# CORRIDOR DEVELOPMENT PERMIT GUIDELINES

## For Adjacent Development

**ADJACENT CONSTRUCTION REVIEW**
LEGAL AND CORPORATE
COMMERCIAL SERVICES

VERSION 1.6 | JUNE 2025

METROLINX

## PREAMBLE

The *Building Transit Faster Act, 2020* (BTFA) targets steps in the planning, design and construction process that have delayed major projects in the past. The legislation removes roadblocks and gives the province the tools needed for Metrolinx and Infrastructure Ontario to deliver priority transit projects faster.

*Building Transit Faster Act, 2020:*

On July 8, 2020, the *Building Transit Faster Act, 2020* (**BTFA**) came into force, introducing measures that streamline project delivery and support the accelerated completion of the priority transit projects identified in Ontario's "New Subway Transit Plan for the Greater Toronto Area (GTA)", as outlined in the 2019 Ontario Budget: the Ontario Line, the Scarborough Subway Extension, the Yonge North Subway Extension, and the Eglinton Crosstown West Extension, and Hamilton Light Rail Transit.

*Ontario Rebuilding and Recovery Act, 2020:*

On December 8, 2020, the *Ontario Rebuilding and Recovery Act, 2020* (ORRA) received Royal Assent. The ORRA amended the **BTFA** to enable the extension of the suite of acceleration measures, as applicable, to other provincial transit projects by providing regulation-making authority to name other projects. Designating transit corridor lands enables Metrolinx to use the full suite of measures in the **BTFA** to accelerate project delivery for these projects, as appropriate per the details of the priority project's designation regulation.

The legislation will help get transit built faster by ensuring nearby developments or construction projects do not interfere with or delay the priority transit projects. The **BTFA** introduces a permit requirement for certain works near the priority transit projects. A **Corridor Development Permit** is required to carry out the following work within the **Transit Corridor Lands and permit buffers**:

1. **Building**, **Altering** or placing a **Building**, other **Structure** or road, or conduct excavation or dewatering, on or under transit corridor land, or land within permit buffers.
2. **Building**, **Altering** or placing Utility Infrastructure that would require grading or excavation on or under transit corridor land, or land within permit buffers.
3. Such other work as may be prescribed by Regulation under section 84 of the Act.

The **Corridor Development Permit** does not replace any other permit and/or approval that an Applicant must obtain to satisfy applicable law, including municipal and provincial approvals. Metrolinx will work collaboratively with Applicants, Authorities Having Jurisdiction, and leverage existing municipal planning and approvals processes, in order to streamline approvals.

Metrolinx's role under the Planning Act as a public review agency is separate from **BTFA**. Our planning review role will remain the same and will follow the current approach where municipalities circulate Metrolinx on planning applications for feedback. No changes are anticipated to the current planning review process.

Interested parties undertaking due diligence, planning and development activities within the **Transit Corridor Lands and permit buffers** are encouraged to read this Guideline, and the companion Metrolinx Corridor Development Permit for Utility and Roadway Work, as may be applicable for such projects, and to visit Metrolinx's website for more information including maps of the Transit Corridor Lands and permit buffers. All inquiries may be directed to development.coordinator@metrolinx.com.

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## 1. DEFINITIONS & ABBREVIATIONS

**"Alter"** or **"Alteration"** means material or structural changes to the exterior of existing buildings or structures, such that the original form or makeup of that building or structure has been temporarily or permanently modified through removal, replacement, or addition of any building or structure components, using mechanical equipment or manual means to perform the work. Such activities may include any construction, demolition or grade alteration activities.

**"Application Package"** means the Application Form, filled out checklist, cover letter, drawings, reports and other documents supporting the application for a Corridor Development Permit.

"**As-Built Drawings**" has the meaning given by the Professional Engineers of Ontario as those drawings prepared by a third party or by the engineer using information furnished by the contractor or other field staff.

"**Authorities Having Jurisdiction**" or "**AHJ**" means any federal, provincial, territorial, regional, municipal or local governmental authority, quasi-governmental authority, court, government or self-regulatory organization, commission, board, tribunal, organization, or any regulatory, administrative or other agency, or any political or other subdivision, department, or branch of any of the foregoing or any Utility Company, having legal jurisdiction in any way over Metrolinx, any aspect of the performance of the Works, the operation of the system or, in each case to the extent it has or performs legislative, judicial, regulatory, administrative or other functions within its jurisdiction.

**"Building**" means a structure, wholly or partially enclosed with a roof, supported by walls, columns, piers or other structural systems, regardless of size, whether temporary or permanent.

**"BTFA"** means *Building Transit Faster Act, 2020*, and Amendments.

"**Business Day(s)**" means a day from Monday to Friday, other than a holiday as defined in section 87 of the Legislation Act, 2006.

**"Transit Corridor Lands and permit buffers"** means lands designated as **Transit Corridor Lands** or lands within the permit buffer (for Buildings, and Structures) of the **Transit Corridor Lands**, as described in **Section 3** of the **BTFA** and this guideline.

**"Corridor Development Permit- CDP"** means the permit that Metrolinx issues that grants the Developer permission to proceed with their work within the Transit Corridor Lands and permit buffers.

**"DC"** means Direct Current

"**Developer**" means owners of development and infrastructure Projects within Transit Corridor Lands and permit buffers. Any landowner who plans work within the Transit Corridor Lands and permit buffers is also considered a Developer in this Guideline. The Developer is an Applicant when they are applying for a permit. A proponent as defined in *Building Transit Faster Act, 2020* (as in the Consolidated Hearings Act), is also a Developer in this Guideline.

**"Developer Infrastructure"** means all permanent infrastructure constructed by the Developer.

**"EMF"** means Electromagnetic Fields

**"EMI"** means Electromagnetic Interference

"**Geotechnical Zone of Influence**" or **"Geotechnical ZOI"** means the zone in the ground in which any intrusion from Developer Infrastructure will impact Metrolinx Infrastructure, as described in Appendix A, Section 1.4 (f).

**"Ground Instrumentation and Monitoring Plan"** or **"GIMP"** is as described in Appendix A, Section 1.4 (h) of this guideline.

**"IEEE Canada"** means Institute of Electrical and Electronics Engineers, Canadian Organization

"**Metrolinx Asset Protection Package**" or "**MAPP**" is a Metrolinx document that governs Metrolinx led Transit Oriented Communities (TOC).

**"Metrolinx Decision"** means the decision that Metrolinx provides to the Developer at the end of the Review Process. It can be one of the following statuses:

1. Permit with no conditions
2. Permit with conditions
3. Resubmit

**"Metrolinx Infrastructure"** means all permanent infrastructure owned by or to be owned by Metrolinx and forms part of Metrolinx transit facilities, e.g. tunnels, stations and elevated structures.

**"Metrolinx Response"** means the written response to the Developer at the end of the Review Process that includes the Metrolinx Decision and any conditions and comments to explain the Metrolinx's Decision.

**"Metrolinx Response Review Process**" the means the Review Process as per **Section 63** in **BTFA** and is the process to follow when the Developer wishes to dispute Metrolinx's Response regarding the application for a Corridor Development Permit.

"**Metrolinx Standards**" means standards developed by Metrolinx.

"**MTO**" means the Ontario Ministry of Transportation and any successor or replacement ministry thereto.

**"OESC"** means Ontario Electrical Safety Code, managed by the Electrical Safety Authority (ESA).

"**Overhead Contact System"** or "**OCS**" means the structures, poles, guy-wires, portals and power distribution system that delivers the power to the distribution system and then to the transit vehicle.

**"Priority Transit Projects"** as defined in the **BTFA**.

"**Project**" means, collectively, Developer Infrastructure and any third-party infrastructure included in the development.

"**Rail Corridor"** or **"Metrolinx Corridor**" means Metrolinx owned property for the exclusive use of Metrolinx operations. A Rail Corridor is a heavy rail corridor used by GO Transit. A Metrolinx Corridor is an exclusive use transit corridor for subway or LRT. Both are fenced off from the public.

"**Record Drawings**" as defined by the Professional Engineers of Ontario as those drawings prepared and sealed by the reviewing engineer after verifying in detail the actual conditions of the completed Project.

"**Review Process**" means the process from the application for a Corridor Development Permit by the Developer, to a Metrolinx Response, and includes an intake and completion check, and a Technical Review by Metrolinx and relevant stakeholders of the Application Package for compliance to the technical requirements of this guideline and the referenced standards.

**"Smoke Dispersion Analysis"** is as defined in Appendix A, Section 1.5 (d).

**"Structure"** means anything that is erected, built or constructed of one or more parts joined together.

**"Technical Review"** means the review by Metrolinx and relevant stakeholders of the Application Package for compliance to the technical requirements of this guideline and the referenced standards.

**"TOC"** means Transit Oriented Communities. TOC is higher density, mixed-use development that is connected, next to or within a short walk of transit stations and stops. The TOC approach goes beyond the traditional Transit Oriented Development (TOD) model, which typically concentrates on a single development.

**"Transit Corridor Lands"** means the lands designated by the Lieutenant Governor in Council under **Section 62** in the **BTFA**.

"**Utility Infrastructure**" means poles, wires, cables, including fibre-optic cables, conduits, towers, transformers, pipes, pipelines or any other works, structures or appliances placed over, on or under land or water by a Utility Company. Pipes and pipelines include watermains, storm and sewer mains.

**"Works"** means the provision of the Developer Infrastructure and third-party infrastructure to be performed as per the Application Package.

## 2. PURPOSE OF THE GUIDELINE

For projects that fall within the boundaries of the **Transit Corridor Lands (TCL)** plus permit buffers, this Guideline will help the development community, consultants, contractors, and landowners navigate the Corridor Development Permit process with ease and clarity through the different stages, outlined in Section 3.1.

While Metrolinx will protect for the design and delivery of **Priority Transit Projects (PTP)**, it is of extreme importance that public and private sector projects within the **Transit Corridor Lands (TCL) and permit buffers** still proceed for the benefit of stakeholders where they do not negatively impact transit delivery and ultimately the future safe operation of Metrolinx vehicles, and the ability to access Metrolinx stations and infrastructure. This Guideline and Metrolinx staff are a resource to support due diligence activities conducted by the development community to inform project designs and methods of construction to ensure the successful completion of all projects.

### 2.1 Why is Metrolinx Interested in Adjacent Developments?

Any new development within close proximity to transit—whether it will be adjacent or physically connected, is of interest to Metrolinx. Metrolinx's interests are first and foremost one of safety; second of expediting future expansion plans in concert with sustainable land development; and third, to enhance transit connections into the surrounding communities.

Projects located within a joint corridor with other Metrolinx infrastructure (such a GO Heavy Rail Corridor, Light Rail Corridor, Station) may be subject to additional review requirements or approvals, in addition to the Corridor Development Permit (CDP).

This guideline is relevant for adjacent developments in proximity to the transit corridor as shown in Figure 2.1 (A), (B) and (C). If a development is proposed to be physically connected to any transit infrastructure, such as a TOC as illustrated in Figure 2.1 (B) and (C) (i.e. station entrance building, pedestrian tunnel connection, etc.), are subject to additional Metrolinx standards, guidelines, and applicable agreements. Each application will be reviewed on a case-by-case basis, and dependent on the nature of the proposed integration.

