

# **METROLINX DEVELOPER'S GUIDE TORONTO LRT PROGRAM**

**Metrolinx Requirements for Developments  
Adjacent or Connecting to Metrolinx Light Rail Transit  
Infrastructure or Rights-of-Way**

**March 2018**

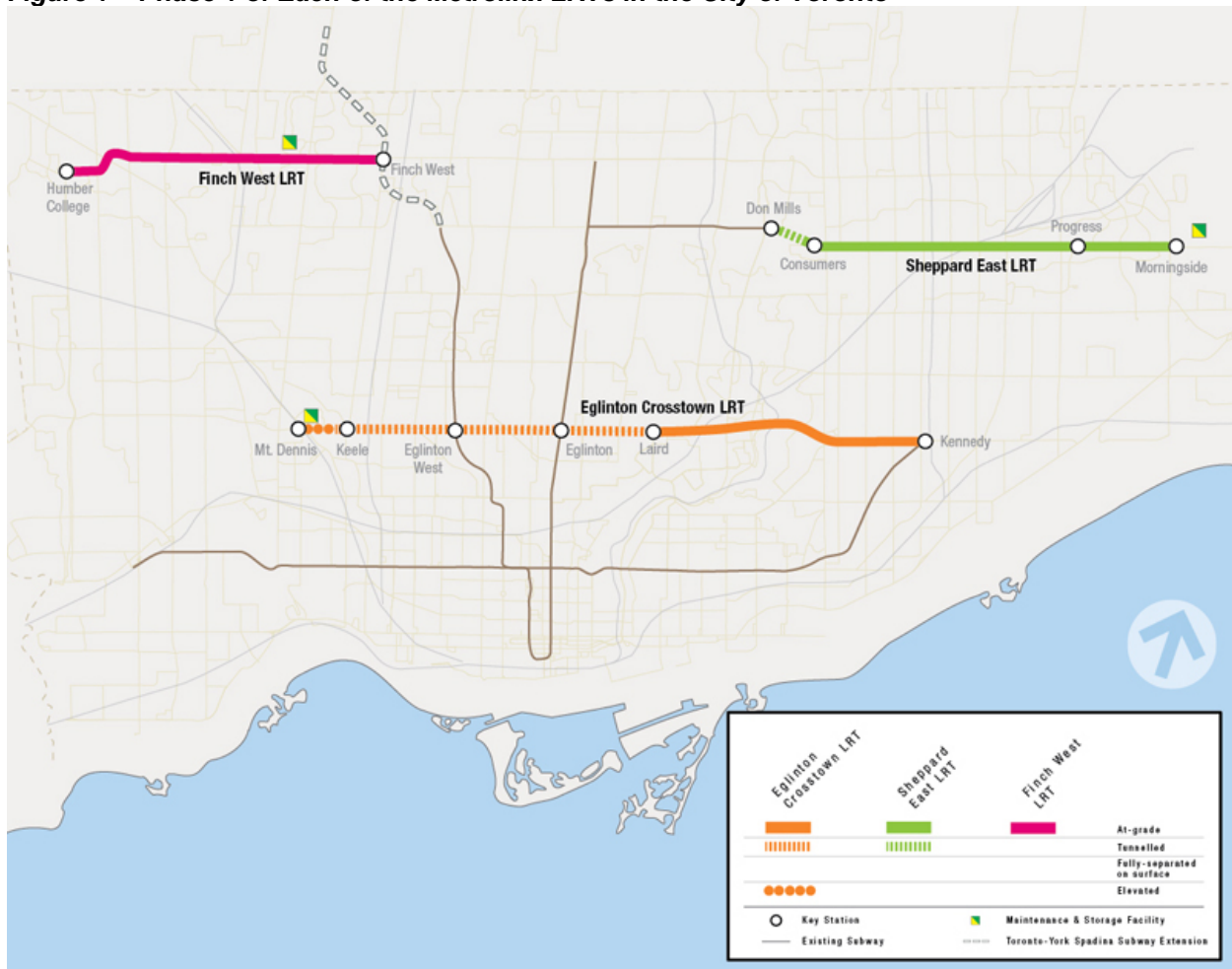
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## 1.0 Introduction to the Metrolinx Developer's Guide

The Toronto Light Rail Transit (LRT) Program is part of "The Big Move," which is a 25 year, \$50 billion plan that will transform transportation across the Greater Toronto and Hamilton Region. Phase I of the Toronto LRT program, as shown in Figure 1 below, is comprised of three light rail transit lines that span approximately 42 kilometres across the City of Toronto.

**Figure 1 – Phase 1 of Each of the Metrolinx LRTs in the City of Toronto**



Phases 1 and 2 of the Toronto LRT Program, (hereinafter referred as Metrolinx LRT Infrastructure) consist of:

- Eglinton Crosstown LRT
  - Phase 1 - between Weston Road (Mount Dennis Station) and Kennedy Station, comprising 19 kilometres and 25 stations and stops; and
  - Phase 2 - between Pearson International Airport and the Jane Street corridor, comprising 14 kilometres and 17 stations and stops.

- Sheppard East LRT
  - Phase 1 - between Don Mills Station and approximately Morningside Road, comprising approximately 12 kilometres and 25 stops; and
  - Phase 2 – between Morningside Road and Meadowvale Road, comprising 2.5 kilometres and 3 stops.
- Finch West LRT
  - Phase 1 - between Finch West Station (Keele Street) and Humber College, comprising 11 kilometres and 19 stops; and
  - Phase 2 – between Keele Street and Finch Station (Yonge Street), comprising approximately 6 kilometres and 8 stops.

The timing for the implementation of these LRT projects will vary, with Phase 1 design and construction for the Eglinton Crosstown and Finch West LRTs planned to occur between 2013 and 2021. Upon their completion, it is anticipated that the design and construction of the Sheppard East LRT will begin.

The Toronto LRT Program creates significant public and economic benefits and introduces opportunities for transit oriented design and development. The coordination of planning and development activities between public and private sector entities is critical to ensure the orderly development of land along LRT corridors and to resolve potential areas of conflict and competing interests between public and private sector groups, as well as to prevent risks to public health and safety. For example, the transit systems may have a bearing on the design of adjacent developments, and construction of the transit systems may affect the ability for other nearby proposed works to be undertaken during the same time period.

