3 Community liaison communication process**

- 3.1 The Proponent shall identify, prior to construction, parties that may be potentially affected by the Designated Project or by any environmental effect of the Designated Project, which shall include representatives of local and municipal governments, nearby residents, community organizations and business organizations identified by the Proponent in appendix D of the environmental impact statement, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation. The Proponent shall provide the list of potentially affected parties, including their contact information, to the Agency prior to construction and shall provide an updated list to the Agency upon request during any phase of the Designated Project.
  
- 3.2 The Proponent shall develop, prior to construction and in consultation with potentially affected parties, a community liaison communication process. The Proponent shall implement the community liaison communication process throughout all phases of the Designated Project. The Proponent shall include, as part of the community liaison communication process, a method for potentially affected parties to provide feedback to the Proponent about any adverse environmental effect caused by any component of the Designated Project and a method for the Proponent to share information about the Designated Project with potentially affected parties, to document and respond to feedback received and to demonstrate how feedback has been addressed, including through the implementation of modified or additional mitigation measure(s) and/or modified or additional follow-up program requirement(s). This includes liaison with potentially affected parties throughout all phases of the Designated Project to identify and address potential impacts of truck traffic on the community and road safety. In doing so, the Proponent shall:
  - 3.2.1 determine, as part of the development of the community liaison communication process:
    - 3.2.1.1 the communication methods (including electronic and in-person communication methods) by which potentially affected parties may provide feedback to the Proponent and communication methods (including electronic and in-person communication methods) by which the Proponent shall share information about the Designated Project and address feedback received. The Proponent shall retain a third-party facilitator to support the exchange of information between the Proponent and potentially affected parties during in-person communication opportunities;
    - 3.2.1.2 how the Proponent shall document feedback received and how that feedback has been addressed, including through the implementation of any modified or additional mitigation measure and/or any modified or additional follow-up program requirement;
    - 3.2.1.3 how the Proponent shall report the information referred to in condition 3.2.1.2 to potentially affected parties (including the frequency at which the Proponent shall report that information, which shall be no less than quarterly, and the communication methods by which the Proponent shall report that information);
    - 3.2.1.4 the information about the Designated Project that the Proponent shall share with potentially affected parties, which shall include the following information:
      - 3.2.1.4.1 a summary of the results of all follow-up program requirements identified in conditions 4.5, 4.10, 4.21, 5.9, 5.10, 5.13, 6.3, 6.10, 7.12,

- 8.4, 8.10, 8.13, 8.21, 8.25, 8.28, 8.32, 9.1 and 9.3, including any modified or additional mitigation measure implemented or proposed to be implemented by the Proponent;
- 3.2.1.4.2 the quarterly reports related to noise complaints referred to in condition 4.9.3;
- 3.2.1.4.3 the land use history, construction details and photographic record referred to in condition 11.2.2;
- 3.2.1.4.4 the results of the post-construction inspections referred to in condition 11.4; and
- 3.2.1.4.5 the results of the heritage impact assessment referred to in condition 11.6.
- 3.2.1.5 how the requirements set out in conditions 3.2.1.1 to 3.2.1.3 may vary throughout any phase of the Designated Project, including during each phase of construction identified in the construction schedule referred to in condition 15.2, during the first year of operation and during the first year of operation at which the Designated Project operates at its full operational capacity;
- 3.2.2 provide the community liaison communication process to the Agency prior to construction;
- 3.2.3 as part of the implementation of the community liaison communication process:
  - 3.2.3.1 implement the community liaison communication process according to the information determined pursuant to conditions 3.2.1.1 to 3.2.1.5;
  - 3.2.3.2 respond to all feedback received through the community liaison communication process in a timely manner, including, if the Proponent determines that no mitigation measure and/or follow-up program requirement is required to address the feedback, by providing a rationale for that determination;
  - 3.2.3.3 implement any mitigation measure and/or follow-up program requirement that the Proponent determined is required to address feedback received (including any modified or additional mitigation measure and/or modified or additional follow-up program requirement); and
  - 3.2.3.4 provide to the Agency, as part of the annual report referred to in condition 2.11, all feedback received during the reporting year and how the Proponent has addressed all feedback, including any mitigation measure and/or any follow-up program requirement that the Proponent has implemented or plans to implement pursuant to condition 3.2.3.3, or a rationale as to why no mitigation measure or no follow-up program requirement is required to address the feedback.

#### **4 Atmospheric environment**

##### ***Light***

- 4.1 The Proponent shall measure, prior to construction, baseline light trespass and glare at the eight sites identified by the Proponent in table 4.5 of the document entitled *Technical Data Report Light*

(Appendix E.8) (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57).

- 4.2 The Proponent shall manage, during all phases of the Designated Project, lighting within the Designated Project Development Area such that light trespass and glare from the Designated Project meet or surpass:
  - 4.2.1 E2 rural guidelines for light trespass and glare as set out in the International Commission on Illumination's *Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations (2<sup>nd</sup> Edition)*; or
  - 4.2.2 E3 suburban guidelines for light trespass and glare as set out in the International Commission on Illumination's *Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations (2<sup>nd</sup> Edition)* if baseline light trespass and glare measured pursuant to condition 4.1 exceeds E2 rural guidelines for light trespass and glare as set out in the Guide.
- 4.3 The Proponent shall develop, prior to construction, mitigation measures to control the direction, timing and intensity of lighting within the Designated Project Development Area to mitigate adverse environmental effects of the Designated Project (including on migratory birds), while meeting engineering requirements for safe railway and facility operation. The Proponent shall implement these measures during all phases of the Designated Project. The Proponent shall submit these measures to the Agency prior to implementing them. As part of these measures, the Proponent shall:
  - 4.3.1 direct light fixtures toward active construction areas during construction and toward the terminal during operation;
  - 4.3.2 use down-cast light fixtures during operation;
  - 4.3.3 install glare reduction technologies on individual light fixtures; and
  - 4.3.4 require that all motor vehicles use low-beam headlights within the Designated Project Development Area.
- 4.4 The Proponent shall evaluate, prior to construction, the technical and economic feasibility of installing amber-coloured outdoor light fixtures with a Correlated Colour Temperature in the range of 3000 Kelvin within the Designated Project Development Area. The Proponent shall also evaluate, in consultation with relevant authorities, whether the use of amber lighting can reduce sky glow and glare from the Designated Project, is not harmful to wildlife and can meet all engineering requirements for safe railway and facility operation. In doing so, the Proponent shall:
  - 4.4.1 provide the results of the evaluation to the Agency and relevant authorities prior to construction, including the sources of information and methodology used for the evaluation; and
  - 4.4.2 install amber outdoor light fixtures with a Correlated Colour Temperature in the range of 3000 Kelvin and with no more than 2 percent of total emitted light with a wavelength of less than 500 nanometres within the Designated Project Development Area, unless the evaluation demonstrates that installing amber lighting is not technically or economically feasible or does not reduce sky glow and glare, is harmful to wildlife and/or does not meet all engineering requirements for safe railway and facility operation.

- 4.5 The Proponent shall develop, prior to construction and in consultation with the Town of Milton and other relevant authorities, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse changes to ambient lighting attributed to the Designated Project. As part of the implementation of the follow-up program, the Proponent shall:
- 4.5.1 monitor, during construction and until the end of the first year at which the Designated Project operates at its full operational capacity, light trespass and glare attributed to the Designated Project and compare monitoring results against the applicable guidelines referred to in condition 4.2.1 or 4.2.2; and
  - 4.5.2 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 4.5.1 demonstrate that modified or additional mitigation measures are required to ensure that light trespass and glare attributed to the Designated Project meet or surpass the applicable guidelines referred to in condition 4.2.1 or 4.2.2.

### **Noise**

- 4.6 The Proponent shall manage noise throughout all phases of the Designated Project so that the Designated Project causes the acoustic environment at any receptor location identified by the Proponent on figure 3 of the document entitled *Technical Data Report Noise Effects Assessment (Appendix E.10)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57) to change by less than one to five decibels, as set out in the U.S. Federal Transit Administration's *Transit Noise and Vibration Impact Assessment Manual*, and the level of highly annoyed to change by no more than 6.5%, as set out in Health Canada's *Guidance for Evaluating Human Health Impacts in Environmental Assessment: NOISE*, from baseline conditions documented by the Proponent in the document entitled *Technical Data Report Noise Effects Assessment (Appendix E.10)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57). In doing so, the Proponent shall:
- 4.6.1 construct, prior to operation, and maintain, throughout operation, noise barriers and/or vegetated berms within the Designated Project Development Area. The Proponent shall determine the locations and heights of the noise barriers and/or vegetated berms prior to construction and shall provide that information to the Agency prior to construction, including a rationale demonstrating how the location and height of each noise barrier and/or vegetated berm will cause change(s) to the acoustic environment to meet the thresholds for change referred to in condition 4.6;
  - 4.6.2 install a temporary sound barrier around the temporary portable concrete plant for the duration of any paving activity conducted during construction;
  - 4.6.3 install a temporary sound barrier around the construction site for the Lower Base Line grade separation;
  - 4.6.4 use noise-dampening technologies on construction vehicles and equipment and maintain the technologies in good working order;
  - 4.6.5 require employees and contractors associated with the Designated Project to abide by best practices for noise reduction during activities occurring within the Designated Project Development Area, including during loading and unloading activities, and encourage employees and contractors associated with the Designated Project to abide by

best practices for noise reduction during activities occurring outside the Designated Project Development Area, including when travelling between the Designated Project Development Area and the 400-series highway network. The Proponent shall provide these best practices to the Agency prior to implementing them; and

- 4.6.6 enclose generators used during construction and manage their overall sound power levels in a manner that reduces noise.
- 4.7 The Proponent shall develop, prior to construction and in consultation with potentially affected parties and the Town of Milton, a communication protocol to share information related to noise attributed to construction of the Designated Project. The Proponent shall implement the protocol during construction. The Proponent shall provide the protocol to the Agency potentially affected parties and the Town of Milton prior to construction. The protocol shall include procedures, including timing and methods, for sharing the following information:
  - 4.7.1 the schedule of construction activities, including construction activities that produce noise, and any update to that schedule;
  - 4.7.2 how the Proponent will notify the local community if the Proponent must conduct construction activities at nighttime pursuant to condition 4.8; and
  - 4.7.3 the details of the protocol for receiving complaints related to exposure to noise attributed to the Designated Project implemented pursuant to condition 4.9, including how to record a complaint.
- 4.8 The Proponent shall conduct construction activities during daytime, unless not technically feasible. If the Proponent must conduct any construction activity that produces noise during nighttime, the Proponent shall notify the local community prior to undertaking the activity according to the communication protocol implemented pursuant to condition 4.7.
- 4.9 The Proponent shall develop, prior to construction and in consultation with potentially affected parties and the Town of Milton, a protocol for receiving complaints related to exposure to noise attributed to the Designated Project. The Proponent shall implement the protocol during all phases of the Designated Project. The Proponent shall provide the protocol to the Agency, potentially affected parties and the Town of Milton prior to construction. As part of the implementation of the protocol, the Proponent shall:
  - 4.9.1 acknowledge any noise complaint attributable to any component of the Designated Project as soon as possible, or no later than 48 hours after the complaint is received, and shall implement any corrective action, if required to reduce exposure to noise, in a timely manner;
  - 4.9.2 take into account the thresholds for change referred to in condition 4.6 and the results of the monitoring conducted pursuant to condition 4.10 when determining if any corrective action is required to reduce exposure to noise; and
  - 4.9.3 provide, on a quarterly basis, a report of all complaints received during the reporting quarter and any corrective action taken (which may include the results of any noise measurement done in relation to any measure taken) to the Agency, potentially affected parties and the Town of Milton.
- 4.10 The Proponent shall develop, prior to construction and in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, Health Canada, the Canadian

Transportation Agency and other relevant authorities, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse changes to the acoustic environment attributed to the Designated Project. As part of the implementation of the follow-up program, the Proponent shall compare changes to the acoustic environment attributed to the Designated Project against the thresholds for change referred to in condition 4.6. In doing so, the Proponent shall:

- 4.10.1 monitor day-night average sound levels continuously during the first four weeks of each phase of construction identified in the construction schedule referred to in condition 15.2, at locations to be determined during the development of the follow-up program;
- 4.10.2 monitor day-night average sound levels continuously during the first four weeks of operation and during four additional weeks when the Designated Project operates at its full operational capacity, at locations to be determined during the development of the follow-up program;
- 4.10.3 as part of the monitoring referred to in condition 4.10.2, monitor low-frequency noise in a manner that allows comparison with the American National Standards Institute's *Quantities and Procedures for Description and Measurement of Environmental Sound Part 4: Noise Assessment and Prediction of Long-Term Community Response (ANSI S12.9-2005/Part 4)*; and
- 4.10.4 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in conditions 4.10.1, 4.10.2 or 4.10.3 demonstrate that modified or additional mitigation measures are required to maintain changes to the acoustic environment attributed to the Designated Project within the thresholds for change referred to in condition 4.6, including in the area north of Britannia Road.