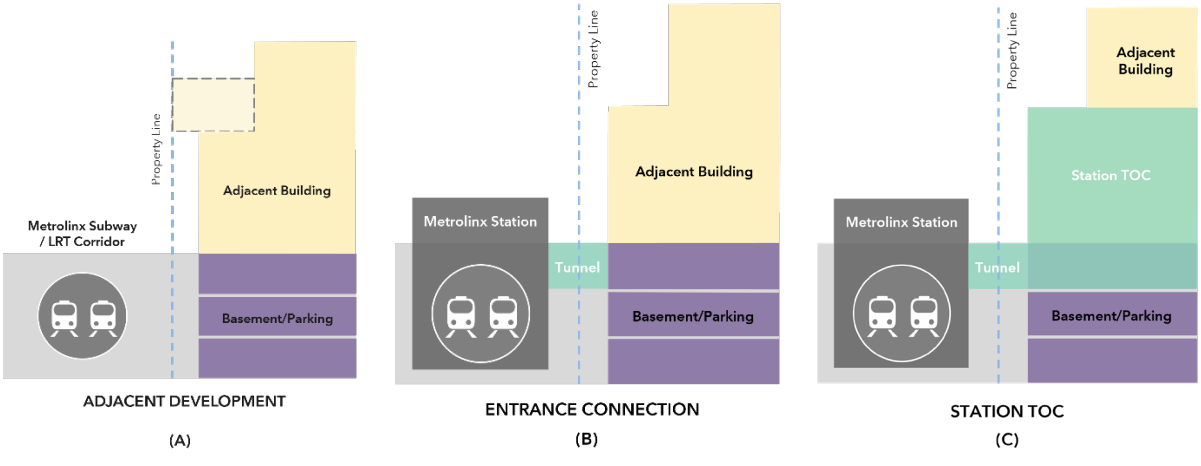



**Figure 2.1: Types of Adjacent Development**

## 2.2 Who Should Use the Guideline?

This guideline is intended for the development community, including: Developers, consultants, contractors, municipalities and/or landowners within the Transit Corridor Lands (TCL) and permit buffers. For projects that relate to Utility and Roadway works (Works within the Right-of-Way- ROW), applicants should refer to the companion document: Metrolinx Corridor Development Permit Guideline for Utility and Roadway Work.

A Corridor Development Permit (CDP) is **not required** in emergency situations when:

1. A Developer is responding to an emergency that involves actions to protect public safety, or is in response to a failure or damage to existing buildings or other infrastructure that has or may result in a loss of an essential service, or
2. EMS, Fire, or Police assistance is required, or 911 is or must be called or dispatched.

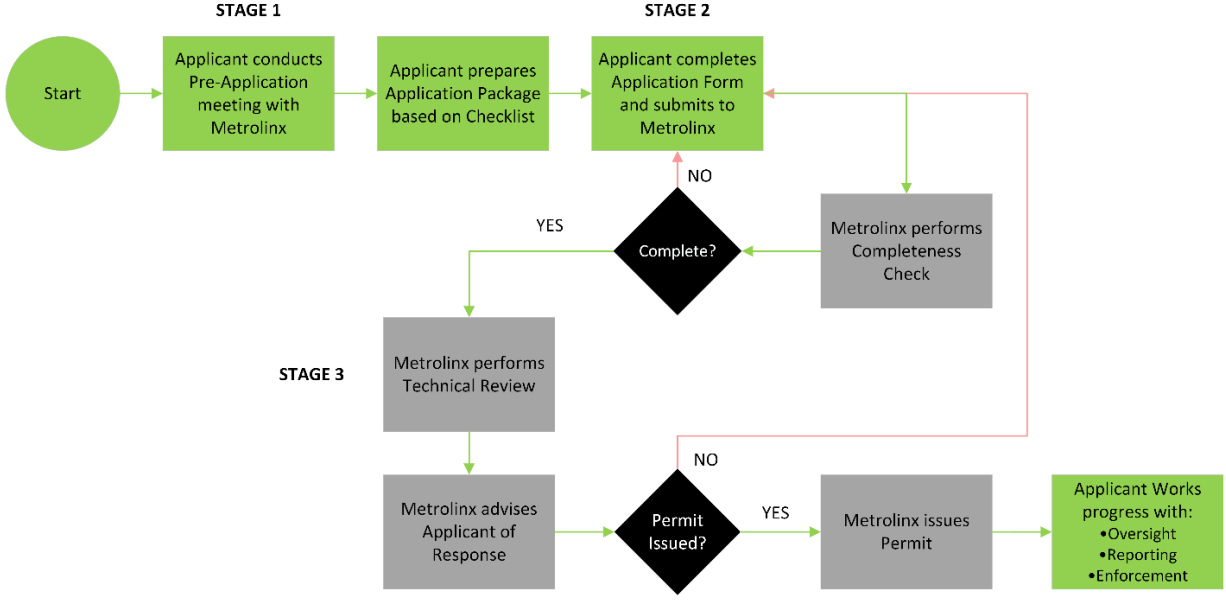
## 2.3 How Should the Guideline be Used?

This guideline should be consulted frequently throughout the development process, including: planning, design, and construction. It is meant to be augmented and supported by dedicated Metrolinx staff throughout the process. This document describes how the Developer and consultant team should coordinate with Metrolinx, third parties and other stakeholders for efficiency and alignment with the process for a Corridor Development Permit.

# 3. APPLICATION, REVIEW & APPROVAL PROCESS

## 3.1 Overview

There are four stages of the Corridor Development Permit Process, shown in the Figure 3.1:




*Applicants must obtain all permits and approvals from other Authorities Having Jurisdiction to progress with works.

**Figure 3.1: Corridor Development Permit Process**

## 3.2 Stage 1: Corridor Development Permit Pre-Application

*For Homeowners*, prior to initiating the Corridor Development Permit process, are encouraged to visit the Metrolinx website to confirm if the project or construction activity may be exempt from the Corridor Development Permit (CDP) process. If additional confirmation is required, please contact Development.Coordinator@metrolinx.com for inquiries or clarification.

For *Developers* and/or proponents of development, to initiate the Corridor Development Permit process, the Developer shall complete and submit to Metrolinx a Pre-Application Form (found here). Submission requirements for Pre-Application include: a Site Plan showing the proposed project, property lines and set-backs; and a Topographic Survey (if available), Site Servicing (if available) and Grading (if available);

Upon review of the Pre-Application Form and submission, it is determined by Metrolinx that the project will have no impact on the Priority Transit Project, Metrolinx will advise the Developer that no Pre-Application meeting is required. The Developer can then proceed to formal submission of a Corridor Development Permit application package.

Where there are perceived potential impacts to Priority Transit Project, Metrolinx will arrange a Pre-Application meeting with the Developer where Metrolinx will explain the review process

and provide an opportunity for any questions and queries. Metrolinx will provide preliminary feedback relating to: the risks for developing in the Transit Corridor Lands and permit buffers; advise of timeline for review and Permit approval based on the nature and complexity of a project.

### 3.2.1 Small-Scale/Minor Projects

Small-scale/minor projects that have a high degree of probability of having little to no impacts to Priority Transit Projects, will have a shorter review period. Minor projects, including decks, porches, and pools generally have the following characteristics:

1. there are no Metrolinx property interests on the lands that are subject to the development;
2. proposed works do not include ground dewatering, excavation or shoring work within the geotechnical zone of influence;
3. the development does not pose any material loading implications on existing/planned transit works or assets;
4. the development complies with all applicable Metrolinx requirements and standards;
5. in general, based on the nature and location of the development compared with that of the design and construction schedule of the given Priority Transit Project, there is little or no need to coordinate designs or construction activities.

Please refer to our **website** for more examples of projects that are classified as small and minor works.

If you are in doubt and not sure if your project falls into the small and minor works category, please contact Metrolinx at development.coordinator@metrolinx.com to confirm.

### 3.2.2 Other Projects

During the Pre-Application meeting with the Applicant, Metrolinx will identify items on the Corridor Development Permit Application Checklist required for submission, according to the site, project and expected impact on Priority Transit Projects. An Application Package shall include:

1. Cover Letter
2. Application Form, including Landowner Authorization, if Applicant is not the Owner
3. Completed Checklist, indicating what is being provided in the Application Package
4. Drawings, Surveys and Technical plans (see Appendix A Section 1.3 and 1.4)
5. Studies and reports (see Appendix A Section 1.5)

Currently, there are no application fees associated with the Metrolinx Corridor Development Permit (CDP).

In general, Corridor Development Permit applies to exterior construction works. Please visit the Metrolinx website here, for a complete list of exempted construction activities.

## 3.3 Stage 2: Obtaining a Corridor Development Permit

The Developer completes the Application Package and submits it for review by Metrolinx to obtain a permit, which may/may not contain conditions as part of permit approval. The permit allows the Developer to proceed with their design and/or construction, subject to certain conditions or obligations that are to be satisfied and confirmed by Metrolinx prior to advancement of design and/or construction associated with a particular condition, and subject to the Municipal Permit process.

### 3.3.1 Metrolinx Application Review Process

Metrolinx will review the Developer's application and perform a completeness check. If the Application Package is incomplete, Metrolinx will request the Developer to provide additional documentation or clarifications that must be provided before Metrolinx will initiate the Technical Review of the Application Package. If/when the application is complete, the Applicant will be advised and Metrolinx will begin Technical Review of the Application Package against the Technical Requirements outlined in Appendix A of this guideline and provide a compiled and complete set of reconciled comments to the Developer; Metrolinx will reach out to the Developer to obtain clarification during the Technical Review as needed prior to issuing comments.If during the Technical Review, there are additions, modifications, or changes to the Developer's project, an amendment to the Application Package is required.

Metrolinx's review of the Developer's Application Package will result in a Metrolinx Decision of one of the following statuses:

1. Permit with no conditions – Issued for small-scale/minor Projects with little to no impacts to Priority Transit Projects.
2. Permit with conditions - Developer shall review Metrolinx's conditions and proceed with the proposed Works in accordance with the stipulated conditions. Where applicable, to further advance the development, the Developer shall submit additional documentation to satisfy the conditions. If the additional documentation is compliant, Metrolinx will update the permit, indicating that the condition has been satisfied and that design and/or construction subject to that condition can proceed.

   A Metrolinx Corridor Development Permit, when issued, shall indicate the conditions and the corresponding Municipal Permits that have Metrolinx authorization, e.g. Demolition Permit, Shoring Permit, Excavation Permit, Foundation Permit, Building Permit. The Municipality will only issue a Municipal permit if they have a corresponding Metrolinx Corridor Development Permit in hand, and the Developer's Application Package is the same in the Metrolinx and Municipal applications, such that Metrolinx and the Municipality are issuing permits for the same design/work, as per applicable Law pursuant to O.Reg163/24 under the Building Code Act, 1992.
3. Resubmit - Application Package is non-compliant or includes insufficient documentation, to the extent that Metrolinx cannot confirm compliance and will not issue a permit. For a resubmit status, the Developer shall review and address

Metrolinx's compliance feedback and resubmit their Application Package for a subsequent review by Metrolinx. It is the Developer's responsibility to demonstrate to Metrolinx that their Project will not create schedule, financial, or other adverse impacts to the Priority Transit Projects, and that any potential impacts will be adequately mitigated, to the satisfaction of Metrolinx for a Permit to be issued.