The Metrolinx Developer's Guide is one tool that supports such planning and development coordination efforts, as this Guide outlines the requirements for proposed developments in proximity to existing or planned Metrolinx LRT Infrastructure. Metrolinx's requirements are applied through the review and approval of planning and development applications that are in proximity to Metrolinx LRT Infrastructure. This Guide does not apply to the review of developments at or near GO Transit infrastructure, assets or corridors, which is currently covered by Metrolinx's Adjacent Development Guidelines.

## **2.0 Purpose of a Metrolinx Review**

Metrolinx reviews all planning and development applications within Metrolinx's Development Review Zone as part of the City of Toronto's development review process. The Metrolinx Development Review Zone includes lands within 60 metres of Metrolinx LRT Infrastructure, including existing and proposed stations, stops, ancillary buildings, tunnels, surface and elevated guideways and LRT vehicle maintenance and storage facilities.

The primary intent of the review is to ensure that future developments, at any stage of their implementation, do not adversely impact the current and future construction, operation, maintenance and integrity of Metrolinx infrastructure, property, and systems. This may include the scheduling of certain works during the construction phase of the Metrolinx LRT Infrastructure and a review of additional considerations including, but not limited to, design excellence, station access, and urban design.

Metrolinx policies aim to foster more intensive, transit-oriented development on and in the vicinity of transit stations/stops including LRT station sites to support transit use and promote more sustainable urban development. Inquiries regarding joint development with Metrolinx station lands should be directed to Metrolinx Corporate Real Estate Business Strategy and Land Development at [CRELand.Development@metrolinx.com](mailto:CRELand.Development@metrolinx.com).

### **3.0 Metrolinx Review Process**

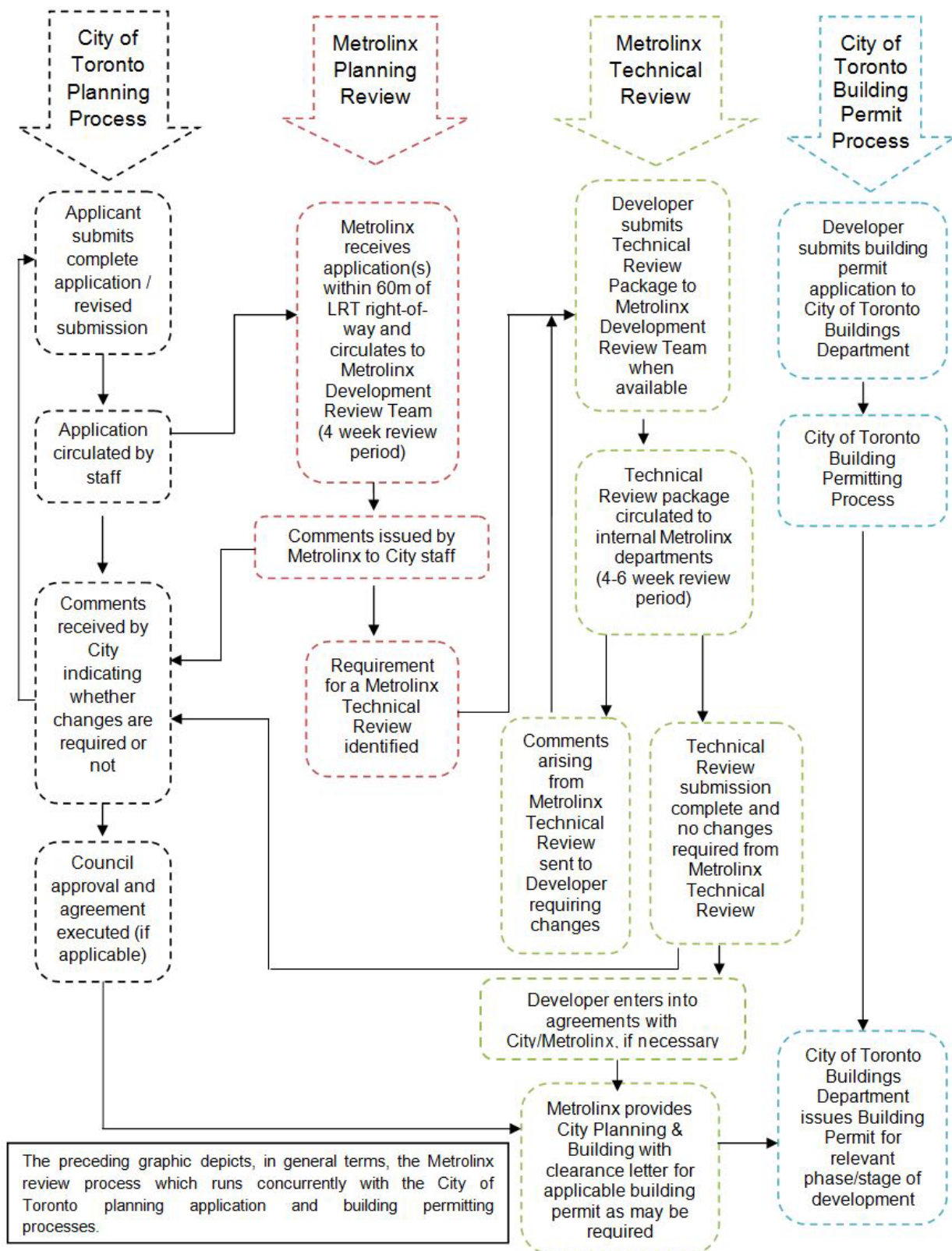
#### **3.1 Overview**

There are two types of Metrolinx development reviews, Planning and Technical. These review processes are undertaken concurrent with the City of Toronto Planning and Building permitting processes, as illustrated by the graphic on the following page.

The **Planning Review** examines high level transportation and urban planning issues associated with a development proposal that may impact existing or future Metrolinx LRT Infrastructure, or adversely affect Metrolinx's ability to construct the committed infrastructure given potential conflicts in time and/or space. A Planning Review will determine if there is a need for a Technical Review.

A **Technical Review**, which may include a Design Excellence Review, examines the technical engineering and design aspects of a development proposal, and identifies issues that may impact existing or future Metrolinx LRT Infrastructure.

The following graphic depicts, in general terms, the Metrolinx review process which runs concurrently with the City of Toronto planning application and building permitting processes.



As a result of the Planning and/or Technical Review process, modification of a Land Owner/Developer's proposal may be required in order to bring the associated development into conformance and compliance with Metrolinx requirements, and reduce or eliminate any impact(s) on Metrolinx LRT construction, operations, facilities, property, infrastructure and/or planned LRT extensions.