#### ***Air quality***

- 4.11 The Proponent shall implement, during all phases of the Designated Project, measures to mitigate fugitive dust emissions attributed to the Designated Project, including by:
  - 4.11.1 using dust suppressants with the least potential for adverse environmental effects when conducting any Designated Project activity that may generate dust;
  - 4.11.2 not handling non-enclosed granular materials during sustained high wind conditions;
  - 4.11.3 covering or enclosing sources of granular materials stored in open containers within the Designated Project Development Area;
  - 4.11.4 building and managing temporary and permanent roads and parking lots located within the Designated Project Development Area to reduce fugitive dust emissions from dirt surfaces, including through paving and the removal of loose materials on road surfaces; and
  - 4.11.5 establishing speed limits of no more than 30 kilometres/hour on temporary and permanent roads located within the Designated Project Development Area and requiring that all persons abide by these speed limits.
- 4.12 If the Proponent chooses to install a temporary portable concrete plant for the Designated Project, the Proponent shall include a bag house and shall install and operate the temporary

portable concrete plant in a manner that mitigates fugitive dust emissions attributed to the operation of the concrete plant. In doing so, the Proponent shall:

- 4.12.1 store dry material only within designated material storage areas and control dust emissions when transferring and handling dry material;
  - 4.12.2 enclose material transfer points, conveyors and mixing equipment within leak-proof structures; and
  - 4.12.3 minimize drop height during truck loading and unloading activities to the lowest height that is technically feasible.
- 4.13 The Proponent shall implement measures to mitigate air emissions attributed to the Designated Project during all phase of the Designated Project, including by:
- 4.13.1 implementing a no-idling policy for mobile equipment and road vehicles within the Designated Project Development Area and requiring that all persons abide by this policy, unless not feasible for health or safety reasons;
  - 4.13.2 giving preference, through the tender process, to third-party contractors to use zero-emission mobile and stationary off-road equipment for any physical activity undertaken in relation to the construction of the Designated Project or, if zero-emission equipment is not available or its use is not technically or economically feasible, providing a rationale for that determination and requiring third-party contractors to use equipment that:
    - 4.13.2.1 uses diesel engines operating on diesel or low-carbon diesel fuel that meet Tier 4 emissions standards where technically and economically feasible or, at a minimum, Tier 3 emission standards and is equipped with verified diesel particulate filters and for which both the engines and the filters are maintained in accordance with maintenance instructions provided by the manufacturer; or
    - 4.13.2.2 uses low-carbon fuel, which may include natural gas, propane or hydrogen, while meeting Tier 4 emissions standards where technically and economically feasible or, at a minimum, Tier 3 emission standards and being maintained in accordance with maintenance instructions provided by the manufacturer;
  - 4.13.3 during operation, using mobile and stationary off-road equipment that is zero-emission for any physical activity undertaken by the Proponent in relation to the Designated Project, including maintenance activities, or, if zero-emission equipment is not available or its use is not technically or economically feasible, providing a rationale for that determination and using equipment that meets the requirements referred to in condition 4.13.2.1 or 4.13.2.2;
  - 4.13.4 reducing distance travelled on-site by outgoing vehicles and minimizing container handling turnaround time during operation; and
  - 4.13.5 ensuring emission control technologies are not removed from equipment and vehicles operated by the Proponent for the Designated Project, unless removal is necessary for repair and maintenance activities, after which the emission control technologies shall be reinstalled or replaced before the equipment and vehicles are operated again.
- 4.14 The Proponent shall provide to the Agency, as part of the annual report referred to in condition 2.11, an update on the technical and economic feasibility of fully electrifying the Proponent-



owned fleet of trucks that may serve the Designated Project. The Proponent shall provide that information annually until such time that the Proponent fully electrifies its truck fleet. In providing that information, the Proponent shall:

- 4.14.1 provide a rationale as to why the truck fleet has, or has not, been electrified; and
  - 4.14.2 provide an update on the electric truck pilot project referred to by the Proponent in its Closing Statement Submission (Canadian Impact Assessment Registry Reference Number 80100, Document Number 972), including the results of the pilot project when it is completed.
- 4.15 The Proponent shall provide to the Agency, as part of the annual report referred to in condition 2.11, an update on the technical and economic feasibility of implementing idling reduction technologies on Proponent-owned locomotives that may serve the Designated Project. The Proponent shall provide that information annually until such time that the Proponent implements these technologies. In providing that information, the Proponent shall provide a rationale as to why these technologies have, or have not, been implemented.
- 4.16 The Proponent shall develop, prior to operation and in consultation with Environment and Climate Change Canada, Transport Canada and other relevant authorities, an air pollutant and greenhouse gas emissions reduction plan to encourage continual improvements in the reduction of air pollutant and greenhouse gas emissions from trucks serving the Designated Project. As part of the development of the plan, the Proponent shall establish emissions thresholds for high-emitting trucks. The Proponent shall submit the plan to the Agency prior to operation and shall implement the plan during operation. As part of the implementation of the plan, the Proponent shall:
- 4.16.1 implement incentive measures to encourage truck operators serving the Designated Project to lower truck emissions and implement clean technology, which may include low-carbon fuel, low-emission auxiliary power units or idling reduction technologies;
  - 4.16.2 install and maintain signs at the exit of the terminal reminding truck drivers serving the Designated Project to reduce idling outside of the Designated Project Development Area;
  - 4.16.3 implement measures (other than visual inspection) to collect information about air pollutants and greenhouse gases emitted by trucks entering the Designated Project Development Area, including concentrations and quantities of nitrogen oxides, carbon dioxide and particulate matters, and to notify truck operators of any truck that meets or exceeds the emissions thresholds for high-emitting trucks established during the development of the plan. As part of these measures, the Proponent may collect information through the installation of emission measurement technologies within the Designated Project Development Area or through review of on-board diagnostic systems; and
  - 4.16.4 report to the Agency, as part of the annual report referred to in condition 2.11, information about air pollutants and greenhouse gases collected pursuant to condition 4.16.3 during the reporting year, including the number and proportion of trucks meeting or exceeding the thresholds for high-emitting trucks established during the development of the plan, and how the Proponent has addressed any incidence of high-emitting trucks through notification to truck operators and/or other means.

- 4.17 The Proponent shall develop, prior to operation and in consultation with Environment and Climate Change Canada, Transport Canada and other relevant authorities, an air pollutant and greenhouse gas emissions reduction plan to require continual improvements in the reduction of air pollutant and greenhouse gas emissions from locomotives serving the Designated Project. As part of the development of the plan, the Proponent shall establish five-year targets for increasing over time the proportion of locomotives serving the Designated Project that meet, at a minimum, Tier 4 emissions standards pursuant to the *Locomotive Emissions Regulations*, and are maintained, in accordance with engine maintenance instructions provided by the manufacturer, to remain at least Tier 4 compliant, or of locomotives that are retrofitted with verified diesel oxidation catalysts and the latest available engine upgrades, until such time that the Designated Project is fully served by these locomotives. The Proponent shall submit the plan to the Agency prior to operation and shall implement the plan throughout operation.
- 4.17.1 As part of the annual report referred to in condition 2.11, the Proponent shall report its progress in meeting the five-year targets established during the development of the plan.
- 4.18 The Proponent shall review the air pollutant and greenhouse gas emissions reduction plans referred to in conditions 4.16 and 4.17, in consultation with Environment and Climate Change Canada, Transport Canada and other relevant authorities, after the fifth year of operation and thereafter at a time to be determined during each review. If the Proponent updates the plan(s), the Proponent shall submit any updated plan to the Agency, Environment and Climate Change Canada, Transport Canada and other relevant authorities within 30 days of the plan(s) being updated.
- 4.19 The Proponent shall manage, during operation, the number of container trucks entering the Designated Project Development Area such that the monthly average daily number of container trucks entering the Designated Project Development Area does not exceed 800 trucks and the maximum daily number of container trucks entering the Designated Project Development Area does not exceed 880 trucks.
- 4.20 The Proponent shall develop, prior to operation, and implement, during operation, measures to optimise the efficiency of container trucks to handle contained goods to and from the Designated Project Development Area. The Proponent shall submit these measures to the Agency prior to implementing them.
- 4.20.1 As part of the annual report referred to in condition 2.11, the Proponent shall report the number of container trucks entering and exiting the Designated Project Development Area, including the number of container trucks entering the Designated Project Development Area with a container or without a container and the number of container trucks exiting the Designated Project Development Area with a container or without a container, during the reporting year.
- 4.21 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Health Canada, the Ontario Ministry of the Environment, Conservation and Parks, Halton Region, the Town of Milton, the Mississaugas of the Credit First Nation and the Six Nations of the Grand River, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse changes to air quality attributed to the Designated Project. The Proponent shall take into account the Canadian Council of Ministers of the Environment's *Ambient Air Monitoring and Quality*

*Assurance/Quality Control Guidelines* when developing and implementing the follow-up program. As part of the implementation of the follow-up program, the Proponent shall:

- 4.21.1 update the 2015-2016 air quality baseline information provided by the Proponent as part of the environmental assessment by conducting pre-construction monitoring and/or by compiling publicly available data and revise, as required based on updated baseline information, maximum predicted ground-level concentrations of air quality contaminants of concern attributed to the Designated Project (including particulate matter, fine particulate matter, coarse particulate matter, ozone, nitrogen dioxide, sulphur dioxide, benzene, 1,3-butadiene, benzo(a)pyrene and carbon monoxide). The Proponent shall submit the updated baseline information and the revised predictions to the Agency prior to construction;
- 4.21.2 during construction, monitor (at locations, based on prevailing winds, upwind of the Designated Project Development Area, at or near the Designated Project Development Area boundary, and downwind of the Designated Project Development Area, at or near the property line):
  - 4.21.2.1 particulate matter, fine particulate matter and nitrogen dioxide continuously and report concentrations as hourly averages;
  - 4.21.2.2 benzene and benzo(a)pyrene non-continuously with an air sample collected over a 24-hour period (midnight to midnight) once every six days; and
  - 4.21.2.3 meteorological conditions (including wind speed, wind direction, temperature and relative humidity);
- 4.21.3 during the first five years of operation, or until the end of the third year during which the Designated Project operates at its full operational capacity, whichever comes later, monitor (at the same monitoring locations referred to in condition 4.21.2):
  - 4.21.3.1 particulate matter, fine particulate matter and nitrogen dioxide continuously and report concentrations as hourly averages;
  - 4.21.3.2 benzene and benzo(a)pyrene non-continuously with an air sample collected over a 24-hour period (midnight to midnight) once every six days; and
  - 4.21.3.3 meteorological conditions (including wind speed, wind direction, temperature and relative humidity);
- 4.21.4 compare the results of the monitoring referred to in conditions 4.21.2 and 4.21.3 to:
  - 4.21.4.1 the Canadian Council of Ministers of the Environment's *Canadian Ambient Air Quality Standards* or, in the absence of federal criteria, to the *Ontario Ambient Air Quality Criteria*; or
  - 4.21.4.2 the revised maximum predicted ground-level concentrations of air quality contaminants referred to in condition 4.21.1 if the updated baseline information referred to in condition 4.21.1 already exceeds the air quality standards referred to in condition 4.21.4.1;
- 4.21.5 if the comparison undertaken pursuant to condition 4.21.4.1 or 4.21.4.2 demonstrates any exceedance of the air quality standards referred to in condition 4.21.4.1 or any exceedance of the revised maximum predicted ground-level concentrations of air quality contaminants referred to in 4.21.1, determine, in consultation with the parties involved

in the development of the follow-up program, the source(s) of any such exceedance. If the Proponent determines, in consultation with the parties involved in the development of the follow-up program, that the Designated Project is contributing to any such exceedance, the Proponent shall develop and implement modified or additional mitigation measures to mitigate the emissions of air quality contaminants attributed to the Designated Project.

