



8 Approvals, Monitoring and Commitments to Future Work

8.1 Permits, Approvals, and Other Requirements

This section outlines the conventional municipal, Provincial, and Federal permits and approvals required for the implementation of this type of transit project. In some cases, the permits may be required for land development and in other cases for the proposed infrastructure improvements. The relevance of the permits will be confirmed in future study phases, when future design phase details are confirmed and further impact analysis work is completed. Additional permit requirements may be identified in the future.

Permits and approvals that may potentially be required for the construction of the transit project, including the LRT park and ride lots, and stations, are listed below.

Municipal Approvals

- » Planning approvals through the municipalities, as applicable;
- » Building permits for station works from the municipalities, as applicable;
- » EIS as per municipal requirements;
- » Approval for SWM in accordance with municipal requirements, as applicable;
- » Sewer discharge approvals in accordance with municipal requirements, as applicable;
- » Municipal Noise By-law exemptions, as required;
- » Official Plan Amendment;
- » Rezoning Amendment;
- » Site Plan Approval;
- » Building permits;
- » Tree permits for proposed tree removals;
- » Alterations to Heritage Properties;
- » GRCA permits and approvals for work within a regulated area, including:
 - Fill, Construction and Alteration to Waterways Permit from GRCA
 - Permit under O. Reg. 42/06 from GRCA
 - GRCA application for Development, Interference with Wetlands and Alterations to Shorelines and Watercourses
 - Watercourses for issues pertaining to floodplains, ESAs and Special Policy Areas



- Site-specific assessment of hydrologic impacts on regulated watercourse and wetland features will be required at the permitting stage
- » Municipality of Waterloo Source Protection Plan relevant policy requirements for well head protection zones, Drinking Water Threats, Groundwater Under the Direct Influence of Surface Water (GUDI) Protection Zones, Contributing Areas and Surface Water Intake Protection Zones. The following policies will be referred to, as applicable:
 - Use and Areas Designated as Restricted Land Use Policies
 - Transport Pathways Policies
 - The Application of Road Salt and the Handling and Storage of Road Salt Policies
 - The Handling and Storage of Fuel Policies
- » The following additional plans will be required to support future permits and approvals from GRCA:
 - Construction sequencing plan
 - Dewatering plan
 - Erosions and sediment control plan
 - Landscaping plans for all disturbed areas
 - Construction monitoring plan

Provincial Approvals and Other Requirements

- » In accordance with O. Reg. 231/08 a statement of completion of the transit project assessment process will be submitted to the Minister of Environment, Conservation and Parks;
- » Evaluation according to the Ontario Wetland Evaluation System for Southern Ontario (3rd edition);
- » *Endangered Species Act* approvals from MNRF if there are impacts to Species at Risk within creeks and watercourses adjacent to the LRT alignment;
- » The *Ontario Water Resources Act* states that the diversion of surface water or the extraction of groundwater by means of active pumping in excess of 50,000 litres per day requires an EASR/PTTW to be obtained from the MECP, with some exceptions;
- » Certificate of Approval for SWM Ponds in accordance with MECP requirements under the *Ontario Water Resources Act*, Section 53, including detailed design, impact assessment, design and assessment criteria, and Erosion and Sediment Control Plans;
- » Certificate of Approval (Drinking Water System) from MECP EA and Approvals Branch;



- » Environmental Compliance Approval (ECA) (Sewage System) from MECP EA and Approvals Branch;
- » Ontario Energy Board approvals for utility relocations;
- » Stage 2 Archaeological Assessments (AAs) (and stage 3 and 4 AAs, if required) be accepted into the Ontario Public Register of Archaeological Reports maintained by MHSTCI;
- » The Project Team will provide MHSTCI with a summary update once all Cultural Heritage Evaluation Reports (CHERs) and Heritage Impact Assessments (HIAs) are complete, stating which properties were confirmed to have cultural heritage value or interest (CHVI) and explaining how built heritage resources and cultural heritage landscapes will be conserved; and
- » Environmental Activity Sector Registries (EASRs) or Environmental Compliance Approvals for applicable project elements such as Traction Power Substations. Assessments should include tonality adjustments as necessary as per NPC-104.