For developments that are subject to a Metrolinx Review, written comments will be provided by Metrolinx to the City of Toronto to identify issues or concerns including any required changes to the development proposal, and to outline conditions to be applied to the approval of the development. A written notice will be provided by Metrolinx to the City of Toronto when Metrolinx specific conditions are met. This must occur prior to the execution of a site plan agreement and/or prior to the City issuing a demolition/shoring/building permit.

### **3.2 Metrolinx Planning Review**

The Metrolinx Planning Review is the first formal step in the review of a development proposal and is triggered by Metrolinx's receipt of a planning application from City of Toronto Community Planning. The Metrolinx Planning Review examines the potential impacts of the proposed development on existing and proposed Metrolinx LRT Infrastructure and operations, and can take up to 4 weeks to complete, provided all necessary information has been submitted.

Planning Review comments may include, among other matters, information regarding the nature of existing or planned transit facilities and implications for the proposed development, suggestions for consideration taken from the *Metrolinx Mobility Hub and/or Design Excellence Guidelines*, such as enhanced connections to station or stop facilities, comments relating to building setbacks and site access in light of LRT infrastructure, and approval conditions such as transit interferences warning clauses and provisions of as-built surveys. In addition, the Planning Review may identify the need for a more detailed Technical Review.

Metrolinx encourages Land Owners/Developers to familiarize themselves with City of Toronto and Provincial policy and guideline documents that speak to coordinating land use planning and transit. Metrolinx also encourages the City of Toronto to consider these policies when they review development applications in proximity to transit facilities. Relevant documents include, but are not limited to:

- Provincial Policy Statement
- City of Toronto Official Plan Section 2.4, and other relevant sections;
- Ontario Transit Supportive Guidelines, 2012;
- The Growth Plan for the Greater Golden Horseshoe (2017);
- The 2014 Regional Transportation Plan (Draft as of date this document)
- Metrolinx Mobility Hub Guidelines;
- Metrolinx *Design Excellence Principles and Requirements for Transit Oriented Development*, 2016; and

To ensure that transit issues are appropriately considered in the municipal review of development proposals, Land Owners/Developers should address consistency with the above documents in their submission materials. In particular, City of Toronto development application submissions should address planning considerations associated with the proximity to higher

order transit, including station/terminal accessibility, proposed use types, transit supportive density, building placement, traffic impacts, urban design, access and pedestrian connections. The City of Toronto Development Guide identifies a number of studies that may be required to support a development application. Metrolinx suggests that Land Owners/Developers integrate discussion with respect to transit context into the required submissions to the City, including:

- Planning Rationale;
- Urban Design Guidelines;
- Transportation Impact Statement;
- Site Servicing;
- Parking and Loading;
- Traffic Operations Assessment; and
- Approximate timelines for construction / Implementation.

This will ensure that municipal planning staff is able to consider whether development proposals are responding appropriately to their proximity to transit. It will also allow Metrolinx to review development applications in their larger planning context. Land Owners/Developers are encouraged to contact and carry out pre-submission consultation activities with Metrolinx before submitting planning applications.

### **3.3 Metrolinx Technical Review**

The Metrolinx Technical Review consists of the review of detailed design and construction documents (drawings and specifications) for the proposed development. The focus of the Technical Review is the identification of any impacts that the construction of the project will have on Metrolinx LRT design, construction, operations and maintenance of facilities.

The Technical Review may include the review of the demolition, shoring/excavation, dewatering, foundation, structural, superstructure, transportation, mechanical/electrical and construction scheduling components of the development. Where developments propose to physically integrate with public facing transit facilities, a Metrolinx Design Excellence review may also be required as part of the Technical Review process. This review is required to be fully completed as a pre-approval condition, prior to the issuance of final Notice of Approval Conditions (NOAC) and the execution of a site plan agreement, and/or the issuance of a building permit for the applicable phase or stage of development.

The length of time required for the Technical Review will depend upon the size, complexity, and degree of impact of the project upon existing or proposed Metrolinx LRT Infrastructure, facilities and operations. Generally, Metrolinx requires a **4 to 6 week** review period for each complete submission. The review and acceptance of a development proposal by Metrolinx does not exempt the development from compliance with applicable codes and standards, local By-laws, governing regulations and any other conditions required by Metrolinx.

Metrolinx has adopted a flat rate fee approach for the majority of Technical Reviews. Most Technical Reviews will be subject to these fixed fees, which will be determined by Metrolinx during the Planning Review process. The Metrolinx fees associated with Technical Reviews are outlined in Appendix 1.



### **3.4 Metrolinx Design Excellence Review**

Metrolinx requires the achievement of design excellence for all our significant capital investments. Proposals for development that are physically integrated with Metrolinx LRT Infrastructure will be subject to greater scrutiny. As part of a Metrolinx Technical Review, proposals for integrated development will also be subject to a Metrolinx Design Excellence review.

The Design Excellence review is intended to provide Metrolinx with confirmation of adherence to the design principles and requirements outlined in that document and more generally to the principles of exemplary transit design in elements of integrated development that directly engage with or impact transit infrastructure. The Design Excellence requirements are not intended to guide design judgment on the developments as a whole.

Land Owner/Developer proposing integrated development are encouraged to contact Metrolinx's LRT Development Coordinator / Project Officer early in the process to discuss requirements, which vary according to the level of integration proposed with the transit facility.

### **3.5 Legal Agreements with Metrolinx**

Conditions identified through the Metrolinx Review may include requirements for specific agreements with Metrolinx, depending on the potential for impacts on and the extent of integration with Metrolinx LRT Infrastructure. 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 proposal.

#### **A. Land Transfer or Exchange Agreements**

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

#### **B. Construction Agreement**

A Construction Agreement is necessary when there are particular developer obligations for protection of Metrolinx interests that cannot be addressed through municipal planning approval conditions.

A Construction Agreement is established between the Land Owner/Developer and Metrolinx (or its agent) 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 Land Owner/Developer. This agreement must be executed prior to the release of the first 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.

#### **C. Reciprocal Easement and Operating Agreement**

A Reciprocal Easement and Operating Agreement will be required in instances where:

- (i) a development is adjacent to or integrates with Metrolinx LRT Infrastructure;

- (ii) a development is built above Metrolinx LRT infrastructure; and/or
- (iii) where there are any encroachments onto Metrolinx lands or interests in lands including its easement in the municipal right-of-way.

This agreement will outline the requirements for Metrolinx access to the Land Owner/Developer's structures and facilities including access over or through the development parcel in order to facilitate the maintenance, rehabilitation, or replacement of Metrolinx infrastructure and assets. This Agreement is required prior to the issuance of the full building permit for the development.