### 3.3.2 Timing of Permit Review Process

The overall timing from submission of an Application Package by the Developer to Metrolinx Response, is expected to be up to 60 Business Days. If a Metrolinx Response is not provided within 60 Business Days from a complete submission, the Developer shall be entitled to enter the Metrolinx Response Review Process, as this process has been established under **Section 11** of the **BTFA**.

### 3.3.3 Metrolinx Response Review Process

As part of the Corridor Development Permit process, the Province has implemented a Metrolinx Response Review Process which allows Applicants to request a review of the Metrolinx Response to their permit application, provided they meet the criteria identified below.

Should an Applicant disagree with a Metrolinx Response with respect to their Corridor Development Permit Application, Applicants have 30 Business Days to initiate the Metrolinx Response Review Process, provided that one or more of the following criteria is met:

A. Non-Decision: A Metrolinx Response has not been provided within 60 Business Days of a submission of a complete application.

B. Error in Application of Statutory Authority: The Applicant can demonstrate that the Metrolinx Response was beyond the jurisdiction of Metrolinx under the Building Transit Faster Act, 2020.

C. Patently Unreasonable: The Applicant can demonstrate that the Metrolinx Response was patently unreasonable given the submitted documents and the reason(s) for the decision.

To initiate this process, the Applicant shall complete and submit to Metrolinx an Application for Review of a Metrolinx Response. Applications forms can be found here. The Applicant will submit the Application and any supporting materials to development.coordinator@metrolinx.com. Metrolinx will acknowledge receipt of the Application.

Note: Supporting materials may include legal analysis of the Metrolinx Response, a third-party engineer assessment of the Metrolinx Response, and marked-up submitted documentation that demonstrate why the Applicant believes Metrolinx has made an error in the application of Statutory Authority or why the Metrolinx Response is Patently Unreasonable. The scope for a review is limited to the design that was submitted as part of the original application. New technical drawings, designs, and other technical work that significantly alters the proposed

project will not be assessed in the Review Process. If the Applicant has new designs or other detailed, technical changes that would result in a potentially different Permit Response, the Applicant will need to submit a new Permit Application. Note that if the Applicant requires further clarification or direction from Metrolinx before submitting materials to initiate the review process, inquires can be sent to development.coordinator@metrolinx.com.

The Review Process involves a thorough analysis of the application, including any supporting materials provided. Throughout the process, Metrolinx may reach out to the Applicant for further information or to seek clarification, if required. The full review process is expected to take between 20 and 45 Business Days, or longer due to project complexity, if required by Metrolinx and communicated to the Applicant.

The Review Process begins with Metrolinx acknowledging receipt of the Application to the Applicant, ensuring it meets the eligibility criteria. Once that is complete, Metrolinx will begin the formal review. While initial assessment of the application involves only Metrolinx, analysis and review by non-Metrolinx parties, including MTO, is incorporated into the Review Process in order to provide input, support and to ensure fairness and objectivity.

Once the Review Process is completed, Metrolinx will convey the final decision to the Applicant which could include, but is not limited to, a change of the initial Metrolinx Response or no change to the Metrolinx Response.

### 3.4 Stage 3: Executing a Corridor Development Permit

At the conclusion of the review of a Developer submitted Permit Application Package, Metrolinx will provide a Response to the Developer which may result in a permit with or without conditions. The Applicant shall correspond with Metrolinx regarding the Metrolinx Response that has been issued, and indicate an acceptance of the Metrolinx Response, request further discussions with Metrolinx to resolve an unacceptable Response, or request for a review of the Response. If the Applicant does not provide correspondence within 20 Business Days of the issuance of a Metrolinx Response, a Corridor Development Permit will be issued in accordance with the Metrolinx Response that was issued.

With a conditional permit in hand, the Developer's work shall be in accordance with the submitted application and is obligated to satisfy applicable conditions through additional submissions of required documentation as indicated in Section 3.5, Stage 4: Inspection, Reporting, and Corridor Development Permit Enforcement. A Corridor Development Permit amendment shall be required to revise previously imposed permit conditions and for updates, modifications, or changes to a Developer's project that create new impact(s) to the Priority Transit Project in design or construction after a Corridor Development Permit has already been issued.

The Corridor Development Permit does not replace permits and approvals required by other Authorities Having Jurisdiction, such as Conservation Authorities, the Ministry of Transportation pursuant to the Public Transportation and Highway Improvement Act and municipalities. Municipalities are considered to be the prime approval authority that require supporting clearance permits/approvals from other Authorities Having Jurisdiction, such as Metrolinx. The Corridor Development Permit Review Process is concurrent with other permits

and approvals that an Applicant must obtain to satisfy applicable law; Applicants are still required to obtain applicable permits under legislation from MTO. The Corridor Development Permit Review Process is concurrent with other permits and approvals that an Applicant must obtain to satisfy applicable law, including municipal approvals.

Should the Corridor Development Permit expire prior to completion of the Applicant's proposed work, the Applicant shall engage Metrolinx to request for a Corridor Development Permit Extension. Extension will be at the sole discretion of Metrolinx.

Click here for the Corridor Development Permit Application Form.

### 3.5 Stage 4: Inspection, Reporting, and Corridor Development Permit Enforcement

During the construction of the development, and if required under the conditions included as part of the Corridor Development Permit, Metrolinx will perform inspections of the works, facilitated through reporting methods provided by the Developer, as outlined in the Technical Requirements section in **Appendix A**, as a means to enforce compliance with a Corridor Development Permit.

The framework established under the BTFA and its regulations includes enforcement tools to ensure compliance with Metrolinx Corridor Development Permit conditions. Permit enforcement includes the ability for Metrolinx to carry out inspections, issue stop-work orders and Non-Compliance Notifications (NCN) for non-compliant works that have the potential to pose imminent or future danger to the construction of Priority Transit Projects within the Transit Corridor Lands and permit buffers. Upon inspection, Metrolinx can issue a:

Non-Compliance Notification (NCN), for noncompliance of work under Metrolinx Corridor Development Permit conditions; subject to 30 Calendar days (or other duration defined by Metrolinx) resolution, after which continued non-compliance escalates to the issuance of a Stop-work-order;

Stop-work-order, for noncompliance of work that poses an imminent impact to the construction of a Priority Transit Project within the Transit Corridor Lands and permit buffers; work-stoppage shall be in effect for specific work identified by Metrolinx, until the impact is eliminated/removed and all conditions on the Stop-work-order are satisfied. A stop-work order can also be issued for work occurring without a Corridor Development Permit.

If included as a condition for a Corridor Development Permit, the frequency of construction inspections conducted by Metrolinx staff or designated representatives shall depend upon the type of development and proximity to the Transit Corridor Lands and permit buffers. The following is a listing of typical submission items that have the potential to pose conflicts and/or risks to a Priority Transit Project, and are subject to construction inspection and enforcement for conformance to Metrolinx Corridor Development Permit conditions; submission requirements are further defined and expanded in the Technical Requirements section in **Appendix A**:

(a) Building/Structure Clearances and Proximity to Metrolinx Infrastructure

(b) Pre/Post Construction Condition Survey

(c) Construction Management Plan

(d) Demolition Work Plan

(e) Grading, Excavations, Shoring & Tie-Back Plan

(f) Ground Instrumentation & Monitoring Plan (GIMP)

(g) Crane Swing Plan

(h) Safety Work Plan

(i) Quality Work Plan

(j) Risk Assessment Work Plan

# 4. AGREEMENTS

## 4.1 Agreements with Metrolinx that May be Required

The Corridor Development Permit will govern the Developer's work until the completion of construction of the Developer's Project. Through the Permit Review Process, Metrolinx may identify conditions for specific agreements and timing for such agreements, in addition to the Corridor Development Permit. The following sets out, in general terms, the nature and purpose of typical agreements; other agreements not listed below may also be required depending upon the Developer's proposal.

### 4.1.1 Non-Disclosure Agreement

Metrolinx may require a Developer to enter into a Non-Disclosure Agreement (NDA) in order to protect sensitive and confidential information such as documents, working papers, designs, timelines, and other materials pertaining to Metrolinx.

### 4.1.2 Land Transfer or Exchange Agreements

Metrolinx may require a Developer to enter into a Land Transfer Agreement when land within the development site is or has a likelihood of being required for a Metrolinx Priority Transit Project or where Metrolinx lands are required by the Developer to accommodate the development.

### 4.1.3 Construction Agreement

A Construction Agreement is necessary when there are particular Developer obligations for protection of Metrolinx interests that go beyond the terms of the Corridor Development Permit and an extension of the Permit is needed to cover the additional terms.

A Construction Agreement is established between the Developer and Metrolinx to set out the specific requirements and parameters of the construction of the development and may include restrictions on the timing and duration of construction activity by the Developer. This agreement must be executed prior to the release of the first municipal building permit and start of any excavation and shoring work. In some circumstances this agreement may be required prior to demolition Works on the site.

### 4.1.4 Long Term Maintenance Agreement

If the Developer Infrastructure is within 3 metres of Metrolinx Infrastructure or in any way impacts Metrolinx's ability to maintain Metrolinx Infrastructure, a Long-Term Maintenance Agreement will be established between the property owner of the Development and Metrolinx. This agreement will define the obligations of both parties to allow for ongoing maintenance and repairs of both the Metrolinx Infrastructure and the Developer Infrastructure to the extent that one impacts the other.

# APPENDIX A - TECHNICAL REQUIREMENTS

## 1.1 Corridor Development Permit Compliance Review against Technical Requirements

Developer projects proposed within the Transit Corridor Lands and permit buffers shall adhere to design and construction requirements and are subject to a Metrolinx compliance review. Such review includes: review of detailed design and construction documents (drawings and specifications) for the proposed development. The focus of the compliance review is the identification of any adverse impacts a proposed development may have on the delivery of Priority Transit Projects, access to Metrolinx Infrastructure, operations and facilities.

The compliance review will include the review of the following:

- Building/Structure Clearances and Proximity to Metrolinx Infrastructure (Section 1.3);
- Corridor Development Permit Submission Requirements (Section 1.4);
- Technical Studies and Reports as Required for a Corridor Development Permit (Section 1.5)

The compliance review must be fully completed, prior to the issuance of a Corridor Development Permit. Where the Developer Project proposes to physically integrate with public facing transit facilities, this document will apply in conjunction with other Metrolinx department requirements and follow the Metrolinx Asset Protection Package (MAPP) process and obtain the associated agreements accordingly.

The issuance of a Corridor Development Permit by Metrolinx does not exempt the Developer from compliance with Applicable Codes and Standards, local By-laws, governing regulations, and any other conditions required by Metrolinx.