## 5 Water

### *Surface water*

- 5.1 The Proponent shall design, in consultation with Conservation Halton, the Town of Milton, Environment and Climate Change Canada, Fisheries and Oceans Canada, other relevant authorities, the Mississaugas of the Credit First Nation and the Six Nations of the Grand River, and implement the Designated Project such that maximum and minimum flows of waterbodies affected by the Designated Project located outside of the Designated Project Development Area are maintained during all phases of the Designated Project, and that sufficient capacity exists to safely accommodate and convey the range of climate conditions that could be reasonably expected during the Designated Project's lifetime, including at least one regulatory storm event.
- 5.2 The Proponent shall design, in consultation with Conservation Halton, the Town of Milton, Environment and Climate Change Canada, Fisheries and Oceans Canada and other relevant authorities, and implement a stormwater management system to collect and treat all stormwater runoff from the Designated Project prior to release to Indian Creek and Tributary A. In doing so, the Proponent shall:
  - 5.2.1 design the stormwater management system so that it can convey multiple storm events, including a regulatory storm event;
  - 5.2.2 install oil grit separators for the administration and maintenance buildings, gate area and work pad areas to capture sediments, oil and grease before discharge to the wet ponds;
  - 5.2.3 install shut off valves on the stormwater management pond outlets; and
  - 5.2.4 implement end-of-pipe storage volumes that take into account Enhanced Protection requirements for long-term average suspended solids under Ontario's *Stormwater Management Planning and Design Manual*.
- 5.3 The Proponent shall not use salt for de-icing or traction control purposes within the Designated Project Development Area during any phase of the Designated Project, unless other technically and economically feasible methods for de-icing or traction control purposes may result in unsafe construction conditions or unsafe railway or facility operation. If the Proponent must use salt, the Proponent shall develop, in consultation with Conservation Halton and other relevant authorities, and implement measures to mitigate salt loading into the stormwater management system. The Proponent shall submit these measures to the Agency prior to implementing them and shall provide a rationale as to why other methods are not technically or economically feasible.
- 5.4 The Proponent shall develop, in consultation with Conservation Halton and other relevant authorities, and implement measures to control erosion and sedimentation within the Designated Project Development Area to avoid the deposit of sediments in waterbodies when conducting any

activity, including dewatering, during construction and operation. These measures shall include the installation of erosion and sedimentation control devices and vegetation planting. The Proponent shall submit these measures to the Agency prior to implementing them.

- 5.5 The Proponent shall undertake equipment fuelling and maintenance, store substances with the potential to cause harmful effects to the receiving environment and deposit water removed during dewatering at least 30 metres from any wetland or waterbody.
- 5.6 The Proponent shall implement measures to prevent wet concrete or cement-laden water, including high pH run-off occurring during concrete work, from entering any wetland or waterbody during construction.
- 5.7 The Proponent shall collect and treat all wastewaters and wash waters, taking into account the Canadian Council of Ministers of the Environment's *Canadian Water Quality Guidelines for the Protection of Aquatic Life*, before discharging them in any wetland or waterbody.
- 5.8 The Proponent shall develop, in consultation with Conservation Halton and other relevant authorities, and implement measures to mitigate the mobilization and transport of potential residual agricultural contaminants within the Designated Project Development Area towards waterbodies during all phases of the Designated Project, including measures to allow time for increased die-off of pathogenic organisms and volatilization of agricultural contaminants prior to soil disturbance and removal of nutrient compounds through plant harvesting.
- 5.9 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Fisheries and Oceans Canada, the Town of Milton, Conservation Halton and other relevant authorities, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to the stormwater management system. As part of the implementation of the follow-up program, the Proponent shall:
  - 5.9.1 review, every five years following the end of construction, the performance of the stormwater management system in light of the most current climate change projections, including through the review of downstream hydrographs and floodlines; and
  - 5.9.2 develop and implement modified or additional mitigation measures if any review conducted pursuant to condition 5.9.1 demonstrates that modified or additional mitigation measures are required to maintain downstream hydrographs and floodlines unaltered, unless otherwise directed or advised by Environment and Climate Change Canada in consultation with Conservation Halton.
- 5.10 The Proponent shall develop, in consultation with Environment and Climate Change Canada, Conservation Halton and other relevant authorities, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse changes to surface water quality and quantity attributed to the Designated Project. As part of the development of the follow-up program, the Proponent shall determine the water quality parameters to be monitored in order to support the comparison of measured parameters to the levels predicted during the environmental assessment. The water quality parameter shall include the effluent contaminants of concern identified by the Proponent in table 7.4-1 submitted in response to Information Request 7.4 (Canadian Impact Assessment

Registry Reference Number 80100, Document Number 680). As part of the implementation of the follow-up program, the Proponent shall:

- 5.10.1 monitor surface water quantity continuously during construction and for at least five years following the end of construction;
- 5.10.2 monitor surface water quality, during construction and for at least five years following the end of construction, at least monthly and during high flows and upset conditions;
- 5.10.3 conduct the monitoring referred to in conditions 5.10.1 and 5.10.2 both at locations where water flows towards the Designated Project Development Area and at locations where water flows away from the Designated Project Development Area, including the effluent of the stormwater management ponds;
- 5.10.4 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 5.10.1 or 5.10.2 demonstrate that modified or additional mitigation measures are required to mitigate adverse changes to surface water quality and quantity attributed to the Designated Project, including so that water discharged from the stormwater management system meets applicable water quality standards; and
- 5.10.5 determine, in consultation with Environment and Climate Change Canada, Conservation Halton and other relevant authorities and based on the results of the monitoring referred to in conditions 5.10.1 and 5.10.2, if additional monitoring is required after the first five years following the end of construction.

### **Groundwater**

- 5.11 The Proponent shall develop, in consultation with Conservation Halton and other relevant authorities, and implement measures to maintain baseline groundwater flow and prevent the preferential movement of groundwater along servicing alignments.
- 5.12 The Proponent shall estimate, prior to construction, the dewatering requirements of the Designated Project and shall provide that information to the Agency prior to construction. In the event that the Proponent determines that construction of the Designated Project requires dewatering in excess of 50,000 litres/day, the Proponent shall implement a dewatering system to dissipate the energy and reduce the sediment content of discharging water during construction.
- 5.13 The Proponent shall develop, prior to construction and in consultation with Natural Resources Canada, Conservation Halton and other relevant authorities, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse changes to groundwater quality and quantity attributed to the Designated Project. As part of the implementation of the follow-up program, the Proponent shall:
  - 5.13.1 monitor, during construction and for a minimum of one year following the end of construction, groundwater levels and quality within the Designated Project Development Area and at private wells to which the Proponent is granted access located within the Local Assessment Area defined by the Proponent on figure 6 of the document entitled *Technical Data Report Hydrogeology (Appendix E.6)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57). In the event that the

Proponent determines that construction dewatering is required pursuant to condition 5.12, the Proponent shall also monitor wells located within the projected dewatering cone of depression and to which the Proponent is granted access to determine the potential for drawdown interference; and

- 5.13.2 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 5.13.1 demonstrate that modified or additional measures are required to maintain groundwater quantity and quality as predicted by the Proponent as part of the environmental assessment in the document entitled *Technical Data Report Hydrogeology (Appendix E.6)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57).

## **6 Terrestrial environment**

- 6.1 The Proponent shall design, prior to construction and in consultation with Environment and Climate Change Canada, Conservation Halton, other relevant authorities, the Mississaugas of the Credit First Nation and the Six Nations of the Grand River, and maintain, throughout operation, 7.1 hectares of replacement online and offline wetlands within the Designated Project Development Area in a manner that supports the maintenance of ecological functions in the Bronte Creek watershed and that enhances wetland habitat for turtle and breeding opportunities for wetland-dependant birds. In doing so, the Proponent shall establish the constructed riparian wetlands with locally-occurring native emergent and riparian vegetation. The Proponent shall construct the replacement wetlands before removing the existing wetlands, unless not technically feasible.
  - 6.1.1 If it is not technically feasible to construct the replacement wetlands before removing the existing wetlands, the Proponent shall provide a rationale for that determination and shall construct the replacement wetlands within three years of the start of construction.
- 6.2 The Proponent shall design, in consultation with Conservation Halton, and maintain, throughout operation, drainage features around Designated Project components, including culverts beneath the mainline, to maintain baseline drainage and inflows and outflows to and from any pre-existing wetland that are retained within the Designated Project Development Area following construction. In doing so, the Proponent shall:
  - 6.2.1 conduct, prior to construction and in consultation with Conservation Halton, a feature-based water balance analysis for all wetlands with drainage areas that may be affected by the Designated Project to understand the hydrological impacts of site alteration (including water inflows and outflows) on all wetlands located within the Designated Project Development Area and to mitigate the adverse changes to wetlands and wetland functions attributed to the Designated Project. As part of the consultation, the Proponent shall consult Conservation Halton regarding about the types, frequency and timing of measurements used when conducting the analysis;
  - 6.2.2 take into account the results of the feature-based water balance analysis conducted pursuant to condition 6.2.1 to inform the design and maintenance of the replacement wetlands referred to in condition 6.1;

- 6.2.3 take into account the results of the feature-based water balance analysis conducted pursuant to condition 6.2.1 to inform the design of the stormwater management system; and
  - 6.2.4 submit to the Agency, prior to construction, the results of the feature-based water balance analysis conducted pursuant to condition 6.2.1 and how the Proponent took into account these results pursuant to conditions 6.2.2 and 6.2.3.
- 6.3 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Conservation Halton and other relevant authorities, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to the adverse changes to wetlands and wetland functions attributed to the Designated Project. As part of the implementation of the follow-up program, the Proponent shall:
- 6.3.1 monitor, for at least five years following the end of construction, the areal extent, encroachment by invasive vegetation species and success of native vegetation planting for all retained and constructed wetlands located within the Designated Project Development Area;
  - 6.3.2 monitor, for at least five years following the end of construction, water level fluctuations in all retained and constructed wetlands located within the Designated Project Development Area and compare monitoring results against baseline fluctuations;
  - 6.3.3 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 6.3.1 or 6.3.2 demonstrate that modified or additional mitigation measures are required such that the total areal extent of wetlands within the Designated Project Development Area is maintained or increased over time and retained and constructed wetlands maintain their functions over time; and
  - 6.3.4 determine, in consultation with Environment and Climate Change Canada, Conservation Halton and other relevant authorities and based on the results of the monitoring referred to in conditions 6.3.1 and 6.3.2, if additional monitoring is required after the first five years following the end of construction, including the duration of that additional monitoring.
- 6.4 The Proponent shall establish and maintain, during all phases of the Designated Project, a buffer of undisturbed vegetation around all retained and constructed wetlands and along riparian areas located within the Designated Project Development Area. In doing so, the Proponent shall:
- 6.4.1 determine the width of the buffer(s) prior to construction, in consultation with relevant authorities, and shall provide that information to the Agency prior to construction; and
  - 6.4.2 conduct work or activity within the buffer only to the extent necessary to meet engineering requirements for safe railway and facility operation, to install and maintain erosion or sediment control measures and to conduct channel realignment, restoration and naturalization work.
- 6.5 The Proponent shall delineate, prior to construction, areas on the ground within which construction will take place. The Proponent shall not undertake any construction activity outside of these areas, to the extent that it is technically feasible or unless required to meet engineering requirements for safe railway and facility operation.