#### **D. Entrance Connection Agreement**

An Entrance Connection Agreement is required for developments which propose direct pedestrian connections to a Metrolinx LRT station. The Entrance Connection Agreement will deal with all aspects of a transit connection, including but not limited to the design, construction, supply and installation of fare collection equipment, electrical services, stairs, elevators, escalators, security features, wayfinding and signage, fire / life safety and other elements or components of an Entrance Connection as applicable. Entrance Connection proposals are required to undergo a Metrolinx Review as further outlined in Appendix 2, Entrance Connection Review Submissions. In addition, the Entrance Connection Agreement will specify the demarcations of property lines and the responsibilities of the Land Owner/Developer and Metrolinx for operating and maintaining the associated facilities, and any possible connection fees to be charged by Metrolinx.

### **4.0 Expediting Metrolinx Reviews**

Prior to the submission of a development proposal to the City, it is recommended that the Land Owner/Developer contact Metrolinx's Development Coordinator to discuss the proposal and potential impacts upon Metrolinx property, facilities and/or infrastructure. It is requested that prior to meeting with Metrolinx, the Land Owner/Developer engage with City of Toronto Community Planning during this pre-submission consultation process.

The following steps are suggested to expedite the Metrolinx Planning and Technical Review processes:

1. Contact Metrolinx's LRT Development Coordinator / Project Officer for preliminary information regarding the location of the development site in relation to the Metrolinx 60 metre Development Review Zone, and the need for a Metrolinx Review.
2. Obtain Metrolinx technical information, including Metrolinx infrastructure location, structural, electrical, transportation, and mechanical drawings relevant to the development site, where available. A pre-condition to obtaining Metrolinx infrastructure drawing information is the execution of a tripartite Non-Disclosure Agreement between/among the Land Owner/Developer, ProjectCo and Metrolinx. This agreement template is attached as Appendix 3. Contact Metrolinx's LRT Development Coordinator to request the required drawings.

Note: Metrolinx infrastructure drawings are the property of Metrolinx and shall not be reproduced or transmitted to any other party without the consent of Metrolinx. Metrolinx infrastructure drawings may be obtained electronically only.

3. A preliminary meeting with Metrolinx's LRT Development Coordinator is recommended as it provides the Land Owner/Developer with an opportunity to discuss the proposed development and determine constraints and opportunities, if any, for the design and construction of the development.

## **5.0 Metrolinx Contact for Review Process**

All submissions, responses and contact for the Metrolinx Reviews are through Metrolinx's LRT Development Coordinator / Project Officer at [development.coordinator@metrolinx.com](mailto:development.coordinator@metrolinx.com).

## APPENDIX 1 TECHNICAL REVIEW CLASSIFICATION AND FEES

The following table outlines the various levels of Technical Review and their associated review fee in regards to development proposals within the 60 metre Development Review Zone of Metrolinx LRT Infrastructure, easements or other interests.

Level of Review	Type of Review	Fee
1	Developments within 60-metres of existing or planned Metrolinx LRT Infrastructure, including within Municipal Rights-of-Way, with perceived limited to no impact(s) on LRT implementation activities, infrastructure assets, or operations, but where additional information is required to fully assess potential impacts.	\$4,000.00
2	Developments within 60-metres of existing or planned Metrolinx LRT Infrastructure, including within Municipal Rights-of-Way, with perceived low to moderate impact(s) on LRT implementation activities, infrastructure assets, or operations, where potential impacts need to be better understood and construction coordination/agreement is likely required.	\$8,000.00
3	Developments within 60-metres of existing or planned Metrolinx LRT Infrastructure, including within Municipal Rights-of-Way, with perceived moderate to high impacts on LRT implementation activities, infrastructure assets, or operations, such as loading impacts or construction coordination.	\$30,000.00
4	Developments within 60-metres of existing or planned Metrolinx LRT Infrastructure, including within Municipal Rights-of-Way, with perceived severe complexity and significant impacts on LRT implementation activities, infrastructure assets, or operations, where fixed fee review is not considered practical	Cost Reimbursable

*\* Metrolinx reserves the right to elevate developments to a higher Level of Technical Review should circumstances/complexities change and are warranted*

The Land Owner/Developer must submit payment based on the Technical Review level with the initial Technical Review submission. Upon receipt of a submission with the corresponding payment, Metrolinx will initiate the Technical Review and confirm the classification level based on the more detailed drawings/reports.

**Note: Additional fees may be required for cost recovery purposes in the event of numerous revised submissions and/or where changes are significant enough to warrant further cost recovery charges. Significant changes in the development proposal or construction methods may result in a re-categorization of the review level. Metrolinx reserves the right to change the fee category if a revised design results in greater impacts upon Metrolinx LRT Infrastructure.**

Level 4 Technical Reviews that examine complex proposals will be undertaken on a cost reimbursement basis. In the event of a cost reimbursement review, an estimate of the cost of the review will be developed by Metrolinx and provided to the Land Owner/Developer in advance of the commencement of the Technical Review. At the time a Technical Review is initiated a deposit amount may be requested from the Land Owner/Developer with an agreement to pay the balance, to cover the review fees.

The determination of the need for a cost reimbursement review is at the sole discretion of Metrolinx. It is intended that cost reimbursement reviews would be the exception rather than the rule and would only be utilized in extraordinary cases where multiple complex reviews are expected to be required prior to final approval.

### **Costs Not Covered By Technical Review Fees**

The flat rate Technical Review fee, as identified through the development review classification, only applies to the cost of the Technical Review. The following is a list of some of the Metrolinx costs which may be encountered in addition to the Technical Review fee, including but not limited to:

- Cost of power cuts, electrical or fire system load tests, including supervisory costs;
- Flag duties for Metrolinx operations;
- Metrolinx safety/training requirements;
- Cost of operational diversions or other impacts on Metrolinx operations; and
- Cost to third parties with whom Metrolinx has contractual commitments.

## APPENDIX 2 TECHNICAL REVIEW SUBMISSION REQUIREMENTS

Land Owners/Developers must submit the required information to permit an assessment of potential impacts on existing or planned Metrolinx LRT Infrastructure, maintenance and operations. The extent of supporting information required will depend on a variety of factors, including the nature of the development proposals, the proximity to Metrolinx infrastructure, and whether the Metrolinx infrastructure is existing, planned, or under construction. The extent of supporting information required should be confirmed through a meeting with the Metrolinx Development Coordinator at the pre-submission consultation stage.