## 1.2 Applicable Codes & Standards

The Developer's Project shall adhere to the most current edition of applicable federal, provincial, and municipal laws, and industry codes, standards, and guidelines.

## 1.3 Building/Structure Clearances and Proximity to Metrolinx Infrastructure

Building and Structure clearance requirements are established by Metrolinx, to provide a buffer zone along an existing/proposed Transit Corridor Lands, to permit access to Metrolinx Infrastructure for emergencies and maintenance, fire separation, the dissipation of rail-oriented vibration, noise, and as a buffer from potential derailments. The following provides an overview of building clearance requirements and conditions for at grade LRT/Subway systems (Figures A1 and A3) and below grade subways (Figure A2) based on available current-state information, which may change based on selection of final vehicle type and asset requirements:

(i) The minimum building/structure horizontal clearance is measured from the mutual property line to the building/structure face, and shall be the greater of either 3 metres or local jurisdictional requirements except when an:

1. Adjacent building façade or Structure contains operable windows or balconies, in which case the minimum horizontal clearance shall be 15 metres measured from the adjacent building operable window face or

balcony edge to the track center line for at or above grade Metrolinx tracks;

2. Adjacent building façade or Structure is located adjacent to Transit Corridor Lands station, or elevated guideway viaduct structure, in which case the horizontal clearance shall be measured from the adjacent building façade or Structure to the Transit Corridor Lands station or elevated Structure façade, resulting in the greater of the requirements for fire separation in accordance with NFPA 130 or jurisdictional requirements.

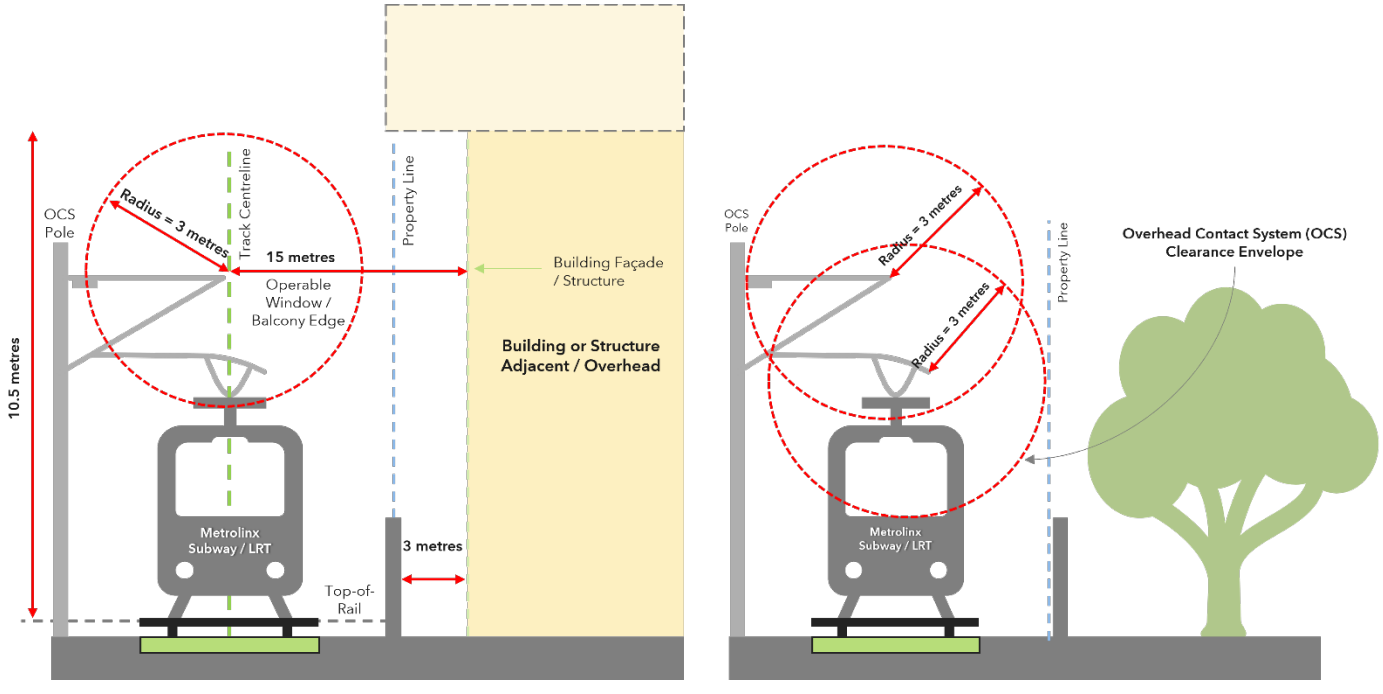



**Figure A1: Adjacent Building or Structure Clearances**

(ii) Unless otherwise determined by the existing Metrolinx location-specific requirements applicable to the area, the minimum vertical clearance for a building or structure overhanging the Transit Corridor Lands shall be 10.5 meters, measured from the Transit Corridor Lands top-of-rail to the nearest outer edge of the building or structure element overhanging the Transit Corridor Lands top-of-rail elevation; other requirements regarding overbuilds may apply.

In cases where property interests or requirements prompt the mutual property line to be redefined, all minimum clearances will be measured from the ***new*** property line.

Existing building and structure clearances may vary by location and ***do not*** set the precedent for new developments. New developments will be subject to current standards and requirements.

Developer Infrastructure facing or located adjacent to the Transit Corridor Land shall be designed to avoid potential impacts with Metrolinx transit vehicles and infrastructure. Adjacent property owners shall:

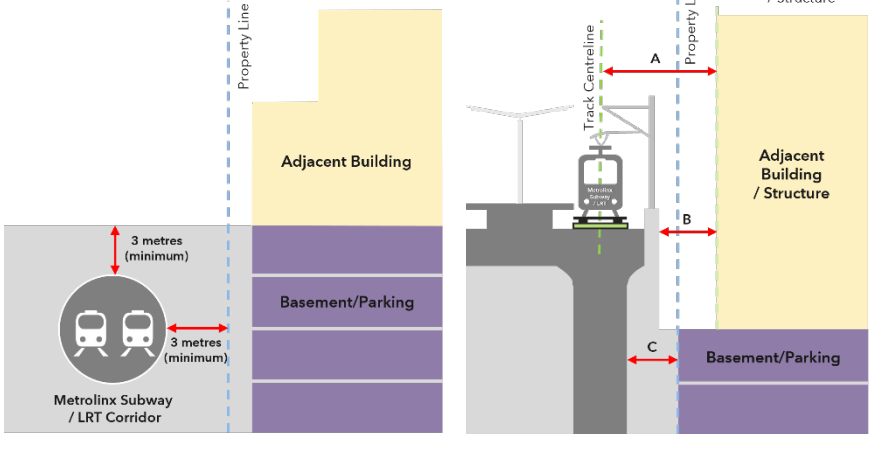
1. Unless otherwise determined by the Metrolinx existing location-specific requirements applicable to that area, maintain building appurtenances and landscaping at a minimum distance of 3 metres from the outermost point of OCS Poles and support structures [relative to the track center line]

2. Plan for landscape maintenance from private property and not allow growth into the Transit Corridor Land or beyond the mutual property line.

3. Not be permitted to access the **Metrolinx Corridor** to maintain the private development.

4. Design buildings such that balconies do not provide direct access to the **Metrolinx Corridor**.

Developer Works adjacent to Metrolinx Infrastructure shall maintain a minimum 3 metre




ADJACENT DEVELOPMENT CONSTRUCTION

MINIMUM SEPARATION DISTANCES

FIGURE A2 FIGURE A3

clearance from existing and planned Metrolinx Infrastructure (Figure A2). Please note additional soil cover on and clearance from existing and planned Metrolinx infrastructure may be imposed and shall be determined by a detailed engineering review and analysis. All clearances are reviewed on a case-by-case basis, and subject to the satisfaction of Metrolinx.

Developer Projects adjacent to Metrolinx elevated guideways and stations shall maintain a minimum fire separation distance per NFPA 130 – Standard for Fixed Guideway Transit and Passenger Rail Systems.

Metrolinx requires a minimum clearance of 6 metres, as measured from the property line to the fixed guideway and any temporary support of construction (Figure A3).

## 1.4 Corridor Development Permit Submission Requirements

The requirement and level of detail for the following plans and drawings shall be determined through a Pre-Application Meeting. The information, drawings, and documents submitted by the Developer must demonstrate that the proposed development will ***not*** adversely impact Metrolinx priority transit projects' construction, current and future operations and maintenance or impact the integrity and durability of Metrolinx facilities, property, and structures.

All documents must be signed and sealed by the appropriate professional responsible for preparing these documents. Typical Submission requirements are as follows:

(a) Full sets of drawings for the proposed development, including, but not limited to:

- Site plan
- Topographic survey
- Property plans including a PIN/Printout Parcel Registry
- Architectural drawings
- Landscape Architectural drawings
- Civil Engineering drawings
- Structural drawings
    - Structural drawings including caisson/foundation plans, sections and details, floor plans, column and wall schedules and loads on foundation for the development
    - Plan and cross-sections of the development and its founding elevations relative to planned/future Metrolinx structures or right-of-way (ROW)

(b) **Pre/Post-Construction and/or Structural/ Building Condition Survey/Plan/Assessment**

A pre-construction condition survey and/or structural/building assessment of existing Metrolinx Infrastructure is required as a method for providing baseline of conditions prior to the start of Developer construction. A post-construction condition survey and/or structural/building assessment of Metrolinx Infrastructure is required as a means of observing any new structural or non-structural deficiencies or damage to Metrolinx Infrastructure due to Developer construction and shall be performed upon substantial completion of the development.

The condition surveys/assessments shall be comprised of both plans and photographic components, with survey limits extending 30 metres past the proposed Developer Project limits within the Transit Corridor Lands and permit buffers. See Figure A4 for a sample of a condition survey. The condition survey shall be carried out in accordance with MTO guidelines. Any damage to Metrolinx Infrastructure due to the Developer's construction shall be the Developer's responsibility to correct. The Condition Survey report/Assessment shall include:

- drawings illustrating locations and type of the defects, all photograph locations; and all cracks over 0.3mm.
- photographic record of each defect.
- the size of the cracks shall be measured with a gauge and identified in the written text of the report.
- hard copy of the report and a USB drive with all of the actual photographs – original jpg or tiff file – to allow for zooming in, and for post-processing, if necessary, to improve visibility.