- 6.6 The Proponent shall minimize soil disturbance and shall retain vegetation, including wildlife trees, within and around the Designated Project Development Area, to the extent that it is technically feasible or unless required to meet engineering requirements for safe railway and facility operation.
- 6.7 The Proponent shall handle and store soils during construction in a manner that protects soil quality for re-use. In the event that the Proponent encounters contaminated soils during construction, the Proponent shall determine the suitability of re-using that soil before re-using it. The Proponent shall dispose of any soil not suitable for re-use according to proper screening and disposal requirements, taking into account Ontario's *Management of Excess Soil – A Guide for Best Management Practices*.
- 6.8 The Proponent shall implement measures, during construction, to avoid the introduction or spread of invasive vegetation within the Designated Project Development Area, including from equipment brought on-site from other worksites and from imported fill. In doing so, the Proponent shall take into account Ontario Invasive Plant Council's *Clean Equipment Protocol for Industry*.
- 6.9 The Proponent shall conduct progressive reclamation of areas disturbed by the Designated Project. The Proponent shall use native Ontario groundcover species and nurse crops when conducting progressive reclamation.
- 6.10 The Proponent shall develop, prior to construction and in consultation with Conservation Halton and other relevant authorities, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to progressive reclamation of the Designated Project Development Area conducted pursuant to condition 6.9, including the establishment of native Ontario groundcover species and nurse crops. As part of the development of the follow-up program, the Proponent shall identify objectives that shall be used by the Proponent to evaluate the effectiveness of the progressive reclamation. The Proponent shall implement the follow-up program once progressive reclamation is completed and shall continue to implement the follow-up program until the Proponent has determined, in consultation with Conservation Halton and other relevant authorities, that the objectives have been met.

## **7 Fish and fish habitat**

- 7.1 The Proponent shall develop, prior to construction and in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, Conservation Halton and other relevant authorities, and implement, during all phases of the Designated Project, measures to protect fish and fish habitat when conducting any Designated Project activity in or near water not already approved under the *Fisheries Act* and its regulations, taking into account Fisheries and Oceans Canada's *Measures to protect fish and fish habitat*.
- 7.2 The Proponent shall have a qualified individual, who is an aquatic biologist, salvage and relocate fish prior to conducting any Designated Project activity requiring the removal of fish habitat, including dewatering, culvert installations, channel realignment or any construction work undertaken by a contractor associated with the Designated Project, in a manner that is consistent

with any authorization issued under the *Fisheries Act* and its regulations. In doing so, the Proponent shall:

- 7.2.1 salvage and relocate fish to the satisfaction of Fisheries and Oceans Canada;
  - 7.2.2 give preference to relocating fish within the same waterbody, outside of the work area; and
  - 7.2.3 if relocating fish within the same waterbody is not technically feasible, relocate fish within the same watershed where suitable habitat exists, outside of the work area.
- 7.3 The Proponent shall design, install and operate the water and pump intake structures located in fish-bearing water within the Designated Project Development Area in a manner that mitigates the incidental capture of fish by entrainment and impingement and is consistent with the *Fisheries Act* and its regulations. In doing so, the Proponent shall use an appropriately sized fish screen, taking into account Fisheries and Oceans Canada's *Freshwater Intake End-of-Pipe Fish Screen Guideline* and *Interim code of practice: end-of-pipe fish protection screens for small intakes in freshwater*, and shall not disturb the bed of the waterbody.
- 7.4 The Proponent shall conduct any in-water construction activity, including any activity associated with the realignment of Indian Creek and Tributary A, outside of restricted activity timing windows for fish species defined for the Southern Region by Ontario Ministry of Natural Resources and Forestry, unless otherwise permitted by relevant authorities.
- 7.4.1 If the Proponent must conduct any in-water construction activity during the restricted activity timing windows, the Proponent shall develop and implement additional mitigation measures, in consultation with Fisheries and Oceans Canada, Conservation Halton and other relevant authorities, to protect fish during sensitive life stages, including migration and spawning. The Proponent shall submit these measures to the Agency prior to implementing them.
- 7.5 The Proponent shall develop, to the satisfaction of Fisheries and Oceans Canada and in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and Conservation Halton, and implement an offsetting plan in relation to fish and fish habitat. The Proponent shall submit the approved offsetting plan to the Agency prior to implementation. As part of the development of the offsetting plan, the Proponent shall:
- 7.5.1 delineate existing and future fish habitat, including riparian buffers; and
  - 7.5.2 describe how created habitat will meet the requirements of life stages for fish species likely to be affected by the Designated Project.
- 7.6 The Proponent shall advise the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and Conservation Halton on how the views and information they provided to the Proponent as part of the development of the offsetting plan referred to in condition 7.5 have been considered by the Proponent, including a rationale for why the views and information have, or have not, been integrated, prior to submitting the final offsetting plan to Fisheries and Oceans Canada for approval. The Proponent shall submit that rationale to the Agency prior to implementing the approved offsetting plan.
- 7.7 The Proponent shall, for any fish habitat offsetting measure proposed in the approved offsetting plan referred to in condition 7.5 that may cause adverse environmental effects not considered in

the environmental assessment, develop and implement, following consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, Conservation Halton and other relevant authorities, measures to mitigate those effects. The Proponent shall submit these measures to the Agency prior to implementing them.

- 7.8 The Proponent shall fell trees away from waterbodies and shall immediately remove trees, debris or soils inadvertently deposited in any location within the Designated Project Development Area that may cause a loss of flood storage.
- 7.9 The Proponent shall apply, in consultation with Conservation Halton, natural channel design principles when realigning Indian Creek and Tributary A. In doing so, the Proponent shall incorporate natural bed morphology and planform geometry to the realigned channels in a manner that promotes natural sediment transport processes and such that the realigned channels:
  - 7.9.1 do not excessively aggrade or degrade;
  - 7.9.2 convey baseline flow levels;
  - 7.9.3 maintain baseline bankfull frequency;
  - 7.9.4 do not alter downstream channel morphology; and
  - 7.9.5 provide fish habitat features and allow for fish migration and passage.
- 7.10 The Proponent shall realign Indian Creek and Tributary A in a manner that minimizes the extent and duration of flow diversions in existing channels, including by:
  - 7.10.1 constructing the realigned channels offline;
  - 7.10.2 siting the realigned channels predominantly outside of the existing channels;
  - 7.10.3 not commissioning each realigned channel or channel segment until such time that all realignment works in that channel or channel segment are completed; and
  - 7.10.4 leaving earthen plugs in the connection points with the existing channels until such time that the realigned channels are vegetated and the Proponent commissions the realigned channels or channel segments pursuant to condition 7.10.3.
- 7.11 The Proponent shall develop, prior to construction and in consultation with Fisheries and Oceans Canada and Conservation Halton, and implement, during operation, measures to mitigate increased temperature in water discharged from the stormwater management system such that collected overland runoff flows at a temperature no higher than baseline conditions, taking into account Ontario's *Stormwater Management Planning and Design Manual*. As part of these measures, the Proponent shall:
  - 7.11.1 maintain vegetated edges and berms around the wet ponds and along the outlet channel;
  - 7.11.2 maintain grassed swales; and
  - 7.11.3 install below-grade pipes and bottom draw outlet pipes.
- 7.12 The Proponent shall develop, prior to construction and in consultation with Fisheries and Oceans Canada, Conservation Halton, the Mississaugas of the Credit First Nation and the Six Nations of

the Grand River, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to adverse environmental effects on fish and fish habitat attributed to the Designated Project. The Proponent shall implement the follow-up program at least until the end of the fifth year of operation. As part of the implementation of the follow-up program, the Proponent shall:

- 7.12.1 monitor the effectiveness of the offsetting measures implemented as part of the approved offsetting plan(s) referred to in condition 7.5;
- 7.12.2 monitor channel stability throughout the Designated Project Development Area, including channel cross-sections, bed substrate, bed morphology and detailed longitudinal profiles, to track channel migration. In doing so, the Proponent shall:
  - 7.12.2.1 conduct spring monitoring of in-stream structures through visual assessment and photo documentation; and
  - 7.12.2.2 conduct fall monitoring of stream characteristics (including profile, pattern, dimensions and pebble counts);
- 7.12.3 monitor water temperature of the overland runoff flows from the stormwater management system;
- 7.12.4 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 7.12.1, 7.12.2 or 7.12.3 demonstrate that modified or additional mitigation measures are required to mitigate adverse environmental effects on fish and fish habitat attributed to the Designated Project, including fish and fish habitat downstream of the Local Assessment Area, defined by the Proponent in section 3.2 of the document entitled *Technical Data Report Fish and Fish Habitat (Appendix E.4)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57); and
- 7.12.5 before the end of the fifth year of operation, determine, in consultation with Fisheries and Oceans Canada and Conservation Halton and based on the results of the monitoring referred to in conditions 7.12.1, 7.12.2 and 7.12.3, if additional monitoring is required. If additional monitoring is required, the Proponent shall update the follow-up program pursuant to condition 2.7 and shall implement the additional follow-up requirements.

## **8 Wildlife**

### ***Migratory birds***

- 8.1 The Proponent shall carry out the Designated Project in a manner that protects migratory birds and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment and Climate Change Canada's *Avoidance Guidelines* to reduce risk to migratory birds. The Proponent's actions when carrying out the Designated Project shall be in compliance with the *Migratory Birds Convention Act, 1994*, the *Migratory Birds Regulations* and with the *Species at Risk Act*.
- 8.2 The Proponent shall ensure that vegetation in migratory bird habitat located within the Designated Project Development Area remains undisturbed during the breeding season for migratory birds. In doing so, the Proponent shall:

- 8.2.1 determine the dates of the breeding season, in consultation with Environment and Climate Change Canada, for any year that vegetation clearing shall occur; and
  - 8.2.2 if vegetation clearing outside of the breeding season is not technically feasible during any year, develop and implement additional mitigation measures, in consultation with Environment and Climate Change Canada, to avoid effects on migratory birds and their nests or eggs. The Proponent shall submit these measures to the Agency prior to implementing them.
- 8.3 The Proponent shall design and maintain, throughout operation, buildings associated with the Designated Project in a manner that minimizes the risk of avian collisions, taking into account the City of Toronto's *Bird Friendly Development Guidelines*.
- 8.4 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, and implement a follow-up program to verify the accuracy of the environmental assessment and to determine the effectiveness of all mitigation measures to avoid harming migratory birds, including migratory birds that are listed species at risk, their eggs and nests, including the mitigation measures implemented pursuant to conditions 8.1 to 8.3, 8.12 and 8.23. The Proponent shall implement the follow-up program during construction and until at least the end of the fifth year of operation. As part of the implementation of the follow-up program, the Proponent shall:
- 8.4.1 develop and implement modified or additional mitigation measures if the results of the monitoring conducted as part of the follow-up program demonstrate that modified or additional mitigation measures are required to avoid harming migratory birds, including migratory birds that are listed species at risk, their eggs and nests; and
  - 8.4.2 before the end of the fifth year of operation, determine, in consultation with Environment and Climate Change Canada and based on the results of the monitoring conducted as part of the follow-up program, if additional monitoring is required. If additional monitoring is required, the Proponent shall update the follow-up program pursuant to condition 2.7 and shall implement the additional follow-up requirements.