**Level 1 Review: Developments within 60-metres of existing or planned Metrolinx LRT Infrastructure, including within Municipal Rights-of-Way, with perceived little to no impact on LRT implementation activities, infrastructure assets, or operations.**

Level 1 Reviews are generally warranted in instances where Metrolinx requires additional supporting information (plans/reports) to better understand and evaluate the design and/or timing of proposed development; however, it is anticipated that issues/concerns can be addressed through Notice of Approval Conditions (NOACs) and that no Construction Agreement, or any other agreement, between Metrolinx and the proponent, will be required. Planning/Development applications that may fall into this category are for projects that do not alter existing site access or servicing connections to/from the right-of-way in which LRT operates, and where the development does not impact Metrolinx planned/active construction activities.

Given the relatively less complex nature of Level 1 Technical Reviews, submission requirements will vary depending upon the nature of the proposed development and the status and stage of the existing or planned Metrolinx infrastructure. The Technical Review requirements will be determined on a case by case basis following the process as outlined above in Section 3.0 - Metrolinx Review Process.

**Level 2 Review: Developments within 60-metres of existing or planned Metrolinx LRT Infrastructure, including within Municipal Rights-of-Way, with perceived low to moderate impact(s) on LRT implementation activities, infrastructure assets, or operations.**

Level 2 Reviews are generally warranted in instances where Metrolinx requires additional supporting information (plans/reports) to better understand and evaluate the design and/or timing of proposed development, and where it is likely that Metrolinx will require the proponent to enter into one or more private agreements. Level 2 Reviews are typically assigned to proposed developments that do not impose any additional loading impacts on Metrolinx existing/planned infrastructure, but where a low to moderate level of analysis and coordination effort is required.

The following drawings/documents may be required for review. All documents must be signed and sealed by the appropriate professional. Actual requirements will be determined through consultation with Metrolinx staff:

1. A Site Plan and below grade floor plans and cross sections of the proposed development, that include founding elevations and any underground storage tanks and associated piping, with reference lines to the Metrolinx ECLRT existing or planned infrastructure. Distance measurements between Metrolinx existing/planned infrastructure and the Land Owner/Developer's planned infrastructure must be clearly shown.
2. Air Quality Study indicating any development feature(s) that may adversely affect the air quality and relationship of air in-take/discharge to Metrolinx's at-grade vent shaft openings and station entrance openings. Developments shall locate all building entrances a minimum distance of 12 metres from Metrolinx vent shafts
3. A Smoke Dispersion Analysis, undertaken in accordance with the Metrolinx *Smoke Dispersion Analysis (SDA) Requirements for New Development in the Vicinity of LRT Stations and Ventilation Shafts* for all new residential and commercial developments within 50m radius of an existing or planned tunnel ventilation grate, to demonstrate the following:
  - The concentration of smoke discharged from the tunnel ventilation shafts and drawn into entrances (including operable windows and doors) or air intake shafts of adjacent buildings is sufficiently diluted; and
  - The new development has an effective smoke management system and emergency response and evacuation plan to minimize the smoke ingress into the building or any issues arising from the smoke ingress into the building.
4. A geotechnical investigation report showing up-to-date geotechnical conditions at the site of the development.
5. An impact assessment statement from the structural and/or geotechnical consultant stating the effects of the Development on the existing or planned Metrolinx LRT Infrastructure and works.
6. Acknowledgement that noise, vibration, stray current and electro-magnetic interference from Metrolinx's operations in compliance with defined criteria and LRT applicable standards, have been considered in the design of the project, and appropriate mitigation measures applied. The acknowledgement can be a report based on site investigations or an impact assessment statement.
7. Up-to-date surveys which are signed and sealed by an Ontario Land Surveyor. Please see Appendix 4 for the requirements for reference plans and other survey plans near Metrolinx LRT subsurface infrastructure.
8. Architectural, landscape, mechanical, electrical, servicing and utility drawings.
9. Structural, foundation, excavation, dewatering plan and shoring drawings.
10. Other Plans, Studies and Schedules including but not limited to: Construction Management Plan, Traffic and Transit Management Plan, Transportation Impact Study (as required by the City's Guidelines for the Preparation of Traffic Impact Studies), Construction/Project Schedule, and any Environmental Site Assessments, Risk Assessments, or Records of Site Conditions filed under O.Reg.153/04 for the proposed development site.

**Level 3 Review:**                    **Developments within 60-metres of existing or planned Metrolinx LRT Infrastructure, including within Municipal Rights-of-Way, with perceived moderate to high impacts on LRT implementation activities, infrastructure assets, or operations**

Level 3 Reviews are generally warranted in instances where Metrolinx requires additional supporting information (plans/reports) to better understand and evaluate the design and/or timing of proposed development, and where it is likely that Metrolinx will require the proponent to enter into one or more private agreements. Level 3 Reviews are typically assigned to proposed developments that will impose new/additional loads onto Metrolinx existing/planned infrastructure, and where a moderate to high level of analysis and coordination effort is required.

In addition to the Level 2 submission requirements, the following drawings/documents may be required for review. All documents must be signed and sealed by the appropriate professional. Actual requirements will be determined through consultation with Metrolinx staff:

1. A structural analysis or calculations by the Land Owner/Developer's consultant of the effects of all applicable loadings, including construction loading, on the Metrolinx LRT Infrastructure, in accordance with Metrolinx's Applicable Standards, demonstrating that the Metrolinx LRT Infrastructure will not be adversely affected by the development, including solutions to mitigate any impact on Metrolinx LRT Infrastructure. The documentation must include identification of the affected Metrolinx structural units.  
  
Note: The review of all submitted structural analysis or calculations will be focusing 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 focused on the portions of the development that might affect Metrolinx LRT Infrastructure. Metrolinx will not accept any responsibility for the accuracy and adequacy of the calculations, which will remain the sole responsibility of the Land Owner/Developer.
2. Documentation showing that the excavation support system and permanent structure adjacent to the Metrolinx property are designed for "at-rest" earth pressures. The "at-rest" horizontal earth pressure must be measured either by in-situ methods ( $K_0$  stepped blade, self-boring pressure meter, dilatometer or cone penetration test) or through laboratory testing of undisturbed samples (triaxial testing).
3. Pressure meter testing, or other suitable in-situ testing, must be carried out to confirm the Elastic modulus of the soil ( $E$  and  $E_r$ ) and variation with depth for use in modelling to confirm that there are no impacts to the Metrolinx LRT Infrastructure.
4. Structural drawings including caisson/foundation plans, sections and details, floor plans, column and wall schedules and loads on foundation for the development. Show the relationship of the development to Metrolinx's infrastructure in both plan and section.
5. Shoring design criteria and description of excavation and shoring methods.
6. Ground water control plan, including the determination of the short-term (during construction) and long-term effects of dewatering on Metrolinx LRT Infrastructure, and provision of assurances that the influence of dewatering will have no impact on the Metrolinx LRT Infrastructure.