Federal Approvals

- » Fisheries Act Authorization from DFO, if required;
- » Harmful Alteration, Disruption or Destruction (HADD) permitting from DFO if there are potential impacts to aquatic wildlife or their habitat; and
- » *Railway Safety Act* from CN and CP Rail.

8.2 Impact Monitoring

Impact monitoring is a necessary continuation of the construction and operational application of the proposed works. It is designed to evaluate the need to review or update the environmental protection and mitigation measures during a future design phase, or to trigger the implementation of contingency plans that may include remedial measures needed to achieve the project goals and objectives.

A monitoring plan will be prepared in accordance with Subsection 9(2)(8) of O. Reg. 231/08. The objectives of the monitoring plan are to:

- » Augment existing information and databases, where required;
- » Determine the accuracy of impact predictions and the effectiveness of environmental protection measures;
- » Ensure compliance with Federal, Provincial and local legislation and regulations; and
- » Ensure that TPA Process commitments, plans and programs are carried out as planned.



8.2.1 Construction Compliance

Preceding construction, a compliance monitoring plan will be created. This plan will describe how compliance with all the commitments outlined in this EPR, as well as conditions of any permits and approvals will be monitored during the construction phase. Compliance reports will summarize the results of the compliance monitoring plan for construction projects and state compliance with commitments outlined in this report and conditions of any permits and approvals.

8.2.2 Operational Compliance

The Region has standard procedures for spills management, accidents or malfunctions and infrastructure inspection. These procedures will be followed during the operations phase. For monitoring of the natural and social environment the following steps should be incorporated:

- » Monitoring must be directed at fulfilling one or more objective sets, be subject to analysis and lead to potential actions;
- » Monitoring should be for identifying problems, establishing a background reference, and evaluating the effectiveness of controls;
- » Technology performance monitoring should be to confirm that the facility operates as designed, if remedial design improvements are needed, or if it needs maintenance. This will assist in improving future designs;
- » The monitoring program will be directed at connecting impact analysis with technology performance assessment;
- » The strategy will recognize and incorporate existing monitoring programs; and, reporting on results and taking appropriate follow-up action. This is a key component that fulfils due diligence expectations.

8.3 Future Commitments

Commitments to future work during a future design phase are to be completed prior to construction and will include consultation and engagement with stakeholders as appropriate to inform and manage expectations. Additional communications with government and non-government stakeholders will be required during a future design phase as well as during construction. Meetings and discussions will be held during a future design phase with government agencies (e.g. MTO, MECP, MNRF) and local municipalities to obtain required approvals and permits. All municipalities will be contacted to finalize details concerning proposed alterations to municipal roads and road structures as well as municipal utilities. They will be kept apprised of proposed project staging and mitigation details as they are further developed during the design process. They will also be kept informed of progress as construction proceeds.

Communication with non-government stakeholders (e.g. members of the public, business associations, etc.) will focus on the following:

- » Obtaining input on construction mitigation measures that affect the community; and

- » Identifying local and site-specific issues so that specific mitigation measures can be developed to minimize impacts to the extent possible. This may include discussions on issues such as:
 - Construction access;
 - Temporary road closures;
 - Construction schedule; and
 - Critical community activities that may be affected.
- » Communication of project status and activities will be maintained as follows:
 - A website and social media tools will be developed to provide ongoing updates to facilitate communication during future design and construction;
 - Whenever a construction activity impacts a residential or business area, advance notice will be provided to the residents and businesses within the zone of influence;
 - Completion of more detailed operational and construction phase noise and vibration impact assessments;
 - Neighbourhoods will be kept updated on construction duration and progress;
 - Community liaison officer(s) will be available for neighbourhoods to contact with specific information requests; and
 - Enquiry/complaint procedures will be developed.

Community liaison officer(s) will be available for neighbourhood residents and businesses to hear and assist with issues that may arise during construction.