***Listed species at risk***

- 8.5 The Proponent shall conduct, prior to carrying out any physical activity associated with the Designated Project in areas of suitable habitat for western chorus frog (*Pseudacris triseriata*) identified during the environmental assessment within the Designated Project Development Area and the Local Assessment Area (as defined by the Proponent in section 3.2 of the document entitled *Technical Data Report Terrestrial (Appendix E.16)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57)), springtime surveys of these areas to identify the presence or absence of western chorus frog (*Pseudacris triseriata*) and breeding and hibernating sites (residences) for western chorus frog (*Pseudacris triseriata*). In doing so, the Proponent shall:
- 8.5.1 submit the methodology used for the surveys and the results of the surveys to Environment and Climate Change Canada and determine, in consultation with Environment and Climate Change Canada, if additional surveys are required for the purpose of implementing conditions set out in this Decision Statement in relation to western chorus frog (*Pseudacris triseriata*);

- 8.5.2 identify, in consultation with Environment and Climate Change Canada, Conservation Halton, Halton Region and Ontario Ministry of Environment, Conservation and Park, connectivity between all habitat necessary to support the annual life cycle of western chorus frog (*Pseudacris triseriata*), including breeding and hibernating sites (residences) identified through the surveys; and
  - 8.5.3 develop, in consultation with Environment and Climate Change Canada, Conservation Halton, Halton Region and Ontario Ministry of Environment, Conservation and Park, and implement modified or additional mitigation measures, including measures to maintain or enhance habitat connectivity, to mitigate adverse environmental effects attributed to the Designated Project on western chorus frog (*Pseudacris triseriata*) and/or its breeding or hibernating sites (residences) (including connectivity between these sites) during any phase of the Designated Project. The Proponent shall take into account Conservation Halton's *Road Ecology Quick Reference Guide* when developing and implementing these measures.
- 8.6 The Proponent shall install, prior to construction and during the breeding season for western chorus frog (*Pseudacris triseriata*), exclusion fencing to prevent western chorus frog (*Pseudacris triseriata*) from entering construction areas. The Proponent shall design the exclusion fencing in consultation with Environment and Climate Change Canada and shall maintain it during construction. In doing so, the Proponent shall:
- 8.6.1 determine the dates of the breeding season, based on ambient temperatures and in consultation with Environment and Climate Change Canada, for any year that construction shall occur; and
  - 8.6.2 ensure, based on the results of the surveys conducted pursuant to condition 8.5, that construction areas do not contain western chorus frog (*Pseudacris triseriata*) breeding sites (residences) prior to installing exclusion fencing.
- 8.7 The Proponent shall install, prior to construction and before the breeding season determined for that year pursuant to condition 8.6.1, exclusion fencing between the railway tracks located within the Designated Project Development Area and breeding and hibernating sites (residences) for western chorus frog (*Pseudacris triseriata*) identified through the surveys conducted pursuant to condition 8.5. The Proponent shall design the exclusion fencing in consultation with Environment and Climate Change Canada and shall maintain it during construction.
- 8.8 The Proponent shall only replace culverts located adjacent to breeding and hibernating sites (residences) for western chorus frog (*Pseudacris triseriata*) identified through the surveys conducted pursuant to condition 8.5 outside of the breeding season for western chorus frog (*Pseudacris triseriata*) determined pursuant to condition 8.6.1.
- 8.9 If any hibernating site (residence) for western chorus frog (*Pseudacris triseriata*) identified through the surveys conducted pursuant to condition 8.5 will be temporarily or permanently affected by any activity associated with the Designated Project, the Proponent shall replace the affected site (residence) with at least a one-to-one ratio of restored habitat suitable for western chorus frog (*Pseudacris triseriata*) in location(s) determined in consultation with Environment and Climate Change Canada, Conservation Halton and the Town of Milton. The Proponent shall restore the habitat as soon as technically feasible after any hibernating site (residence) has been

affected by the Designated Project and shall maintain the restored habitat throughout all phases of the Designated Project.

- 8.10 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada and Conservation Halton, and implement a follow-up program to verify the accuracy of the environmental assessment and to determine the effectiveness of mitigation measures as it pertains to the adverse environmental effects on western chorus frog (*Pseudacris triseriata*) attributed to the Designated Project, including mitigation measures implemented pursuant to conditions 8.5 to 8.9. As part of the development of the follow-up program, the Proponent shall identify indicators that shall be used by the Proponent to determine the effectiveness of the mitigation measures. The Proponent shall implement the follow-up program during construction and until at least the end of the fifth year of operation. As part of the implementation of the follow-up program, the Proponent shall:
- 8.10.1 monitor the use by western chorus frog (*Pseudacris triseriata*) individuals of the habitat restored pursuant to condition 8.9;
  - 8.10.2 monitor the use by western chorus frog (*Pseudacris triseriata*) individuals of any measure implemented pursuant to condition 8.5.3 to maintain or enhance habitat connectivity;
  - 8.10.3 report the results of all monitoring conducted as part of the implementation of the follow-up program to Environment and Climate Change Canada and Conservation Halton pursuant to condition 2.6.2 to inform future regional habitat creation and restoration efforts; and
  - 8.10.4 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 8.10.1 or 8.10.2, taking into account the indicators identified during the development of the follow-up program, demonstrate that modified or additional mitigation measures are required to mitigate adverse environmental effects on western chorus frog (*Pseudacris triseriata*) individuals attributed to the Designated Project; and
  - 8.10.5 before the end of the fifth year of operation, determine, in consultation with Environment and Climate Change Canada and Conservation Halton and based on the results of the monitoring referred to in condition 8.10.1 or 8.10.2 if additional monitoring is required. If additional monitoring is required, the Proponent shall update the follow-up program pursuant to condition 2.7 and shall implement the additional follow-up requirements.
- 8.11 The Proponent shall conduct vegetation clearing outside of the breeding season for eastern meadowlark (*Sturnella magna*) and bobolink (*Dolichonyx oryzivorus*) in areas identified by the Proponent as habitat for eastern meadowlark (*Sturnella magna*) and bobolink (*Dolichonyx oryzivorus*) on figure 5 of the document entitled *Technical Data Report Terrestrial (Appendix E.16)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57).
- 8.12 The Proponent shall cause to be established and maintained, during construction and operation, 40.7 hectares of suitable replacement grassland habitat (containing hay and meadow fields) in the Luther Marsh Wildlife Management Area to compensate for the loss of suitable habitat for eastern meadowlark (*Sturnella magna*), bobolink (*Dolichonyx oryzivorus*) and monarch butterfly (*Danaus plexippus*) within the Designated Project Development Area. The Proponent shall cause

the suitable replacement grassland habitat to be established before removing the existing grassland habitat within the Designated Project Development Area.

- 8.13 The Proponent shall cause to be developed, prior to construction and in consultation with Environment and Climate Change Canada and other relevant authorities, and cause to be implemented a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to the replacement grassland habitat established pursuant to condition 8.12. As part of the development of the follow-up program, the Proponent shall cause to be identified indicators that shall be considered to determine the suitability of the replacement grassland habitat. As part of the implementation of the follow-up program, the Proponent shall cause to:
- 8.13.1 monitor use of the replacement grassland habitat established pursuant to condition 8.12 by eastern meadowlark (*Sturnella magna*) and bobolink (*Dolichonyx oryzivorus*), including breeding success of both species, for a period of 20 years following the establishment of the replacement grassland habitat;
  - 8.13.2 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 8.13.1, taking into account the indicators identified during the development of the follow-up program, demonstrate that modified or additional mitigation measures are required to mitigate adverse environmental effects on meadowlark (*Sturnella magna*) and bobolink (*Dolichonyx oryzivorus*) attributed to the Designated Project; and
  - 8.13.3 develop and implement, in consultation with Environment and Climate Change Canada and other relevant authorities, modified or additional mitigation measures and/or additional follow-up requirements if after 20 years following the establishment of the replacement grassland habitat, the results of the monitoring referred to in condition 8.13.1, taking into account the indicators identified during the development of the follow-up program, demonstrate that the replacement grassland habitat is not functioning as predicted during the environmental assessment as a replacement habitat for eastern meadowlark (*Sturnella magna*) and bobolink (*Dolichonyx oryzivorus*). The Proponent shall cause these modified or additional mitigation measures and/or additional follow-up requirements to be implemented until such time that monitoring results indicate that the replacement grassland habitat is functioning as predicted during the environmental assessment. The Proponent shall cause these modified or additional mitigation measures and/or additional follow-up requirements to be submitted to the Agency prior to them being implemented.
- 8.14 The Proponent shall identify, prior to construction and in consultation with Environment and Climate Change Canada, Conservation Halton and the Six Nations of the Grand River, foraging, nesting and overwintering habitat for snapping turtle (*Chelydra serpentina*) and midland painted turtle (*Chrysemys picta marginata*) within the Designated Project Development Area and within the Local Assessment Area, defined by the Proponent in section 3.2 of the document entitled *Technical Data Report Terrestrial (Appendix E.16)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57).
- 8.15 The Proponent shall develop, prior to operation and in consultation with Environment and Climate Change Canada, Fisheries and Oceans Canada, Conservation Halton and the Six Nations of the Grand River, habitat enhancement features (including nesting mounds) for snapping turtle



(*Chelydra serpentine*) and midland painted turtle (*Chrysemys picta marginata*) in Indian Creek and in ponds located within the Designated Project Development Area. In doing so, the Proponent shall:

- 8.15.1 locate constructed nesting mounds outside of areas where nesting habitat has been identified pursuant to condition 8.14; and
- 8.15.2 maintain the habitat enhancement features during operation.
- 8.16 The Proponent shall conduct in-water construction activities outside of the overwintering period for snapping turtle (*Chelydra serpentine*) (October 1 to April 30), unless not technically feasible. If the Proponent must conduct in-water construction activities within the overwintering period, the Proponent shall have a qualified individual, who is a biologist, relocate snapping turtles (*Chelydra serpentine*) observed within in-water construction areas to an accredited facility for the duration of the overwintering period, prior to conducting any in-water construction activity.
- 8.17 The Proponent shall install, prior to construction, and maintain, throughout construction, exclusion fencing to prevent snapping turtle (*Chelydra serpentine*) from entering construction work areas. The Proponent shall take into account the location of the foraging, nesting and overwintering habitat identified pursuant to condition 8.14 when installing the exclusion fencing.
- 8.18 The Proponent shall install, prior to operation, and maintain, throughout operation, exclusion fencing between the habitat enhancement features constructed pursuant to condition 8.15 and roads located within the Designated Project Development Area. In doing so, the Proponent shall take into account the location of the foraging, nesting and overwintering habitat identified pursuant to condition 8.14.
- 8.19 With respect to all exclusion fencing referred to in conditions 8.6, 8.7, 8.17 and 8.18, the Proponent shall:
  - 8.19.1 install and maintain all exclusion fencing taking into account Ontario's *Reptile and Amphibian Exclusion Fencing: Best Practices, Version 1.1. Species Technical Note* and Ontario's *Best Management Practices for Mitigating the Effects of Roads on Amphibians and Reptile Species at Risk in Ontario*; and
  - 8.19.2 inspect all exclusion fencing at least monthly, or more frequently following a heavy rain event, if any construction activity associated with the Designated Project occurs in close proximity or if a previous inspection has detected an imminent breach, and repair any damage promptly.
- 8.20 The Proponent shall install and maintain, during all phases of the Designated Project, signs to notify drivers of the risk of turtle collisions along any temporary and permanent road located within the Designated Project Development Area. The Proponent shall take into account Ontario's *Best Management Practices for Mitigating the Effects of Roads on Amphibians and Reptile Species at Risk in Ontario* when installing the signs.
- 8.21 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Conservation Halton and the Six Nations of the Grand River, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to the adverse environmental effects on snapping turtle (*Chelydra serpentine*) and midland painted turtle (*Chrysemys picta*

*marginata*) attributed to the Designated Project, including mitigation measures implemented pursuant to conditions 8.15 to 8.20. As part of the development of the follow-up program, the Proponent shall identify indicators that shall be used by the Proponent to determine the effectiveness of the mitigation measures. As part of the implementation of the follow-up program, the Proponent shall:

- 8.21.1 monitor, during the time that the Proponent shall maintain the exclusion fencing referred to in condition 8.17, the effectiveness of the fencing in preventing snapping turtle (*Chelydra serpentina*) and midland painted turtle (*Chrysemys picta marginata*) from entering in-water construction work areas;
  - 8.21.2 monitor, during all phases of the Designated Project, roads located within the Designated Project Development Area for turtle crossings and/or turtle collisions with vehicles; and
  - 8.21.3 develop and implement modified or additional mitigation measures, taking into account Ontario's *Reptile and Amphibian Exclusion Fencing: Best Practices, Version 1.1. Species Technical Note* and Ontario's *Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile Species at Risk in Ontario*, if the results of the monitoring referred to in condition 8.21.1 or 8.21.2, taking into account the indicators identified during the development of the follow-up program, demonstrate that modified or additional mitigation measures are required to mitigate the risk to turtles, including the risk of collisions with vehicles.
- 8.22 The Proponent shall submit all sightings of turtles within the Designated Project Development Area during any phase of the Designated Project in a timely manner to the Natural Heritage Information Centre of Ontario Ministry of Natural Resources and Forestry.
- 8.23 The Proponent shall implement measures, during all phases of the Designated Project and in consultation with Environment and Climate Change Canada, to mitigate the adverse environmental effects on barn swallow (*Hirundo rustica*) and bank swallow (*Riparia riparia*) attributed to the Designated Project. As part of these measures, the Proponent shall:
- 8.23.1 maintain and keep accessible nesting habitat for barn swallow (*Hirundo rustica*) located in the barn identified by the Proponent on figure U24-1 submitted in response to Undertaking 24 (Canadian Impact Assessment Registry Reference Number 80100, Document Number 939);
  - 8.23.2 install artificial nesting structures in suitable habitat and open areas to replace the artificial nesting habitat for barn swallow (*Hirundo rustica*) located in the shed identified by the Proponent on figure U24-1 submitted in response to Undertaking 24 (Canadian Impact Assessment Registry Reference Number 80100, Document Number 939). The Proponent shall install the artificial nesting structures before removing the shed and shall maintain the structures during all phases of the Designated Project;
  - 8.23.3 manage stockpile slopes located within the Designated Project Development Area during construction in a manner that prevents bank swallow (*Riparia riparia*) from nesting in the stockpiles; and
  - 8.23.4 establish and maintain buffer zones and setback distances if the Proponent encounters a barn swallow (*Hirundo rustica*) or bank swallow (*Riparia riparia*) nest during the removal of a culvert during any phase of the Designated Project. The Proponent shall maintain the

buffer zones and setback distances at least until all young have visibly left the nest permanently.

8.24 The Proponent shall compensate for the loss of monarch butterfly (*Danaus plexippus*) habitat attributed to the Designated Project by establishing, in consultation with Environment and Climate Change Canada, 18.8 hectares of replacement open habitat within the Designated Project Development Area. The Proponent shall maintain the replacement habitat throughout operation. The Proponent shall incorporate vegetation species in the replacement habitat that provide breeding and nectaring functions for monarch butterfly (*Danaus plexippus*).

8.24.1 The Proponent shall limit the use of chemical herbicides and pesticides in the replacement habitat established pursuant to condition 8.24.

8.25 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada and other relevant authorities, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to the adverse environmental effects on monarch butterfly (*Danaus plexippus*) attributed to the Designated Project, including the mitigation measures implemented pursuant to conditions 8.12 and 8.24. As part of the development of the follow-up program, the Proponent shall identify indicators that shall be used by the Proponent to determine the effectiveness of the mitigation measures. The Proponent shall implement the follow-up program during construction and until at least the end of the fifth year of operation. As part of the implementation of the follow-up program, the Proponent shall:

8.25.1 monitor the use by monarch butterfly (*Danaus plexippus*) of the replacement grassland habitat (including any breeding habitat) established pursuant to condition 8.12;

8.25.2 monitor the use by monarch butterfly (*Danaus plexippus*) of the replacement habitat established pursuant to condition 8.24;

8.25.3 develop and implement modified or additional mitigation if the results of the monitoring referred to in condition 8.25.1 or 8.25.2, taking into account the indicators identified during the development of the follow-up program, demonstrate that modified or additional mitigation measures are required to mitigate the adverse environmental effects on monarch butterfly (*Danaus plexippus*) attributed to the Designated Project; and

8.25.4 before the end of the fifth year of operation, determine, in consultation with Environment and Climate Change Canada and other relevant authorities and based on the results of the monitoring referred to in condition 8.25.1 or 8.25.2 if additional monitoring is required. If additional monitoring is required, the Proponent shall update the follow-up program pursuant to condition 2.7 and shall implement the additional follow-up requirements.

8.26 The Proponent shall conduct pre-construction surveys of eastern milksnake (*Lampropeltis Triangulum*) in Tributary A and in wooded areas near where Indian Creek intersects the railway tracks. The Proponent shall develop the methodology for the surveys in consultation with Environment and Climate Change Canada and other relevant authorities and shall take into account Ontario's *Survey Protocol for Ontario's Species at Risk Snakes* when developing the methodology.

- 8.27 If the presence of eastern milksnakes (*Lampropeltis Triangulum*) within the Designated Project Development Area is confirmed through the surveys conducted pursuant to condition 8.26, the Proponent shall, in consultation with Environment and Climate Change Canada and other relevant authorities:
- 8.27.1 implement, prior to construction, a snake capture and relocation program to remove eastern milksnakes (*Lampropeltis Triangulum*) from the Designated Project Development Area and relocate them in accordance with wildlife care protocols to suitable habitat identified by the Proponent based on known habitat requirements of eastern milksnakes (*Lampropeltis Triangulum*) within the Local Assessment Area, as defined by the Proponent in section 3.2 of the document entitled *Technical Data Report Terrestrial (Appendix E.16)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57). As part of the program, the Proponent shall implement measures to prevent relocated snakes from returning to the removal site(s);
  - 8.27.2 develop, prior to construction, measures to mitigate adverse environmental effects on eastern milksnake (*Lampropeltis Triangulum*) attributed to the Designated Project, in addition to the snake capture and relocation program referred to in condition 8.27.1. The Proponent shall implement these measures during all phases of the Designated Project. The Proponent shall submit these measures to the Agency prior to implementing them; and
  - 8.27.3 determine, prior to construction, if any of the exclusion fencing referred to in conditions 8.6, 8.7, 8.17 and 8.18 can mitigate adverse environmental effects on eastern milksnake (*Lampropeltis Triangulum*) attributed to the Designated Project. If the Proponent determines that the exclusion fencing implemented for other listed species at risk cannot effectively mitigate adverse environmental effects on eastern milksnake (*Lampropeltis Triangulum*), the Proponent shall develop and implement, in consultation with Environment and Climate Change Canada and other relevant authorities, modified or additional mitigation measures for eastern milksnake (*Lampropeltis Triangulum*), which may include appropriately adapting any existing exclusion fencing.
- 8.28 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada and other relevant authorities, and implement a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to the adverse environmental effects on eastern milksnake (*Lampropeltis Triangulum*) attributed to the Designated Project, including the mitigation measures implemented pursuant to conditions 8.26 and 8.27. As part of the development of the follow-up program, the Proponent shall identify indicators that shall be used by the Proponent to determine the effectiveness of the mitigation measures. The Proponent shall implement the follow-up program during construction and until at least the end of the fifth year of operation. As part of the implementation of the follow-up program, the Proponent shall:
- 8.28.1 monitor sightings of eastern milksnake (*Lampropeltis Triangulum*) within the Designated Project Development Area during any phase of the Designated Project;
  - 8.28.2 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 8.28.1, taking into account the indicators identified during the development of the follow-up program, demonstrate that modified or additional mitigation measures are required to mitigate the adverse environmental

effects on eastern milksnake (*Lampropeltis Triangulum*) attributed to the Designated Project; and

- 8.28.3 before the end of the fifth year of operation, determine, in consultation with Environment and Climate Change Canada and other relevant authorities and based on the results of the monitoring referred to in condition 8.28.1, if additional monitoring is required. If additional monitoring is required, the Proponent shall update the follow-up program pursuant to condition 2.7 and shall implement the additional follow-up requirements.
- 8.29 The Proponent shall conduct, prior to construction in the area of Indian Creek, surveys for little brown myotis (*Myotis lucifugus*) habitat in thicket communities along Indian Creek and in the coniferous plantation and deciduous woodland fragment west of the railway tracks. The Proponent shall submit the methodology used for the surveys and the results of the surveys to Environment and Climate Change Canada. If the results of the surveys indicate the presence of little brown myotis (*Myotis lucifugus*) habitat, the Proponent shall develop, in consultation with Environment and Climate Change Canada and other relevant authorities, mitigation measures to protect or replace the surveyed habitat. The Proponent shall submit the results of the surveys and the identified mitigation measures, if any, to the Agency prior to construction.
- 8.30 The Proponent shall provide regular awareness training about actions to take to protect wildlife to all employees and contractors associated with the Designated Project who may encounter wildlife within the Designated Project Development Area.
- 8.31 The Proponent shall design, prior to construction and in consultation with Environment and Climate Change Canada, Halton Region, Conservation Halton and other relevant authorities, and maintain throughout operation, a system of ecopassages within the Designated Project Development Area, including through the mainline embankment and associated roadways, to retain habitat connectivity for terrestrial and aquatic species expected to be present within the Designated Project Development Area, including listed species at risk, while meeting engineering requirements for safe railway and facility operation. The Proponent shall design and maintain all ecopassages taking into account Ontario's *Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile Species at Risk in Ontario* and Conservation Halton's *Road Ecology Quick Reference Guide*.
- 8.32 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Halton Region, Conservation Halton and other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to the adverse environmental effects on habitat connectivity attributed to the Designated Project, including the effectiveness of ecopassages installed pursuant to condition 8.31. As part of the development of the follow-up program, the Proponent shall identify indicators that shall be used by the Proponent to determine the effectiveness of the mitigation measures. The Proponent shall take into account Ontario's *Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile Species at Risk in Ontario* and Conservation Halton's *Road Ecology Quick Reference Guide* when developing the follow-up program. The Proponent shall implement the follow-up program until at least the end of the fifth year following the installation of all ecopassages. As part of the implementation of the follow-up program, the Proponent shall:

- 8.32.1 develop and implement modified or additional mitigation measures if the results of the monitoring conducted as part of the implementation of the follow-up program, taking into account the indicators identified during the development of the follow-up program, demonstrate that modified or additional mitigation measures are required to mitigate adverse environmental effects on habitat connectivity; and
  - 8.32.2 before the end of the fifth year following the installation of all ecopassages, determine, in consultation with Environment and Climate Change Canada, Halton Region, Conservation Halton and other relevant authorities and based on the results of the monitoring conducted as part of the follow-up program if additional monitoring is required. If additional monitoring is required, the Proponent shall update the follow-up program pursuant to condition 2.7 and shall implement the additional follow-up requirements.
- 8.33 The Proponent shall develop, prior to construction and in consultation with Environment and Climate Change Canada, Halton Region, Conservation Halton, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and other relevant authorities, a wildlife management and connectivity plan that takes into account the final detailed design of the Designated Project. The Proponent shall provide the plan to the Agency prior to construction. The Proponent shall implement the plan according to the timelines established in the plan. The plan shall include:
- 8.33.1 mapping of wildlife habitat, travel patterns and existing and planned wildlife corridors within the Regional Assessment Area, defined by the Proponent in section 3.3 of the document entitled *Technical Data Report Terrestrial (Appendix E.16)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57), based on publicly-available information;
  - 8.33.2 details on how the Proponent shall maintain habitat connectivity for terrestrial species during all phases of the Designated Project, including how the Proponent has considered the role of open agricultural lands and wildlife travel patterns and existing and planned wildlife corridors across the Regional Assessment Area and in adjacent lands within Region of Halton's Natural Heritage System during detailed design of the Designated Project;
  - 8.33.3 details on how the Proponent has considered terrestrial and aquatic species expected to be present within the Designated Project Development Area when designing, installing and maintaining all travel corridors (including ecopassages referred to in condition 8.31) and when establishing the dimensions of buffers in the Designated Project Development Area;
  - 8.33.4 details on how the Proponent shall design and operate the Designated Project's truck entrance on Britannia Road to mitigate adverse environmental effects on Halton Region's Natural Heritage System;
  - 8.33.5 all measures to be implemented by the Proponent to mitigate the adverse environmental effects of the Designated Project on wildlife during any phase of the Designated Project, including the mitigation measures set out in this Decision Statement as it pertains to listed species at risk and migratory birds. In doing so, the Proponent shall describe how these measures give preference to avoiding adverse environmental effects on wildlife over minimizing adverse environmental effect on wildlife, to minimizing adverse environmental effects on wildlife over compensating for adverse environmental effects

on wildlife and, if minimizing adverse environmental effects on wildlife is not possible, to compensating for adverse environmental effects on wildlife; and

- 8.33.6 the information referred to in condition 2.7 for each follow-up program to be implemented by the Proponent to verify the accuracy of the environmental assessment and determine the effectiveness of the mitigation measures as it pertains to wildlife, including listed species at risk and migratory birds.