7. Monitoring Plan for movement of the shoring and Metrolinx LRT Infrastructure prior to and during construction of the development, including Action Protocol. A generic sample document that shows the values of Review and Alert levels and corresponding Action Protocol is attached to this Guide as Appendix 5.
8. Site servicing plans which show the utility installations proposed through or adjacent to Metrolinx property. This plan shall show Metrolinx utility connections where associated municipal connections are to be modified.
9. A pre-construction condition survey of Metrolinx LRT Infrastructure, including a survey to confirm locations of existing walls and foundations of the Metrolinx LRT Infrastructure. A post-construction condition survey as a means of observing any new structural or non-structural deficiencies or damage to Metrolinx LRT Infrastructure will be required upon substantial completion of the development. The requirements for the survey are shown in Appendix 4.

**Level 4 Review:**                    **Developments within 60-metres of existing or planned Metrolinx LRT Infrastructure, including within Municipal Rights-of-Way, with perceived severe complexity and significant impacts on LRT implementation activities, infrastructure assets, or operations, where fixed fee review is not considered practical**

Level 4 Reviews are warranted in instances where Metrolinx requires additional supporting information (plans/reports) to better understand and evaluate the design and/or timing of proposed development, and where Metrolinx will require the proponent to enter into one or more private agreements.

Level 4 Reviews are assigned to proposed developments that will impose new/additional loads onto Metrolinx existing/planned LRT Infrastructure, which may also include a station integration/entrance connection component, where significant analysis and coordination efforts are required. Level 4 Reviews are also assigned to proposed developments that are planned to be constructed during the LRT construction phase, where they pose significant and complex construction coordination challenges that must be addressed to Metrolinx's satisfaction.

In addition to the Level 3 submission requirements, the following drawings/documents may be required for review. All documents must be signed and sealed by the appropriate professional. Actual requirements will be determined through consultation with Metrolinx staff:

1. Ontario Building Code (OBC) compliance review, specifically including Section 3.13 Rapid Transit Stations, as well as all relevant OBC Fire and Life Safety provisions and ordinances and including a plan depicting egress routes from the station.
2. Drawings showing provision for make-up air to the station if existing LRT entrances are removed or modified by the development.
3. Architectural and urban realm/landscape plans, 3D Building Mass Renderings, site circulation diagrams, photographs, reports and such other information as necessary to support a Metrolinx Design Excellence Review, as outlined in the *Metrolinx Design Excellence Principles and Requirements for Transit Oriented Development* document.
4. Drawings/documentation of construction method, hoarding, construction access, and haul routes.

5. Details of remedial work to Metrolinx LRT Infrastructure in order to support roof at wall openings, including structural calculations, drawings and construction sequencing.
6. Details regarding the replacement/repair of the waterproofing system of the affected Metrolinx LRT Infrastructure, including Metrolinx expansion joints, using products equal or compatible with the existing waterproofing system.
7. Crane locations, loadings with other pertinent details, such as, axle loads and configuration, outrigger loads and configuration, size of the spread for each outrigger, lifting area diagram, maximum/minimum loads on each leg/outrigger.

### **Entrance Connection, Modification, or Removal – Technical Review Submissions**

Entrance Connection proposals will require a separate technical review from that of the main development, which includes the submission of detailed plans and specifications relating to the connection. The following is a list of submission requirements regarding the Entrance Connection technical review.

1. Details of stairs, doors, sprinklers and ventilation for the development connection.
2. Architectural finish materials selection, including samples.
3. A National Fire Protection Association (NFPA) 130 Standard for Fixed Guideway Transit and Passenger System review to ensure design requirements outlined in the document, are met in relation to Metrolinx's infrastructure for instances where the design of the new development includes a direct connection to Metrolinx's infrastructure such as a Station Entrance.
4. Wayfinding and signage plans and specifications for internal connections to Metrolinx corridors, developed in co-ordination with Metrolinx Design Excellence; including development connection to Metrolinx and concept for general wayfinding within building.
5. Drawings of fare collection equipment, CCTV, intercom, fire alarm, vertical accessibility equipment, all designed in conformance with applicable Metrolinx Design Standards and Master Specifications, including accessibility requirements, as applicable to the subject proposal.
6. As-built reproducible drawings and electronic files for Metrolinx documentation records.
6. If the Land Owner/Developer proposes to draw power from Metrolinx LRT Infrastructure, the Land Owner/Developer is required to initiate an Electrical Load Analysis to determine if Metrolinx's existing power capacity is available and is not affected by the Land Owner/Developer's additional loads. The analysis shall include as a minimum: demand load study, power supply scheme, connection supply limits, and short circuit analysis and protection coordination.
7. The Land Owner/Developer is required to provide a lighting impact analysis over the area of development and ensure that all the elements of EMI/EMC and safety and security meet Metrolinx's Applicable Standards.

## Technical Review Drawing & Report Submission Requirements

Technical Reviews require the following number of documents signed and sealed by the appropriate professional in that discipline to constitute a complete application and resubmissions to review comments.

- Plans & Surveys:
  - One (1) complete set of full size plans and surveys.
- Reports:
  - One (1) copy of all required reports according to level of review.
- Electronic Format:
  - One (1) CD containing all plans, surveys, and reports in PDF and Microstation (see Appendix 4).

Note: The requirements shown above also apply to all submissions including supplemental submissions and responses/resubmissions to review comments.

## APPENDIX 3 NON-DISCLOSURE AGREEMENT

### Non-Disclosure Agreement

This Agreement is made as of the     day of     among Metrolinx, Name of the ProjectCo (“acronym of the ProjectCo”) and Land Owner/Developer (The “Recipient”).

#### **Recitals:**

A.     The Recipient has expressed an interest in developing a property owned by it adjacent to     of the     LRT (the “Station”), one of the underground stations or at-grade stops of the proposed     LRT in conjunction with the Metrolinx property municipally known as     . The Recipient has requested preliminary specifications and plans for the Station and other related information from Metrolinx and ProjectCo, which have both agreed to provide to the Recipient on the terms and subject to the conditions hereinafter set forth.