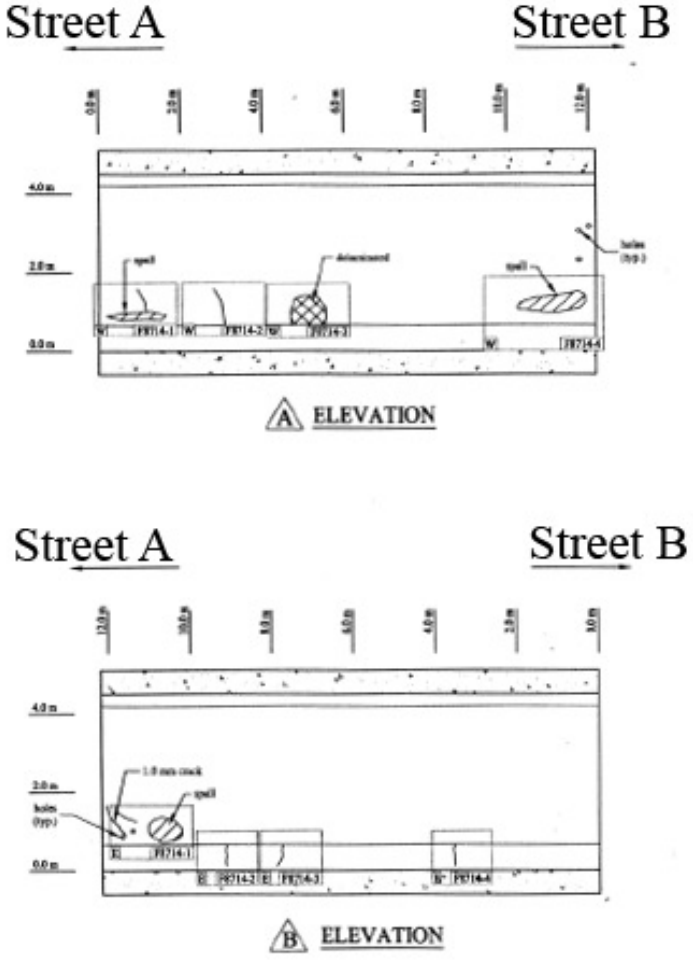



**Figure A4: Sample Condition Survey**

(c) **Construction Management Plan**

A Construction Management Plan is required, and shall identify the proposed Developer Project scope of work including: type of construction activity, site access, positioning of construction machinery and equipment including stationary and movable cranes, protective barriers/fencing, locations of hoarding, and locations of

stockpiling of materials and laydown areas, all in relation to the existing and proposed Metrolinx Infrastructure within the Transit Corridor Land and permit buffer (Figure A5).

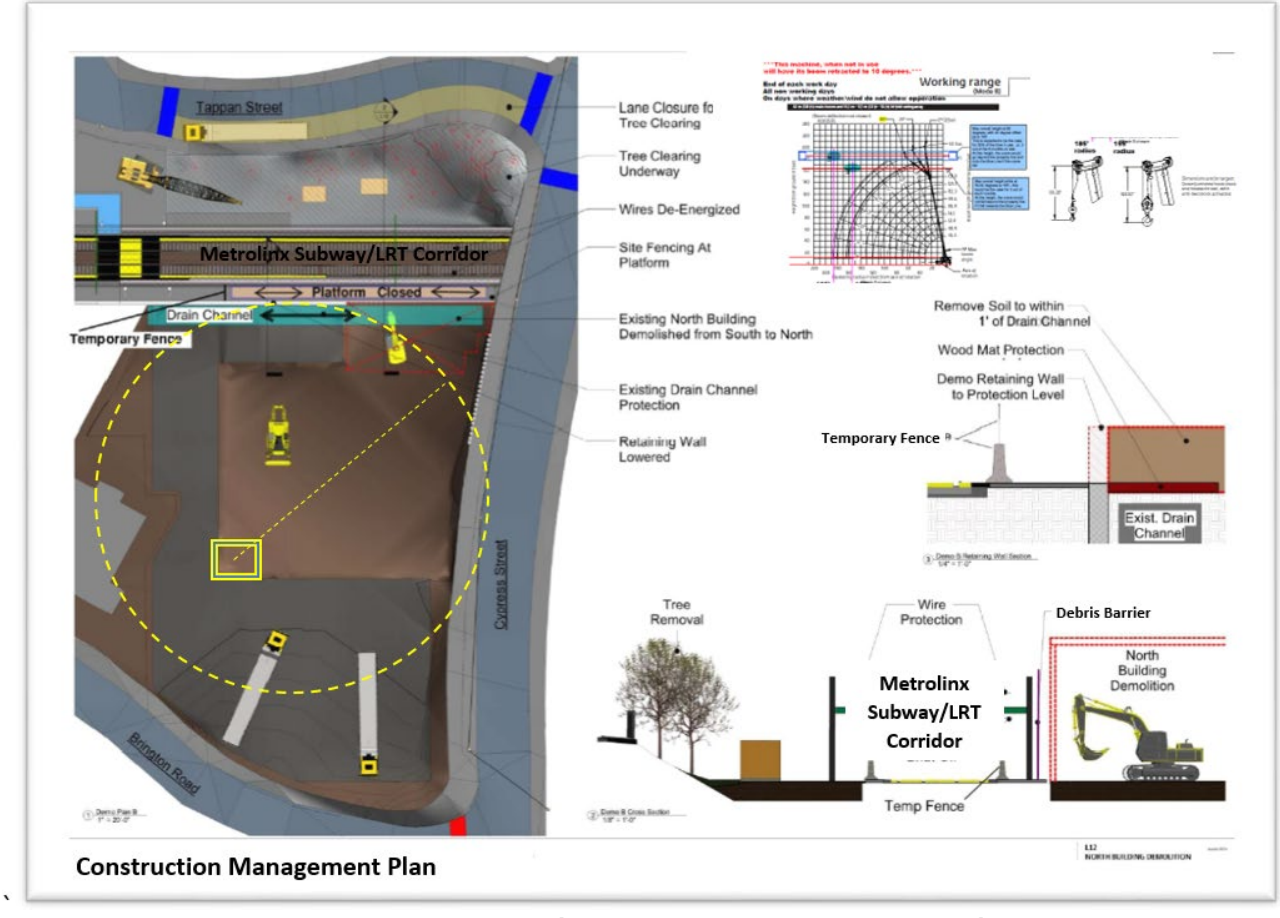



**Figure A5: Sample Construction Management Plan**

(d) **Demolition Work Plan**

A Demolition Work Plan shall be required for any proposed demolition of structures within the Transit Corridor Lands and permit buffers, and shall include, but not limited to the following:

- Detailed narrative describing the demolition procedure and protection of Metrolinx Infrastructure and the public from dust and debris;
- Ground Instrumentation and Monitoring Plan;
- Crane/equipment/machinery swing/location plans with supporting documentation; in the jurisdiction of the proposed Developer Project in the jurisdiction of the proposed Developer Project;
- Site description and detail;
- Building description for the building to be demolished;
- Structural assessment derived from the field investigation and available record drawings for the structural system to be demolished;
- Demolition method to be used in removing superstructure, substructure, or removal of part of Metrolinx structure;

- List and provide details of weight, size, track length, swing, lifting capacity, etc. of equipment / plant to be deployed;
- Demolition procedures and stages with drawings;
- Proposed safety and environmental protection measures;
- Record drawings of the structure to be removed; and
- Photos of Site and Structure(s).

(e) **Hoarding and Stockpiling of Materials Plan**

Developer shall ensure that hoarding and stockpiling of construction site materials or Works within the Transit Corridor Lands and permit buffers conform to the following requirements:

(i) Works and protective coverings shall be secured in compliance with Site-Specific Safety Manuals.

(ii) Equipment and materials shall not block Metrolinx access roads or any part of the Metrolinx Corridor unless prior written consent from Metrolinx is obtained.

(iii) Within **Rail Corridors** and Metrolinx Corridors, track components including support structure shall be protected where there is a potential for debris falling onto the tracks including trees, rocks, and vegetation.

(iv) Materials on site shall be contained in secure areas within the construction site.

(v) Damages to Metrolinx Infrastructure resulting from the Developer's improper materials storage practices, shall be the responsibility of the Developer

(f) **Excavations, Shoring, and Tie-Back Plan**

Detailed excavation, shoring, tie-back plans, and specifications shall be required for any temporary support of excavation structural-systems utilized by proposed Developer Projects within the Transit Corridor Lands and permit buffers, and shall include detailed drawings/plans, specifications and structural calculations signed and sealed by a Professional Engineer in the jurisdiction of the proposed Project.

Construction within the Transit Corridor Lands and permit buffers poses a potential risk to Metrolinx Infrastructure, and will require additional Metrolinx reviews (Figure A6) and such construction may not be permitted unless adequate mitigation measures are provided, to the satisfaction of Metrolinx.

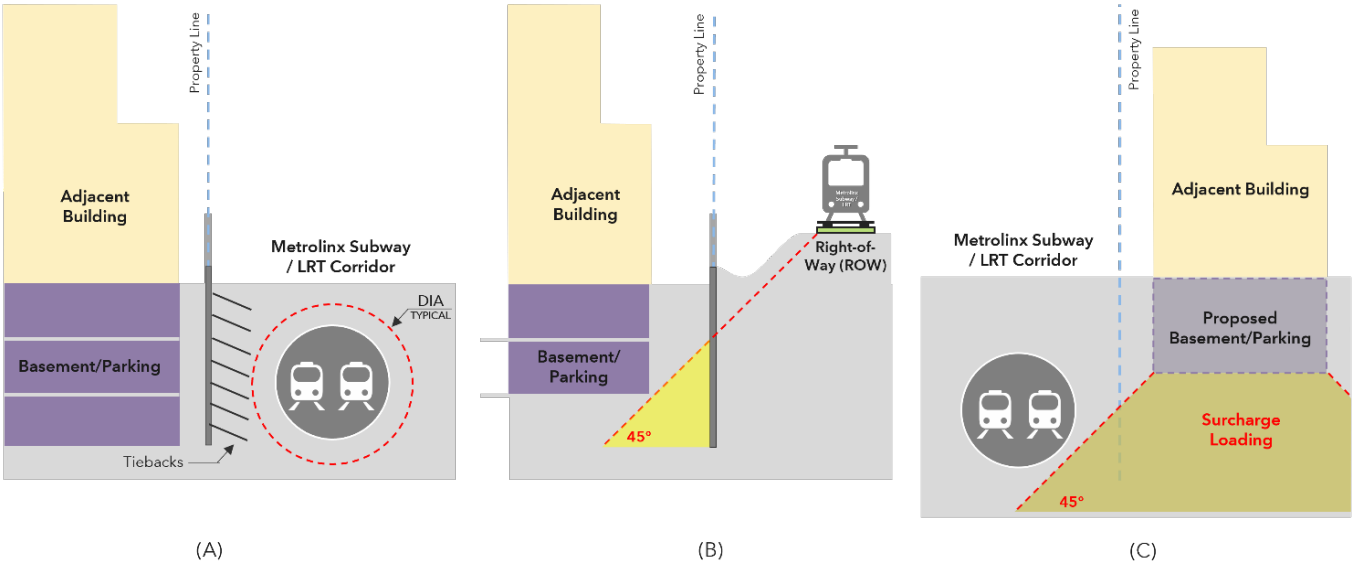



**Figure A6 (A, B, and C): Developer Infrastructure Encroachments into the Geotechnical ZOI of Metrolinx Infrastructure**

Developer infrastructure, including tie-backs may not encroach into the minimum 3 metre setback surrounding the Metrolinx Subways/LRT Corridor, as measured between the end of a Developer tie-back and Metrolinx Infrastructure "DIA/Typical" (Figure A6 (A)).