## **9 Human health**

- 9.1 The Proponent shall develop, prior to construction and in consultation with Health Canada and other relevant authorities, a follow-up program to verify the accuracy of the environmental assessment as it pertains to adverse environmental effects on human health caused by changes in concentrations of contaminants of potential concern in country foods attributed to the Designated Project. The Proponent shall implement the follow-up program during construction and for at least the first five years of operation. As part of the implementation of the follow-up program, the Proponent shall:
- 9.1.1 monitor concentrations of benzo(a)pyrene in soils within the Local Assessment Area, as defined by the Proponent in figure 1 of the document entitled *Technical Data Report Human Health Risk Assessment (Appendix E.7)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57), and compare monitoring results against modelling predictions estimated by the Proponent during the environmental assessment, as referred to by the Proponent in table IR8.3-1 submitted in response to Information Request 8.3 (Canadian Impact Assessment Registry Reference Number 80100, Document Number 714); and
- 9.1.2 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 9.1.1 demonstrate that modified or additional mitigation measures are required to ensure that concentrations of benzo(a)pyrene in soils attributed to the Designated Project are below the Canadian Council of Ministers of the Environment's *Soil Quality Guidelines for the Protection of Environmental and Human Health*.
- 9.2 The Proponent shall conduct, prior to construction and in consultation with Health Canada, a sleep disturbance analysis based on an evaluation of the distribution of baseline and predicted nighttime noise events. If the results of this evaluation demonstrate that nighttime noise events attributed to the Designated Project may exceed 60 dBA  $L_{max}$  outdoors more than 15 times per night, at any point of reception identified by the Proponent on figure 3 of the *Technical Data Report Noise Effects Assessment (Appendix E.10)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57), the Proponent shall develop, in consultation with Health Canada, and implement, prior to construction, modified or additional mitigation measures to ensure that nighttime noise events attributed to the Designated Project do not exceed 60 dBA  $L_{max}$  outdoors more than 15 times per night at any point of reception. The Proponent shall submit the results of the analysis and any modified or additional mitigation measure to the Agency prior to implementing them.
- 9.3 The Proponent shall develop, prior to operation and in consultation with Health Canada, and implement a follow-up program to verify the accuracy of the environmental assessment and

determine the effectiveness of the mitigation measures as it pertains to adverse environmental effects on human health caused by nighttime noise events attributed to the Designated Project during operation, including any modified or additional mitigation measure developed and implemented pursuant to condition 9.2. As part of the implementation of the follow-up program, the Proponent shall:

- 9.3.1 monitor, for at least two years following the start of operation, nighttime noise events attributed to the Designated Project, at the same points of reception considered in the sleep disturbance analysis conducted pursuant to condition 9.2;
- 9.3.2 develop and implement modified or additional mitigation measures if the results of the monitoring referred to in condition 9.3.1 demonstrate that nighttime noise events attributed to the Designated Project experienced at any point of reception exceed 60 dBA  $L_{max}$  outdoors more than 15 times per night, so that nighttime noise events attributed to the Designated Project experienced at any point of reception do not exceed 60 dBA  $L_{max}$  outdoors more than 15 times per night;
- 9.3.3 compile the results of the monitoring referred to in condition 9.3.1 on a monthly basis and make these results available upon request; and
- 9.3.4 before the end of the second year following the start of operation, determine, in consultation with Health Canada and based on the results of the monitoring conducted as part of the follow-up program, if additional monitoring is required. If additional monitoring is required, the Proponent shall update the follow-up program pursuant to condition 2.7 and shall implement the additional follow-up requirements.

## **10 Socioeconomic effects**

- 10.1 The Proponent shall provide additional agricultural lease opportunities or rehabilitate or improve agricultural lands under the care and control of the Proponent within properties adjacent to the Designated Project Development Area in consultation with Halton Region, the Town of Milton and representatives of local farmers and farming organizations, including the Halton Region Federation of Agriculture and until such time that the Proponent has determined other non-agricultural uses for these areas.

## **11 Physical and cultural heritage and structures, sites or things of historical, archaeological, paleontological or architectural significance**

- 11.1 The Proponent shall assess, prior to construction, the condition of each cultural heritage resource under the care and control of the Proponent identified by the Proponent in table 6.4 of the document entitled *Technical Data Report Cultural Heritage Assessment (Appendix E.3)* (Canadian Impact Assessment Registry Reference Number 80100, Document Number 57) using photographic records.
- 11.2 The Proponent shall have a qualified individual document the land use history and construction details of the shed located at 5269 Tremaine Road to provide an understanding of the use, context and relationship of the shed in relation to the surrounding buildings, prior to removing the shed. In doing so, the Proponent shall:



- 11.2.1 make a photographic record of the shed and salvage any component of the building in which there is public or private interest; and
  - 11.2.2 submit a report containing the land use history, construction details and photographic record made pursuant to condition 11.2.1 to the Agency and potentially affected parties. The Proponent shall also make the information available to a local library or museum.
- 11.3 The Proponent shall not carry out any construction activity associated with the Designated Project within 50 metres of any cultural heritage resource under the care and control of the Proponent referred to in condition 11.1, unless required for construction or to meet engineering requirements for safe railway and facility operation. If the Proponent must carry out any construction activity within 50 metres of a cultural heritage resource, the Proponent shall:
- 11.3.1 determine, prior to carrying out any such construction activity, maximum acceptable vibration levels that shall not be exceeded to protect the resource;
  - 11.3.2 conduct continuous monitoring, during any such construction activity, of vibration levels at the resource; and
  - 11.3.3 develop and implement modified or additional mitigation measures, which may include temporarily ceasing any construction activity causing vibration for any given cultural heritage resource until modified or additional mitigation measures are implemented, if the results of the monitoring referred to in condition 11.3.2 exceed the maximum acceptable vibration levels determined pursuant to condition 11.3.1 to ensure that vibration levels remain below acceptable levels. The Proponent shall notify the Agency within 24 hours of any modified or additional mitigation measure being implemented and the Proponent shall submit a detailed description of these measures to the Agency within 7 days of their implementation.
- 11.4 The Proponent shall inspect each cultural heritage resource under the care and control of the Proponent referred to in condition 11.1 and for which the Proponent has carried out any construction activity within 50 metres pursuant to condition 11.3 as soon as practical after construction in the vicinity of each resource has ended. In doing so, the Proponent shall:
- 11.4.1 compare the condition of the resource before and after construction, based on the photographic records made pursuant to condition 11.1, to determine if any vibration-related damage has occurred as a result of construction;
  - 11.4.2 have a qualified individual make any repair necessary to maintain the heritage integrity of the damaged resource in a timely manner if an inspection demonstrates that vibration-related damage has occurred; and
  - 11.4.3 submit the results of all inspections, including a description of any damage that has occurred and of any repair that the Proponent has made or plans to make, to the Agency and potentially affected parties within 30 days of the Proponent completing all inspections.
- 11.5 The Proponent shall develop, prior to construction and in consultation with Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, the Town of Milton and potentially affected parties, a cultural heritage property maintenance and re-use plan in relation to each cultural heritage resource under the control of the Proponent referred to in condition 11.1. The Proponent shall implement the plan throughout all phases of the Designated Project for each

resource, unless the Proponent determines pursuant to condition 11.6 that any given resource is to be relocated or demolished. As part the plan, the Proponent shall set out:

- 11.5.1 how the Proponent shall preserve the heritage value of each cultural heritage resource;
  - 11.5.2 how the Proponent shall secure all cultural heritage resources, prior to construction, and inspect and maintain them in working order, during all phases of the Designated Project, or until such time any viable adaptive re-use is identified for any given resource; and
  - 11.5.3 the criteria, including land use compatibility, that may be used to identify any feasible adaptive re-use for any given cultural heritage resource and, if an adaptive re-use is identified for a resource, to determine the terms of that re-use.
- 11.6 If, for any cultural heritage resource under the care and control of the Proponent referred to in condition 11.1, the Proponent has not identified a feasible adaptive re-use pursuant to the criteria referred in condition 11.5.3 three years after the beginning of operation, the Proponent shall conduct, in consultation with Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Halton Region and the Town of Milton, a Heritage Impact Assessment to determine whether the resource(s) should be preserved, relocated or demolished with appropriate mitigation. The Proponent shall submit the results of the Heritage Impact Assessment to the Agency, Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, the Town of Milton and potentially affected parties within 30 days of the Heritage Impact Assessment being completed.
- 11.6.1 The Proponent shall consider, as part of the Heritage Impact Assessment, removal or demolition of any cultural heritage resource under the care and control of the Proponent only if no other options for re-use are technically and economically feasible.
- 11.7 The Proponent shall have a qualified individual, who is an archeologist licensed under the *Ontario Heritage Act*, conduct any controlled salvage excavation of archaeological resources required for the Designated Project during any phase of the Designated Project in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation and taking into account Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists*.
- 11.8 The Proponent shall develop, prior to construction and in consultation with Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation, an archaeological and cultural resources protection plan to mitigate adverse environmental effects on any previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance discovered within the Designated Project Development Area during any phase of the Designated Project. As part of the plan, the Proponent shall set out:
- 11.8.1 how the Proponent shall notify in advance the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation of any Designated Project construction activity (including any soil disturbance activity) that may result in the discovery of any previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance within the Designated Project Development Area;
  - 11.8.2 how the Proponent shall allow the participation of the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation in archeological

monitoring conducted during any Designated Project construction activity referred to in condition 11.8.1;

11.8.3 how the Proponent will apply a chance find procedure in the event that previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance are discovered within the Designated Project Development Area by the Proponent or brought to the attention of the Proponent by another party during any phase of the Designated Project. As part of the chance find procedure, the Proponent shall:

11.8.3.1 immediately halt work at the location of the discovery, except for action(s) required to be undertaken to protect the integrity of the discovery;

11.8.3.2 delineate an area of at least 20 metres around the discovery as a no-work zone;

11.8.3.3 inform the Agency, Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Halton Region, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation (including any archeological monitor conducting monitoring pursuant to condition 11.8.2) within 24 hours of the discovery, and allow the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation to monitor archaeological works at the location of the discovery;

11.8.3.4 have a qualified individual, who is an archeologist licensed under the *Ontario Heritage Act*, conduct an assessment at the location of the discovery; and

11.8.3.5 apply, in consultation with Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Halton Region, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation, all applicable legislative or legal requirements and associated regulations and protocols respecting the discovery, recording, transferring and safekeeping of previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance.