**FOR VALUABLE CONSIDERATION** paid by the Recipient to Metrolinx and ProjectCo, the Recipient agrees as follows:

1.     **Confidential Information.** “Confidential Information” means design documents and other related information including, but not limited to, concept reference plans relating to the design of the Station, any output specifications for the Eglinton Crosstown Project that relate or pertain to the Station owned by Metrolinx or ProjectCo or which they have a right to use and such other information as Metrolinx or ProjectCo may determine, in their discretion, is connected, directly or indirectly, to the Station, as may be disclosed or provided, orally, in writing, electronically, visually, photographically, magnetically or by some other means by Metrolinx or ProjectCo or on their behalf to the Recipient, regardless of whether or not the information is specifically identified or marked as confidential or proprietary. This Agreement does not apply to Confidential Information which:

- (i) becomes generally available to the public through no fault of the Recipient;
- (ii) is already known to or in the possession of the Recipient at the time of its disclosure by the Recipient as evidenced by the Recipient’s records;
- (iii) was independently developed by the Recipient prior to receipt from Metrolinx or ProjectCo as documented by the Recipient’s written records; or
- (iv) becomes available to the Recipient on a non-confidential basis from a source other than Metrolinx or ProjectCo that is not under other obligations of confidence.

Metrolinx or ProjectCo, as applicable, shall retain all right, title and interest including all intellectual property rights in and to the Confidential Information. Neither the execution of this Agreement nor the furnishing of any Confidential Information shall be construed as granting to the Recipient either by implication or otherwise any interest, licence or right respecting the Confidential Information.

All Confidential Information is provided “as is” without warranty or guarantee of any kind as to accuracy, completeness, fitness for use, purpose, non-infringement of third party rights or any other warranty, express or implied. Metrolinx and ProjectCo shall not be responsible for any damages, loss, expense or claim of loss arising from use of or reliance by the Recipient on the Confidential Information.

2. **Recipient's Obligations.** The Recipient agrees that the Confidential Information is confidential and proprietary to Metrolinx and/or ProjectCo and will be held by the Recipient in confidence. The Recipient:

(i) shall not disclose, reveal, publish or disseminate the Confidential Information to any person other than those of its directors, officers, employees, agents and third parties with a need to know such Confidential Information in connection with the Development provided that before the Recipient discloses the Confidential Information to any person, it shall obtain the prior written consent of Metrolinx and ProjectCo and only disclose to persons who shall either have entered into a confidentiality agreement with Metrolinx and ProjectCo on the terms hereof or be otherwise subject to obligations of confidentiality substantially similar to those contained in this Agreement;

(ii) shall take all reasonable steps required to prevent any unauthorized reproduction, use, disclosure, publication or dissemination of the Confidential Information and shall immediately notify Metrolinx and ProjectCo if it becomes aware of any unauthorized disclosure;

(iii) shall satisfy and comply with all applicable privacy legislation and any other statute or regulation applicable to the Confidential Information including the *Freedom of Information and Privacy Act*;

(iv) shall only use the Confidential Information in connection with the Development and for no other purpose;

(v) shall not contact ProjectCo with respect to any aspect of the design or other component of the Station or the Development without the prior written consent of Metrolinx;

(vi) at the request of Metrolinx or ProjectCo, return all Confidential Information or destroy it and all copies in any form in its power or control and provide Metrolinx and ProjectCo with a certificate of confirmation signed by an officer of the Recipient certifying such return or destruction. To the extent that data or electronic records containing Confidential Information are retained by the Recipient for the purposes of back up, recovery, contingency planning or business continuity planning or are otherwise not accessible in the ordinary course of business, such data or records, to the extent not otherwise permanently deleted or overwritten will not be accessed except for the purposes enumerated above (back up, recovery, contingency planning, business continuity planning).

3. **Legally Required Disclosure:** If the Recipient is required by law to disclose the Confidential Information the Recipient shall provide Metrolinx and ProjectCo with written notice to enable Metrolinx and/or ProjectCo to seek a protective order and shall cooperate with Metrolinx and ProjectCo in obtaining any such order. If such order is

not obtained the Recipient shall disclose only such portions of the Confidential Information as is required by applicable law.

4. **Term:** The obligations of the Recipient herein shall be effective from the date of this Agreement and shall remain in full force and effect for seven (7) years from the date Metrolinx or ProjectCo last discloses any Confidential Information to the Recipient pursuant to this Agreement. Further, the obligation not to disclose shall not be affected by bankruptcy, receivership, assignment, attachment or seizure procedures, whether initiated by or against the Recipient, nor by the rejection of any agreement between Metrolinx and the Recipient, by a trustee of the Recipient in bankruptcy, or by the Recipient as a debtor-in-possession or the equivalent of any of the foregoing under local law.

5. **Further Assurances.** The Recipient acknowledges that Metrolinx or ProjectCo may require the Recipient to provide additional confidentiality covenants satisfactory to Metrolinx or ProjectCo before Metrolinx or ProjectCo discloses additional Confidential Information. The Recipient makes no commitment to enter into any such further covenants and this Confidentiality Agreement shall pertain to and govern all Confidential Information provided by Metrolinx and ProjectCo under it. For greater clarity, should the Recipient not agree to be bound by further confidentiality covenants requested by Metrolinx or ProjectCo, Metrolinx and ProjectCo will not be required to disclose to the Recipient any further or additional Confidential Information.

6. **Other Information.** The Recipient shall have no obligation under this Agreement with respect to information which is or becomes publicly available without breach of this Agreement by the Recipient; is rightfully received by the Recipient without obligations of confidentiality; or is developed by the Recipient without breach of this Agreement.

7. **No Publicity.** The Recipient agrees not to disclose the existence of this Agreement or the terms hereof except as required to comply with its obligations under Section 2 or as required by law.

8. **FIPPA.** No information, records or documents containing personal information will be provided to the Recipient pursuant to this Agreement. The Recipient acknowledges that Metrolinx is bound by the *Freedom of Information and Protection of Privacy Act* (Ontario) ("FIPPA"). If a request is made under FIPPA for access to information or records provided by Metrolinx to the Recipient, the Recipient shall cooperate with Metrolinx and **ProjectCo** in identifying records responsive to the request and responding to it in a timely manner.

9. **Governing Law & Equitable Relief.** This Agreement shall be governed and construed in accordance with the laws of Ontario and the laws of Canada applicable therein. The parties consent to the exclusive jurisdiction of the Ontario courts for any dispute arising out of this Agreement. The parties agree that in the event of any breach or threatened breach by the other party it may obtain, in addition to any other legal remedies which may be available, such equitable relief as may be necessary to protect it against any such breach or threatened breach.