General requirements are as follows:

i. minimum of 1.5 metres clearance for gravity-grouted tie-backs;

ii. minimum of 3.0 metres clearance for post-grouted tie-backs; and

iii. minimum of 6.0 metres clearance for pressure grouted tie-backs.

Any impacts derived from the proposed development, that encroaches into the Geotechnical Zone of Influence (ZOI) of Metrolinx infrastructure (that extends beyond the property line), will require review and clearance to the satisfaction of Metrolinx, based on various elements such as type of construction, soil conditions, surcharge loads, etc. (Figure A5 (B-C)).

## (g) Substation Requirements

(i) The Substation cannot be de-energized during service periods, while transit vehicles are entering or exiting service, or, if required by maintenance, during non-service periods.

(ii) Access to the Substation, Substation parking, and public sidewalks around the substation cannot be blocked at any time.

(iii) The Substation cannot have any temporary or permanent items, including but not limited to structures, piles, scaffolding, cables, guy wires, and ropes, installed on, over, or under the land on which the Substation is situated, attached

to or connected to any Substation component, including but not limited to structure, grounding system, equipment, fence, and pole.

(iv) The Substation components, including but not limited to electrical equipment, structures, fencing, and grounding, cannot be removed.

(v) Due to the possible ground fault step and touch hazard around the Substation, only non-conductive, non-metallic building materials are permitted to be used along the Substation fence and/or property line, and must extend a minimum of 2 metres away from any change in direction and/or corner post of the fence, and a minimum of 2 metres above the top of the fence.

(vi) If conductive or metallic building materials or structures are used, a minimum of 2 metres of a setback from Substation fence and/or property line is required. The 2 metre setback may be reduced if Developer undertakes a ground fault step and touch potential study that meets OESC and IEEE requirements to determine the setback distance whereby the step and touch potential electrical shock hazards are within the acceptable tolerable values.

(vii) All design and construction work must take into consideration and account for all electrical, fire, and building codes with associated limits of approach, clearances, fire ratings, etc., for the electrical equipment installed in the Substation. Snow load studies for the impact on Metrolinx structures and equipment must be supplied where required by the OBC.

(viii) It is the responsibility of the Developer to consider the impact on the development and/or the Developer's property of EMI, EMF, noise, vibration, and DC stray current issues that may exist currently or in the future from the Substation.

(ix) No climbing points on the development's permanent structures shall exist within 3 metres of the fence and/or property line of the Substation, or if so, they must come with permanent measures to prevent entry into the Substation. During construction, no climbing points shall exist within 3m of the Substation.

(x) Shoring tie backs cannot interfere with the Substation grounding system and must take into account possible ground fault potential rise to prevent step and touch potential hazard to the construction workers.

(xi) Developer must install barriers during construction to limit the potential shock hazard to its construction workers carrying out the work of the development in the vicinity of the Substation.

(xii) Developer must protect Metrolinx cables, as approved by Metrolinx and using Metrolinx approved contractor.

(xiii) Excavations must not damage or interfere with Metrolinx property or facilities.

(xiv) Vegetation on Metrolinx property may not be removed or disturbed.

(xv) The Substation must be protected from dust and debris during and after the development construction. The Developer must submit an action plan and risk assessment to be reviewed and approved by Metrolinx.

(xvi) Temporary construction barriers on Substation property might be permitted if agreed to with Substation Maintenance if they do not interfere with access to or parking at the Substation or are not over existing buried duct banks.

(xvii) Metrolinx property may not be used for access or storage without prior written agreement.

(xviii) Adequate lighting and security must be maintained on the Developer's property during construction.

(h) **Site Maintenance and Environmental Management During Construction Plan**

Site maintenance and environmental management shall be required to control erosion, sediments, dust, debris, and tracking of mud as a result of Developer construction of the Developer Project within the Transit Corridor Lands and permit buffers. A site maintenance and environmental management plan is required and shall identify control measures and frequencies of machinery/vehicle cleaning, site upkeep, and protective measures that the Developer will implement to avoid negative impacts to Metrolinx Infrastructure due to the Developer's construction.

(i) **Ground Instrumentation and Monitoring Plan (GIMP)**

Ground Instrumentation and Monitoring Plans are required for the implementation of a construction monitoring program for the Developer Projects within the Transit Corridor Lands and permit buffers, and shall include plans and specifications for all instrumentation and monitoring work, including established monitoring thresholds/limiting values, procedures to ascertain and monitor potential movement of existing Metrolinx Infrastructure through monitoring reports, and contingency measures listing the immediate remedial action to be taken in the event movement reaches the established threshold limits and/or damage is observed, which includes stopping Developer Works.

Instrumentation and monitoring of Metrolinx Infrastructure is required to ensure that structural or functional inadequacy does not develop as a result of the Developer's construction. In addition, monitoring will be required to ensure the Developer's construction support of excavation system is functioning as designed and the loads on Metrolinx Infrastructure remain within design limits. If changes are observed/exceeded, a Stop-Work-Order can be issued by Metrolinx, and the frequency of monitoring will be increased, and contingency measures will be implemented by the proposed Developer.

Monitoring stages shall consist of:

(i) Stage 1 - Initial Pre-Construction Monitoring: Conduct survey of existing conditions within the Metrolinx Infrastructure, obtaining baseline readings at established monitoring points;

(ii) Stage 2 - Project Monitoring: Monitoring during demolition, excavation and construction, and will be performed at an agreed upon Metrolinx-frequency intervals. The monitoring frequency will be increased as necessary during critical work such as blasting, tunneling, or as requested by Metrolinx; and

(iii) Stage 3 - Post-Construction Monitoring: Conduct final survey monitoring, performed after substantial construction completion of the Developer Works to determine changes to initial conditions, document the post-construction condition, and provide photographic records. In addition to structural monitoring, a final alignment survey of the rail/tracks (if present) will be required for comparison with the initial survey data.

Establishment and implementation of Ground Instrumentation and Monitoring Plan (GIMP) must be reviewed, supervised and signed by a professional engineer. Surveying work, being conducted by licenced land surveyors or surveyors with experiences in such monitoring works must also be signed by a professional engineer. The Developer shall provide monitoring reports to Metrolinx during the Developer's construction and at an interval as indicated in the Permit conditions.

Monitoring Requirements:

Where shoring / underpinning of structures adjacent to a Metrolinx structure is required, monitoring of the Metrolinx structure must be carried out.

The Monitoring Plan for the shoring and Metrolinx structures shall include all parameters that are to be measured and documented, all instrumentation and equipment to be used and a drawing showing location and type of monitoring instruments. The plan shall also include the value of the Review Level and the Alert Level and the corresponding Action Protocol.

The following review and alert levels apply to Metrolinx structures and shoring.

| | **Review Level** | **Alert Level** |
|---|---|---|
| *Station and Tunnel Box Structure* | *2mm movement, includes displacement, deformation and rotation* | *3mm movement, includes displacement, deformation and rotation* |
| *Circular Tunnel* | *3mm differential movement over 9.4m track length*<br>*6mm movement, includes displacement, deformation and rotation* | *5mm differential movement over 9.4m track length*<br>*10mm movement, includes displacement, deformation and rotation* |
| *Ballast Track* | *5mm differential vertical movement over 9.4m track length*<br>*3mm differential horizontal* | *6mm differential vertical movement over 9.4m track length* |

| | | |
|---|---|---|
| | *movement over 9.4m track length*<br><br>*10mm maximum movement* | *5mm differential horizontal movement over 9.4m track length 16mm maximum movement* |
| *Shoring, where Metrolinx structure is within shoring Zone of Influence* | *10mm maximum movement* | *15mm maximum movement* |

All monitoring results for Metrolinx Structures, underpinning and shoring shall be provided to the Metrolinx within 24 hours when Alert Level is reached, otherwise weekly monitoring reports are required. The following monitoring frequencies should be followed, where required:

1. Electro levels within Metrolinx structures: continuous real time monitoring;
2. Precision survey carried out on a case-by-case basis; and
3. Inclinometer readings on a twice weekly basis.

**Review Level:** If the displacement of the Metrolinx structure(s) or shoring reaches the value of the Review Level, the Developer shall conduct a review of the work completed with the area noted for the movement, and the Developer shall assess whether it is necessary to alter the method or sequence of construction.

**Alert Level**: If the displacement of the Metrolinx structure(s) or shoring reaches the value of the Alert Level, the Developer shall contact Metrolinx immediately, and make the works secure and cease further work in the "affected" area. The Developer shall conduct a review of the monitoring, and the work completed within the area of movement, and issues the results and comments to Metrolinx. The Developer shall develop a remedy that is satisfactory to Metrolinx. Metrolinx will allow the Developer to resume work in the "affected" area only when the Developer has implemented corrective measures.

(j) **Crane Swing Plan**

Any cranes being utilized, including mobile and stationary cranes, as part of a Developer Project within the Transit Corridor Lands and permit buffers, shall be required to enter into a Crane Swing Agreement prior to crane arrival and erection on site. The Crane Swing Agreement may be required to provide easement rights for the use of a crane and shall outline the necessary requirements needed for the use of a crane on-site. The following shall be submitted to Metrolinx for review and approval as part of the Agreement:

(i) Scope of Work – Purpose of Work, Hours of Operations, Location;

(ii) Crane Swing Plan (Figure A7) – Swing Radius, Existing Infrastructure, Metrolinx Infrastructure, Transit Corridor Lands and permit buffers and Outriggers;

(iii) Specifications of the Crane – Load Charts, Size of Counterweight, Maximum Expected Boom Radius, Maximum Expected Boom Length, Maximum Expected Pick Weight with Factor of Safety of 1.5;

(iv) Copy of Operator's Valid Driver's License;

(v) Copy of Operator's Valid Hoisting License;

(vi) Copy of Operator's Valid Medical Certificate;

(vii) Most recent Annual Developer Inspection/Certification; within last 12 Calendar months; and

(viii) Insurance Certificate.