8.3.1 Property

The Region will continue to identify property acquisition requirements and liaise with property owners to acquire necessary property along the Stage 2 LRT corridor. All property acquisitions will be completed prior to the start of construction. Additionally, consultation will continue with affected property owners along the route.

8.3.2 Design

Upon completion of the functional design, the Region will undertake a future design phase (as appropriate based on the project delivery method selected). These stages will build on the functional design plans and the project described in this EPR to further evaluate and define the system's details regarding alignment, stations, structures and associated elements.

A summary of commitments to future work in the design and/or construction phase related to specific environmental factors is provided in **Table 6-2**.

8.3.3 Ongoing Consultation and Engagement

Consultation and engagement activities will continue with members of the public, agencies, stakeholders and Indigenous communities during future design phases. The



Region will maintain the existing contact list and provide opportunities for ongoing stakeholder consultation and community engagement to understand the needs and interests of various agencies, businesses and organizations in the community and manage their expectations. Feedback will be incorporated into the project design where appropriate. The Region will also continue to consult directly with interested Indigenous communities. In addition, the project website and social media tools will be maintained and used to provide updates during future design and construction.

8.3.4 Utility Coordination

The Region has initiated consultation with utility companies about the project and will continue to communicate with them to discuss their needs and interests as they relate to the Stage 2 ION Project. The Region will also work to coordinate necessary approvals and timing of utility works, including relocation, within the project's construction timing.

8.3.5 Addendum Process

Subject to O. Reg. 231/08, s.15, if there are any changes to the Stage 2 ION Project that are inconsistent with the EPR, the Region will prepare an addendum that includes:

- » A description of the change;
- » The reasons for the change;
- » The proponent's assessment and evaluation of any impacts that the change might have on the environment;
- » A description of any measures proposed by the proponent for mitigating any negative impacts that the change might have on the environment; and,
- » A statement of whether the proponent is of the opinion that the change is a significant change to the transit project, and the reasons for the opinion (O. Reg. 231/08, s.15(1)).

8.3.6 Impact Assessment Agency of Canada

The *Impact Assessment Act, 2019* (IAA 2019) and associated regulations came into effect on August 28, 2019 and replaces the *Canadian Environmental Assessment Act* (CEAA, 2012). This project was reviewed by the Project Team against the Federal Regulations Designating Physical Activities, and the Project Team determined that the study is not "designated" and therefore will not require a federal environmental assessment.

8.4 Project Implementation Plan

The transit project as defined in this EPR consists of the Stage 2 ION LRT, with a total length of 18 km, running from the existing Fairway ION Station to Downtown Cambridge to complete the link of the major urban centres of the City of Waterloo, City of Kitchener and City of Cambridge. The Region's vision for rapid transit is a single LRT system along this entire corridor to keep up with ridership demand. Stage 2 ION, from the Conestoga ION Station in Waterloo to the Fairway ION Station in Kitchener, has already



been completed and entered revenue service in 2019. To facilitate the implementation of Stage 2 ION, Regional staff propose to:

- » Pursue property acquisitions;
- » Encourage transit-supportive development to increase ridership throughout GRT's service areas and to expedite the extension of LRT through Cambridge;
- » Implement transit-supportive strategies in Cambridge; and
- » Seek Federal and Provincial funding for Stage 2 ION.

8.5 Project Costs

The proposed route is estimated to cost about \$1.52 billion. This includes cost to:

- » Design and build the system
- » Purchase property
- » Relocate utilities
- » Provide contingency

This estimate is based on the best available information at this time (Class D estimate, i.e. 30 per cent precision, 5 per cent conceptual design).

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Design recommendations given in this report are applicable only to the Project and areas as described in the text and then only if constructed in accordance with the details stated in this report. The comments made in this report on potential construction issues and possible methods are intended only for the guidance of the designer. The number of testing and/or sampling locations may not be sufficient to determine all the factors that may affect construction methods and costs. We accept no responsibility for any decisions made or actions taken as a result of this report unless we are specifically advised of and participate in such action, in which case our responsibility will be as agreed to at that time.

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