10. **Entire Agreement.** This Agreement terminates and supersedes all prior understandings or agreements on the subject matter hereof. Only a further written document that is duly executed by all parties may modify this Agreement.

11 **No Assignment.** The Recipient may not assign this Agreement or any interests herein without Metrolinx's express prior written consent, which may be arbitrarily withheld.

12. **Severability.** If any term of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, then this Agreement, including all of the remaining terms, will remain in full force and effect as if such invalid or unenforceable term had never been included.

13. **No Implied Waiver.** A party's failure to insist in any one or more instances upon strict performance by another party of any of the terms of this Agreement shall not be construed as a waiver of any continuing or subsequent failure to perform or delay in performance of any term hereof.

14. **Waiver of Liability.** Metrolinx and ProjectCo shall not be liable for the Confidential Information or any errors that may be contained in or omissions from the Confidential Information. The Confidential Information is provided on an "as-is, where-is" basis to the Recipient and the Recipient releases and waives Metrolinx and ProjectCo from all liability which may arise from the use of or reliance on the Confidential Information by the Recipient.

**IN WITNESS WHEREOF**, the parties have executed this Agreement as of the date first above written.

**METROLINX**

By: \_\_\_\_\_  
Name:  
Title:  
I have the authority to bind the corporation

**PROJECTCO**

By: \_\_\_\_\_  
Name:  
Title:  
I have the authority to bind the partnership

**LAND OWNER/DEVELOPER**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
I have the authority to bind the corporation

## APPENDIX 4 REQUIREMENTS FOR REFERENCE PLANS AND OTHER SURVEY PLANS NEAR METROLINX SUBSURFACE LRT INFRASTRUCTURE

### A) Universal

- Publish coordinates be in compliance with Metrolinx's georeferencing standards (document SR-150). The following Reference Datums and Grid System shall be used, in accordance with: the MTO's Engineering Survey Manual dated October 2006, Paragraph 31 of Ontario Regulation 216/10 under the *Surveyor's Act*, and The City of Toronto Requirements for Integrated Surveys Pursuant to O. Reg. 216/10, under the *Surveyors Act*:
  - Grid System: 3-degree Modified Transverse Mercator (MTM) Zone 10.
  - Horizontal Reference Datum: North American Datum (NAD) 1983, using the NAD83 Canadian Spatial Reference System (CSRS) adjustment v.6
  - Vertical Reference Datum: Canadian Geodetic Vertical Datum (CGVD) 1928:78 Adjustment.
- Publish any other coordinates required by the province or by the City.
- Show Metrolinx reference lines (RL) both existing and proposed.
- Show Metrolinx RL ahead & back chainages at RL PI's.
- Show Metrolinx RL chainages at RL intersections with street lines and other property lines.
- Show ties to property corners from RL intersections with street lines.

### B) Depiction of Metrolinx underground LRT Infrastructure - General

- Show outlines of existing subsurface Metrolinx LRT Infrastructure in plan, profile and section views.
- Show expansion joints and wall outlines in plan view.
- Show expansion joints, floor slab outlines and roof slab outlines in profile view.
- Show wall outlines, floor slab outlines and roof slab outlines in section view.
- Label Metrolinx LRT Infrastructure Unit numbers in all views and label RL changes at all expansion joints.
- Show Metrolinx LRT Infrastructure plan views at various elevations as required.
- Show Metrolinx LRT Infrastructure profile views and section views as required.
- Show relationship of Metrolinx underground infrastructure to property lines.

### C) Depiction of Metrolinx LRT Infrastructure – less than 3m from adjacent property lines & infrastructure both existing & proposed

- Show Metrolinx LRT Infrastructure based on field survey prepared by the Land Owner/Developer.



- Survey interior faces of infrastructure and compile exterior faces of infrastructure from construction drawings (cite drawing numbers).

D) Depiction of Metrolinx LRT Infrastructure – greater than 3m from adjacent property lines & infrastructure both existing & proposed

- Show Metrolinx LRT Infrastructure based on mathematical compilation.
- Compile both interior and exterior faces of infrastructure from construction drawings (cite drawing numbers).

E) Determination of Less Than 3m or Greater Than 3m status

- Use “less than” if there is any doubt or possibility of being less than 3m (this mitigates the risk of rejection during Metrolinx review).
- In the alternative, prior to formal submission of plans, submit request to the Metrolinx Development Coordinator for determination of status.
- Allow three weeks for status determination.

F) Currency

- All plans to be up-to-date and signed by the same Ontario Land Surveyor.

## APPENDIX 5 MONITORING PLAN - REVIEW AND ALERT LEVELS AND ACTION PROTOCOL

The Monitoring Plan for the Land Owner/Developer's Shoring and Metrolinx LRT Infrastructure shall include the value of the Review Level and the Alert Level and the corresponding Action Protocol. Note that the Review Level and the Alert Level for differential movement of the structural units of the Metrolinx LRT Infrastructure are 2mm and 3mm, respectively. The Action Protocols are shown below.

**Review Level:** If the displacement of the Shoring or the Metrolinx LRT Infrastructure reaches the value of the Review Level, the Land Owner/Developer shall:

- i. Inform Metrolinx immediately that the Review Level has been reached.
- ii. Conduct a review of the work completed with the area noted for the movement and assess whether it is necessary to alter the method or sequence of construction.
- iii. Issue the results of the review to Metrolinx.

**Alert Level:** If the displacement of the Shoring or the Metrolinx LRT Infrastructure reaches the value of the Alert Level, the Land Owner/Developer shall:

- i. Contact Metrolinx immediately, and make the works secure and cease further work in the "affected" area.
- ii. Conduct a review of the monitoring and the work completed within the area of movement, and issues the results and comments to Metrolinx.
- iii. Develop a remedy that is satisfactory to Metrolinx. Metrolinx will allow the Land Owner/Developer to resume work in the affected area only when the Land Owner/Developer has implemented corrective measures to the satisfaction of Metrolinx.

## **APPENDIX 6 REQUIREMENTS FOR CONDITION SURVEY OF METROLINX LRT INFRASTRUCTURE**

The Condition Survey report shall include drawings illustrating:

- Locations and type of the defects, in addition to a photographic record;
- All photograph locations; and
- All cracks over 0.3mm.

Notes:

- The size of the cracks shall be measured with a gauge and identified in the written text of the report.
- In addition to a hard copy of the report, provide a CD 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.