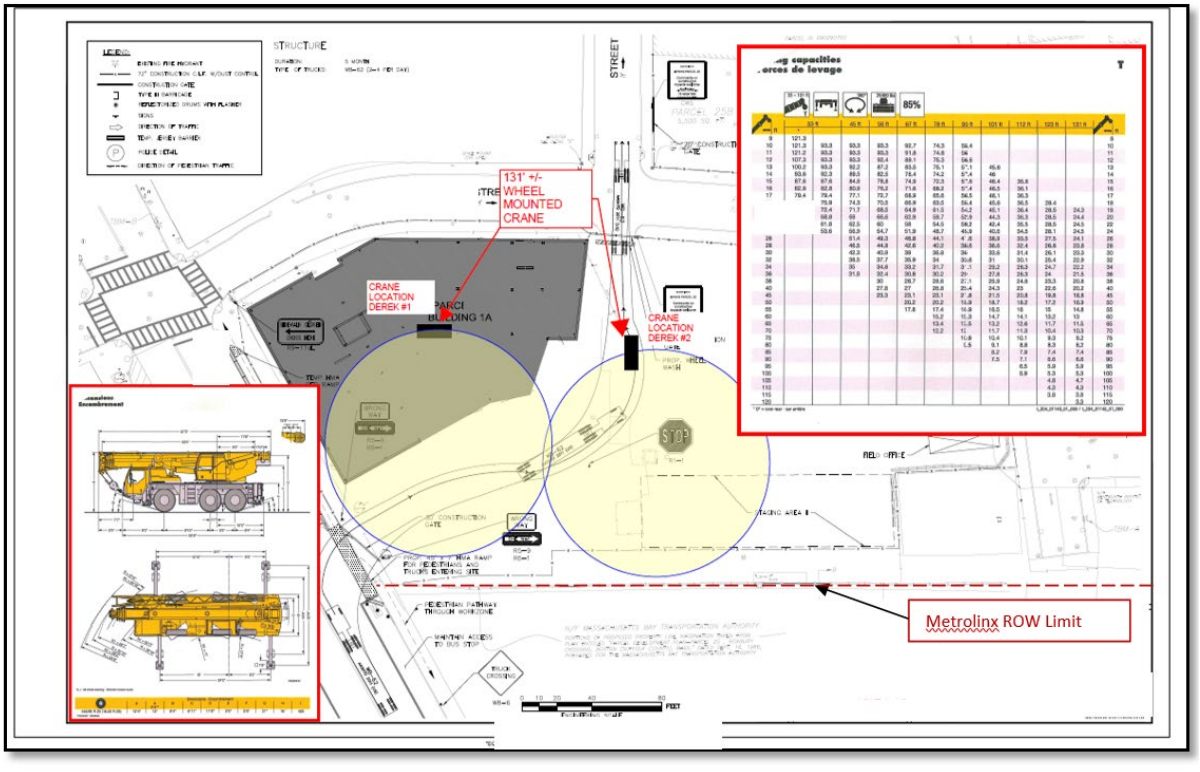



**Figure A7: Sample Crane Swing Plan**

(k) **Construction Barriers and Barricades Plan**

Construction barriers and barricades shall be in compliance with Applicable Codes and Standards, local by-laws, and governing regulations, and shall barricade all work area(s) or close excavations and openings in floors, walls and other parts of Developer Infrastructure while openings are not protected full-time, ensuring positive measures in preventing unauthorized entry into Metrolinx Infrastructure or Metrolinx Corridor. The design and field installation shall be certified in writing by a registered professional engineer registered in the jurisdiction of the Developer's Project.

(l) **Overhead Protection Plan**

Overhead protection for Metrolinx Infrastructure and the public is required whenever there is a possibility of overhead fall hazards from construction material or debris from the Developer's Project. The design and field installation shall be certified in writing by a registered professional engineer registered in the jurisdiction of the Developer's Project.

(m) **Construction Equipment Orientation/Shielding Plan**

Proper construction equipment orientation/shielding by Developer Projects, shall ensure that construction equipment used for sheeting, shoring operations, and temporary protective shields or barriers be positioned and operated so that the equipment is precluded from overturning and falling onto or affecting Metrolinx Infrastructure. Auguring or pile driving equipment shall be oriented parallel to the Metrolinx Corridor/alignment, to prevent piles or equipment from falling or affecting the Transit Corridor Land. The design and field installation shall be certified in writing by a registered professional engineer registered in Ontario.

(n) **Safety, Quality, and Risk Assessment Plans**

Metrolinx is committed to safety and implementing the highest safety standards. The prevention of accidents in the course of completing any adjacent construction project is of primary importance to everyone connected to Metrolinx, as such, Metrolinx is authorized to stop any and all Developer Works within the Transit Corridor Lands and permit buffers that creates an unsafe condition.

Prior to carrying out any work in the Corridor Controlled Lands, the Developer shall submit to Metrolinx, Safety, Quality and Risk Assessment work plans for carrying out specified scope of either intrusive or non-intrusive investigative Works that includes a task-specific safety, quality and risk assessment for each task. These plans will be discussed with the Developer at the Pre-Application meeting and the level of detail required will depend on the scale, complexity and expected impact on the transit project. Metrolinx may, in its sole discretion, conduct its own task-specific safety, quality and risk assessment in respect of any work plan submitted if Metrolinx is not satisfied with the Developer's task-specific assessments. The level of detail required for each of these work plans shall be scaled to the level of complexity of the Developer's Project.

(o) **Site Reviews, Construction Monitoring, and Communications Plans**

In accordance with these Guidelines (Section 3.5) Stage 4: Inspection, Reporting, and Corridor Development Permit Enforcement, Metrolinx shall be entitled to meet with Developer representatives, request information, obtain construction schedules, review construction submissions that have the potential to impact a Priority Transit Project, and review construction as the work progresses to ensure the Project is being constructed in accordance with the Construction Management Plan, Corridor Development Permit, and terms and conditions of Metrolinx Agreements. The Developer shall co-operate with Metrolinx by providing access to the site and assistance in such inspections.

For aspects of the Developer's Project that are expected to have an impact on a Priority Transit Project, the Developer shall provide Metrolinx advance notice of any Developer site/construction meetings where impacts on Metrolinx are to be discussed and shall provide meeting minutes of such meetings to Metrolinx within 5 Business Days of the meeting.

The Developer shall prepare and submit to Metrolinx a monthly project report; details and requirements for this report shall be part of the conditions of the Corridor Development Permit and shall depend on the size, complexity, and level of impact on the transit project. Typical reporting requirements include summarizing project-progress, status of Permit conditions, a three-week look-ahead schedule, updated construction schedule, and where appropriate, photographic evidence that certain Permit conditions have been satisfied.

### (p) Project Close-Out and As-Built/Record Drawing Submission

Developer shall advise Metrolinx in writing once all engineering/field support, interface functions, and project construction impacting Metrolinx is complete, and ensure all Developer obligations associated with the Corridor Development Permit have been met, including any potential financial obligations, such as fines/fees related to a stop-work order that may have previously been imposed.

Where the Developer Project includes a permanent change/modification to Metrolinx Infrastructure or access to Metrolinx Infrastructure, the Developer shall provide As-Built Drawings or Record Drawings in AutoCAD or MicroStation and PDF formats, as directed by Metrolinx.

Metrolinx shall issue a closeout letter to the Developer representing technical, fiscal, and administrative closeout of the Project once the Developer has satisfied the project close-out and as-built conditions of the Corridor Development Permit.

## 1.5 Technical Studies and Reports (as Required) for a Corridor Development Permit (CDP)

In addition to the Technical Requirements listed in Section 1.4, the Developer shall also provide the following Technical Studies and Reports, as applicable, to demonstrate that the Developer's Project will adequately address any impacts from the Developer's Project on the Priority Transit Projects.

### (a) Noise and Vibration Study

Where residents or occupants of the Developer's Project are expected to be impacted by noise and/or vibration from a Priority Transit Project, the Developer shall provide noise and vibration studies to demonstrate through an analysis of the surrounding environment, that suitable measures are provided by the Developer to mitigate transit rail-oriented noise and vibration impacts. The following provides an overview of noise and vibration study requirements and conditions:

(i) Noise standards are to be applied to residential developments within the Transit Corridor Lands and permit buffers;

(ii) Acoustical analysis is recommended for other non-residential uses where there may be sensitivity to noise (e.g., day care centres, offices with sensitive equipment etc.);

(iii) Other measures (e.g. provision of air conditioning, enhanced windows and building materials, etc.) may also be recommended by a qualified acoustical consultant;

(iv) Special considerations may apply at locations where trains are stored and/or operate at reduced speed/idle, as well as in areas with unique operating characteristics (e.g. use of snow blowers, specialized machinery, etc.).

(v) Vibration standards are to be applied to developments within the Transit Corridor Lands and permit buffers.

(vi) Isolation measures will be required where vibration levels exceed the established standards.

(b) **Storm Water Management Study**

Where the Developer's Project will impact the drainage within the Transit Corridor Land, the Developer shall provide a storm water management study to demonstrate through an analysis of the surrounding environment, that the Priority Transit Project will not be adversely affected by the Developer's Project. The following provides an overview of drainage and other study requirements and conditions:

(i) Any proposed alterations to the existing Transit Corridor Land grading and drainage pattern (i.e., into and/or out of) must receive approval by Metrolinx and be substantiated by a storm water management report completed by a Geotechnical Engineer.

(ii) Any development related changes to drainage patterns must be addressed using infrastructure and/or other means located entirely within the Developer's land and submitted as part of a final storm water management plan.

(c) **Environmental Site Assessment Studies**

Where the Developer's project is expected to disturb existing site conditions, Environmental Site Assessment (ESA) Phase I and II Site Assessments and applicable Risk Assessments required by Authorities Having Jurisdiction, shall also be provided to Metrolinx for informational purposes. An erosion and sediment control plan shall also be provided.

(d) **Smoke Dispersion Analysis**

Where the Developer's building is within 50 metres of a planned of existing Metrolinx tunnel ventilation grate, the Developer shall provide a Smoke Dispersion Analysis, to demonstrate the following:

(i) The concentration of smoke discharged from the Metrolinx tunnel ventilation shafts and drawn into Developer building entrances (including operable windows and doors) or air intake shafts is sufficiently diluted; and

(ii) The Developer has an effective smoke management system and emergency response and evacuation plan to minimize the smoke ingress into the Developer's building or any issues arising from the smoke ingress into the Developer's building.

(e) **Site Servicing Report**

Where the Developer is proposing any utility installations through or adjacent to Transit Corridor Lands, the Developer shall provide their site servicing plans. These plans shall also show any Metrolinx utility connections that are proposed to be modified due to the Developer's Project.

(f) **Traffic/Transit Management Study (during construction and permanent condition)**

Where the Developer Project's construction will impact the construction of a Priority Transit Project, the Developer shall provide a traffic/transit management study for their Project. This study shall address temporary and permanent access impacts.

(g) **Pedestrian Management/Study (during construction and permanent condition)**

Where the Developer Project's construction needs to be coordinated with that of a Priority Transit Project for the purposes of ensuring appropriate pedestrian flow in the area, the Developer shall submit a Pedestrian Management Study/Plans that demonstrate the phasing for safe and accessible temporary pedestrian flow in the area.

(h) **Structural and Geotechnical Engineering Reports**

Where the Developer Project's construction has the potential to temporarily or permanently affect loading conditions on Metrolinx Infrastructure, the Developer shall provide structural, geotechnical engineering, and hydrogeological investigations reports that demonstrate that any imposed loading conditions, including surcharge loading, as a result of the Developer's Project are mitigated by the Developer to the extent that there will be ***no damage*** to the Metrolinx Infrastructure and that ***no modifications*** to the Metrolinx Infrastructure are necessary. These reports shall be signed and sealed by a Professional Engineer in the jurisdiction of the Developer's Project.

**Structural Report**

(i) Structural analysis/calculations by the Developer's consultant of the effects of all applicable loadings, including construction loading, on Metrolinx infrastructure, demonstrating that the Metrolinx structure will not be adversely affected by the development, including solutions to mitigate any impact on Metrolinx structures. The documentation must include identification of the affected Metrolinx structures.