11.9 The Proponent shall develop, prior to construction and in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation and Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, a procedure with respect to the discovery, handling, recognition, recording, transferring and safekeeping of any human remain (including any ossuary) discovered within the Designated Project Development Area during any phase of the Designated Project. As part of the procedure, the Proponent shall:

11.9.1 immediately halt work at the location of the discovery, except for action(s) required to be undertaken to protect the integrity of the discovery;

11.9.2 delineate an area of at least 20 metres around the discovery as a no-work zone;

11.9.3 inform appropriate local, municipal and provincial authorities as it pertains to the handling of human remains (including any authority that has a responsibility under *Ontario's Funeral, Burial, and Cremation Services Act*) as soon as possible, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation (including any archeological monitor conducting monitoring pursuant to condition 11.8.2) within 24 hours of the discovery, and allow the Mississaugas of the

Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation to monitor archaeological works at the location of the discovery;

- 11.9.4 have a qualified individual, who is an archeologist licensed under the *Ontario Heritage Act* and who has education, experience and knowledge as it pertains to ossuaries, conduct an assessment at the location of the discovery, subject to the requirements of Ontario's *Funeral, Burial, and Cremation Services Act*. The Proponent shall choose the qualified individual in consultation with the Huron-Wendat Nation and the Six Nations of the Grand River;
  - 11.9.5 in the event that there is any indication that the discovered human remains may be an ossuary, leave the area permanently undisturbed, unless an agreement is reached with the Huron-Wendat Nation and the Six Nations of the Grand River to take an alternative action; and
  - 11.9.6 not recommence work within the no-work zone referred to in condition 11.9.2, unless authorized by relevant authorities and subject to the requirement of condition 11.9.4.
- 11.10 The Proponent shall require all employees and contractors associated with the Designated Project to undertake, before they conduct any construction activity within the Designated Project Development Area, an awareness training program about the procedures related to the discovery and protection of structures, sites or things of historical, archaeological, paleontological or architectural significance referred to in condition 11.8 and the procedures related to the discovery and protection of human remains referred to in condition 11.9. As part of the awareness training program, the Proponent shall include information on the recognition of artifacts related to Indigenous and Euro-Canadian material cultures that may be found within the Designated Project Development Area.
- 11.11 The Proponent shall facilitate discussions between the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation and qualified individuals involved in archaeological work completed in support of the environmental assessment about opportunities to return of artifacts of Indigenous origin excavated as part of the environmental assessment or discovered during construction to the communities for preservation and interpretation. The Proponent shall seek consent from the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and the Huron-Wendat Nation before including, as part of the annual report referred to in condition 2.11, information on any measure implemented as a result of these discussions.

## **12 Effects of the environment on the Designated Project**

- 12.1 The Proponent shall develop, prior to construction, and implement an infrastructure protection plan that describes how the Proponent shall maintain Designated Project infrastructures, keeping them secure and in good working order during all phases of the Designated Project and how the Proponent shall restore any damaged infrastructure and prevent future damages, including in the event of a flooding, freezing rain, ice storm or another extreme weather event and if erosion beyond acceptable levels occurs within the Designated Project Development Area, to mitigate adverse environmental effects of the environment on the Designated Project. As part the implementation of the plan, the Proponent shall:

- 12.1.1 monitor meteorological conditions, including by receiving advanced notice of flood-producing severe rainfall events;
- 12.1.2 regularly inspect all erosion and sediment control devices installed within the Designated Project Development Area, including following rainfall events, and repair any defective or damaged device in a timely manner;
- 12.1.3 report, as part of the annual report referred to in condition 2.11, on any major repair done pursuant to the implementation of the plan, including any major repair done pursuant to condition 12.1.2; and
- 12.1.4 backfill all open excavations in a timely manner during construction, unless not technically feasible.

### **13 Independent Environmental Monitor**

- 13.1 The Proponent shall retain, prior to construction, the services of a third-party independent environmental monitor, who is a qualified individual as it pertains to environmental monitoring in Ontario, to independently observe and record on the implementation of the conditions set out in this Decision Statement during construction and to report findings to the Proponent and the Agency.
- 13.2 The Proponent shall require the independent environmental monitor to report to the Proponent, in writing, about the implementation of any condition set out in this Decision Statement during construction. The Proponent shall also require the independent environmental monitor to recommend to the Proponent, in writing, which action(s) in their view should be taken by the Proponent in respect to the implementation of condition set out in this Decision Statement during construction.
- 13.3 The Proponent shall require the independent environmental monitor to provide to the Agency, at a frequency to be determined in consultation with the Agency, the information reported to the Proponent pursuant to condition 13.2 at the same time that the Proponent receives that information.
- 13.4 The Proponent shall require the independent environmental monitor to retain the information reported to the Proponent pursuant to condition 13.2 for five years following submission to the Agency pursuant to condition 13.3.

### **14 Accidents and malfunctions**

- 14.1 The Proponent shall take all reasonable measures to prevent accidents and malfunctions that may result in adverse environmental effects and mitigate any adverse environmental effect from accidents and malfunctions that does occur. In doing so, the Proponent shall:
  - 14.1.1 store hazardous materials in designated areas with proper primary and secondary containment and in accordance with appropriate federal, provincial and municipal safety procedures and requirements;
  - 14.1.2 store bulk quantities of combustible and flammable materials in designated areas at least six metres away from the Designated Project's property line;

- 14.1.3 provide information to shippers regarding safe loading practices; and
- 14.1.4 place spill containment kits in designated locations within the Designated Project Development Area where there is a higher risk of spills.
- 14.2 The Proponent shall consult, prior to construction, with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Town of Milton, Halton Region and other relevant authorities on the measures to be implemented to prevent accidents and malfunctions, including the measures referred to in condition 14.1.
- 14.3 The Proponent shall develop, prior to each applicable phase of the Designated Project and in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Town of Milton, Halton Region and other relevant authorities, an accident and malfunction response plan in relation to each phase of the Designated Project. The accident and malfunction plan shall include:
  - 14.3.1 a description of the types of accidents and malfunctions that may cause adverse environmental effects during any phase of the Designated Project, including accidents and malfunctions considered in section 13 of the Joint Review Panel Report (Canadian Impact Assessment Registry Reference Number 80100, Document Number 985) and accidents and malfunctions within the Designated Project Development Area which may adversely affect area(s) outside of the Designated Project Development Area;
  - 14.3.2 the measures, including management and organizational procedures, under the care and control of the Proponent to be implemented by the Proponent in response to each type of accident and malfunction referred to in condition 14.3.1 to mitigate any adverse environmental effect caused by the accident or malfunction. These measures shall include:
    - 14.3.2.1 measures to prevent or minimize containerized material spills from spreading over land surfaces and measures to recover spilled materials from waterbodies, as required;
    - 14.3.2.2 measures to manage the stormwater management system to prevent contaminated water from flowing downstream in case of a spill and, if a spill adversely affects a stormwater management pond, measures to deter birds from using the pond until water quality is restored;
    - 14.3.2.3 measures to identify any sensitive habitats where response efforts shall be prioritized; and
    - 14.3.2.4 measures to reduce fire hazard and enhance fire preparedness;
  - 14.3.3 the locations of spill containment kits within the Designated Project Development Area; and
  - 14.3.4 a description of how the Proponent will evacuate its property and participate in coordinated evacuation procedures with relevant authorities in the case of an accident or malfunction requiring evacuation.
- 14.4 The Proponent shall maintain the accident and malfunction response plan referred to in condition 14.3 up-to-date during all phases of the Designated Project so that it remains consistent with the Proponent's Network Operations Emergency Response Plan. The Proponent shall submit any

updated accident and malfunction response plan to the Agency and to relevant authorities involved in its implementation within 30 days of the plan being updated.

- 14.5 In the event of an accident or malfunction with the potential to cause adverse environmental effects, including an accident or malfunction referred to in 14.3.1, the Proponent shall immediately implement the measures appropriate to the accident or malfunction, including any appropriate measure referred to in condition 14.3.2, and shall:
  - 14.5.1 implement the communication plan referred to in condition 14.6 as it relates to accidents and malfunctions;
  - 14.5.2 notify, as soon as possible and pursuant to the communication plan referred to in condition 14.6, the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and potentially affected parties of the accident or malfunction, and notify the Agency in writing no later than 24 hours following the accident or malfunction. When notifying the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, potentially affected parties and the Agency, the Proponent shall specify:
    - 14.5.2.1 the date when and location where the accident or malfunction occurred;
    - 14.5.2.2 a summary description of the accident or malfunction; and
    - 14.5.2.3 a list of any substance potentially released into the environment as a result of the accident or malfunction.
  - 14.5.3 notify the Town of Milton, Halton Region and other relevant authorities with responsibilities related to emergency response (including environmental emergencies) in accordance with applicable legislated and regulatory requirements and existing protocols;
  - 14.5.4 submit a written report to the Agency no later than 30 days after the day on which the accident or malfunction occurred. The written report shall include:
    - 14.5.4.1 a detailed description of the accident or malfunction and of its adverse environmental effects;
    - 14.5.4.2 a description of the measures that were taken by the Proponent to mitigate the adverse environmental effects caused by the accident or malfunction;
    - 14.5.4.3 any view from the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and potentially affected parties and advice from relevant authorities received with respect to the accident or malfunction, its adverse environmental effects and the measures taken by the Proponent to mitigate these adverse environmental effects;
    - 14.5.4.4 a description of any residual adverse environmental effect and any modified or additional measure required by the Proponent to mitigate residual adverse environmental effects; and
    - 14.5.4.5 details concerning the implementation of the accident or malfunction response plan referred to in condition 14.3.
  - 14.5.5 submit a written report to the Agency no later than 90 days after the day on which the accident or malfunction occurred that includes a description of the changes made to avoid a subsequent occurrence of the accident or malfunction and of the modified or additional measure(s) implemented by the Proponent to mitigate and monitor residual

adverse environmental effects and to carry out any required progressive reclamation, taking into account the information submitted in the written report pursuant to condition 14.5.4. The report shall include all additional views from the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and potentially affected parties and advice from relevant authorities received by the Proponent since the views and advice referred to in condition 14.5.4.3 were received by the Proponent.

- 14.6 The Proponent shall develop, in consultation with the Mississaugas of the Credit First Nation, the Six Nations of the Grand River and potentially affected parties, a communication plan for accidents and malfunctions occurring in relation to the Designated Project, including accidents and malfunctions occurring within the Designated Project Development Area which may affect area(s) outside of the Designated Project Development Area. The Proponent shall develop the communication plan prior to construction and shall implement and keep it up-to-date during all phases of the Designated Project. The plan shall include:
- 14.6.1 the types of accidents and malfunctions requiring the Proponent to notify the parties referred to in condition 14.6;
  - 14.6.2 the manner by which the parties referred to in condition 14.6 shall be notified by the Proponent of an accident or malfunction and of any opportunity to assist in the response to the accident or malfunction; and
  - 14.6.3 the contact information of the representatives of the Proponent that the parties referred to in condition 14.6 may contact and of the representatives of the respective parties referred to in condition 14.6 to which the Proponent shall provide notification.

## **15 Schedules**

- 15.1 The Proponent shall submit to the Agency a schedule for all conditions set out in this Decision Statement no later than 60 days prior to the start of construction. This schedule shall detail all activities planned to fulfill each condition set out in this Decision Statement and the commencement and estimated completion month(s) and year(s) for each of these activities.
- 15.2 The Proponent shall submit to the Agency a schedule outlining all activities required to carry out all phases of the Designated Project no later than 60 days prior to the start of construction. The schedule shall indicate the commencement and estimated completion month(s) and year(s) and duration of each of these activities, including the commencement and estimated completion of each construction phase, the commencement of the operation phase and the commencement of the operation phase at which the Designated Project operates at its full operational capacity.
- 15.3 The Proponent shall submit to the Agency in writing an update to schedules referred to in conditions 15.1 and 15.2 every year no later than March 31.
- 15.4 The Proponent shall provide the Mississaugas of the Credit First Nation, the Six Nations of the Grand River, the Huron-Wendat Nation, potentially affected parties, the Town of Milton, Halton Region and Conservation Halton with the schedules referred to in conditions 15.1 and 15.2 and any update to the initial schedule made pursuant to condition 15.3 at the same time the Proponent provides these documents to the Agency.



**16 Record keeping**

- 16.1 The Proponent shall maintain all records relevant to the implementation of the conditions set out in this Decision Statement. The Proponent shall provide the aforementioned records to the Agency upon demand within a timeframe specified by the Agency.
- 16.2 The Proponent shall retain all records referred to in condition 16.1 at a facility in Canada and shall provide the address of the facility to the Agency. The Proponent shall notify the Agency at least 30 days prior to any change to the physical location of the facility where the records are retained, and shall provide to the Agency the address of the new location.
- 16.3 The Proponent shall notify the Agency of any change to the contact information of the Proponent included in the Decision Statement.

**Issuance**

This Decision Statement is issued in Ottawa, Ontario by:

<Original signed by>

January 21, 2021

\_\_\_\_\_  
**The Honourable Jonathan Wilkinson**  
Minister of the Environment

Date \_\_\_\_\_