*Note: The review of all submitted structural analysis/calculations will focus on design assumptions,* structural *model, loads, load combinations, and codes that were used and final results with discussion and/or recommendations. The review will be on the part of the development that may affect Metrolinx infrastructures. All submitted calculations must be legible and presented in a logical and easy-to-follow format. Metrolinx will not accept any responsibility for the accuracy and adequacy of the calculations, which will remain the sole responsibility of the Developer.*

(ii) An impact assessment statement from the structural and/or geotechnical consultant stating that the Development does not adversely affect Metrolinx Structures. No additional load to existing or future Metrolinx Structures is allowed. No reduction in load to existing or future Metrolinx structures is allowed where such reduction in load adversely affects Metrolinx structures.

**Geotechnical Study**

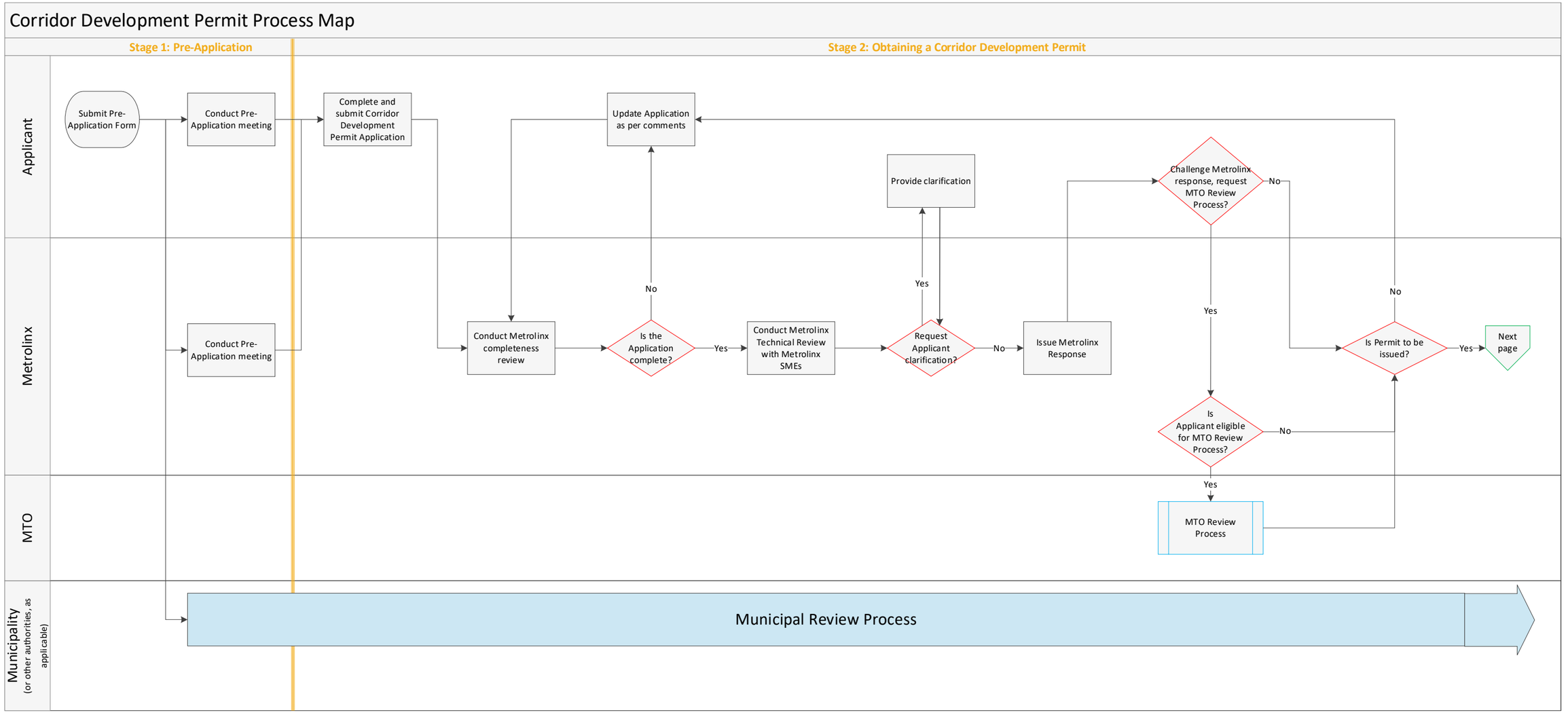
For excavations within the zone of influence that has the potential to induce movement of Metrolinx structures, a finite element or finite difference soil-structure interaction model must be provided to estimate the potential effects on the Metrolinx structure. If the excavation is within 3 metres of a Metrolinx underground structure or tunnel, sufficient geotechnical investigation must be carried out to support a linear or non-linear constitutive soil model or suitable constitutive rock model to accurately estimate ground movements. Sufficient geotechnical investigation requirements include:

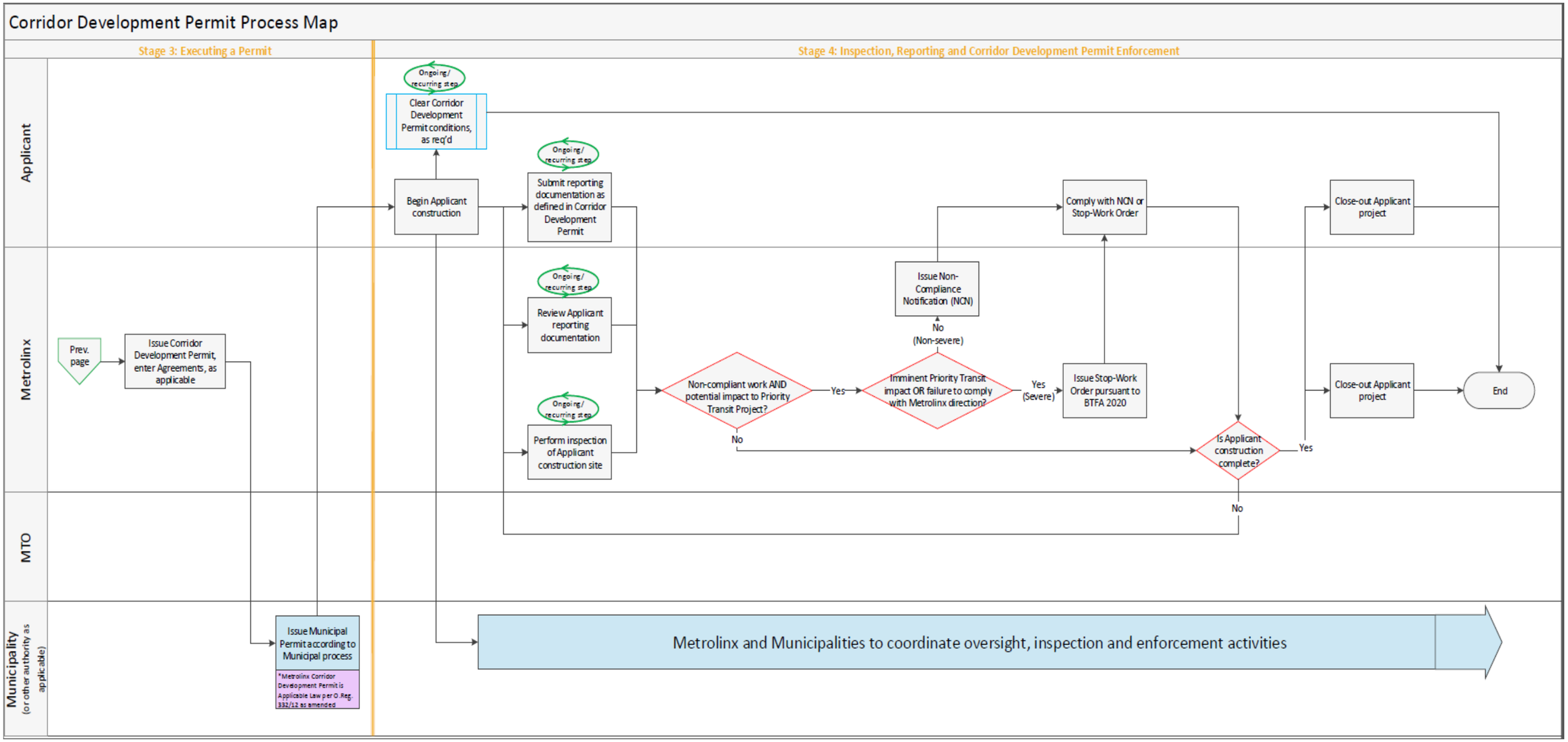
(i) In cohesive soils and glacial tills: PQ soil coring/Shelby tube sampling, triaxial/direct shear tests, oedometer tests and unconfined compressive strength tests;

(ii) In non-cohesive soils (sands and silts): PQ coring/Shelby tube sampling, and direct shear/triaxial tests, and in rock: HQ rock coring, unconfined compressive strength tests with elastic modulus measurements (as per ASTM D7012), and in situ rock pressures meter (borehole dilatometer) testing.

At least three of each of the above laboratory tests is required, with the total number of tests to be assessed to adequately support the soil-structure modelling.

# APPENDIX B - CORRIDOR DEVELOPMENT PERMIT PROCESS MAP


Corridor Development Permit Process Map
Stage 1: Pre-Application
Stage 2: Obtaining a Corridor Development Permit
Applicant
Metrolinx
MTO
Municipality (or other authorities, as applicable)
Submit Pre-Application Form
Conduct Pre-Application meeting
Complete and submit Corridor Development Permit Application
Update Application as per comments
Provide clarification
Challenge Metrolinx response, request MTO Review Process?
No
Conduct Pre-Application meeting
Conduct Metrolinx completeness review
Is the Application complete?
No
Yes
Conduct Metrolinx Technical Review with Metrolinx SMEs
Request Applicant clarification?
Yes
No
Issue Metrolinx Response
Yes
No
Is Permit to be issued?
Yes
Next page
Is Applicant eligible for MTO Review Process?
No
Yes
MTO Review Process
Municipal Review Process


Corridor Development Permit Process Map
Stage 3: Executing a Permit
Stage 4: Inspection, Reporting and Corridor Development Permit Enforcement
Applicant
Metrolinx
MTO
Municipality
(or other authority as applicable)
Ongoing/ recurring step
Clear Corridor Development Permit conditions, as req'd
Begin Applicant construction
Submit reporting documentation as defined in Corridor Development Permit
Review Applicant reporting documentation
Perform inspection of Applicant construction site
Prev. page
Issue Corridor Development Permit, enter Agreements, as applicable
Non-compliant work AND potential impact to Priority Transit Project?
Yes
No
Imminent Priority Transit impact OR failure to comply with Metrolinx direction?
No (Non-severe)
Issue Non-Compliance Notification (NCN)
Yes (Severe)
Issue Stop-Work Order pursuant to BTFA 2020
Comply with NCN or Stop-Work Order
Is Applicant construction complete?
Yes
No
Close-out Applicant project
Close-out Applicant project
End
Issue Municipal Permit according to Municipal process
*Metrolinx Corridor Development Permit is Applicable Law per O.Reg. 332/12 as amended
Metrolinx and Municipalities to coordinate oversight, inspection and enforcement activities