

To: David Veights, Metrolinx  
From: Andrew Shea  
Katie Bright  
Subject: Eglinton Crosstown Light Rail Transit (LRT)  
Transit Project Assessment Process  
Environmental Project Report (EPR) Addendum  
Jane Street to Keele Park and Black Creek Maintenance and Storage  
Facility  
(October 2013)

Date: December 6<sup>th</sup>, 2013  
Job No.: 3212006

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This memorandum presents revisions to the Eglinton Crosstown LRT EPR Addendum (October 2013), made in response to comments received during the 30-day public review period for the document. Revisions are indicated in yellow.

#### **Section 2.1.4: ECLRT Alignment - Evaluation**

The first bullet reading:

- Criterion 1: The option must have some clear advantages over the Base Case;

is revised as follows:

- Criterion 1: The option must have some clear advantages over the Base Case (i.e. the plan presented in the 2010 EPR);

The following text is added following identification of the short listed options on Page 2-9:

A subsequent comparative assessment of the short-listed options was undertaken to identify a preferred concept, based on the following assessment criteria:

- **Alignment and geometry of the mainline and stations:** qualitative assessment of the degree to which the alignment achieves desirable design criteria;
- **Anticipated environmental impacts:** qualitative assessment of the potential for impacts to the natural environment, and the potential to mitigate anticipated impacts;
- **Speed restrictions on main line:** estimate of the effect of geometric design on LRT operations on main line;
- **Geometry of MSF vertical connection:** estimate of the effect of vertical geometric design on LRT operations on the LRT connection from the main line to the proposed MSF;
- **Geometry of MSF horizontal connection:** estimate of the effect of horizontal geometric design on LRT operations on the LRT connection from the main line to the proposed MSF;

- **Station depth:** assessment of the constructability of the station and the ability to provide convenient passenger access and transfer connections;
- **Property impact:** qualitative assessment of the estimated amount of private property required to construct the LRT alignment and associated infrastructure;
- **Anticipated community impact:** qualitative assessment of the potential for impacts associated with noise, vibration, visual impacts, etc.;
- **Potential for connection to future rail services:** qualitative assessment of the ease with which future passenger connections to a potential Mount Dennis GO Rail Station could be implemented;
- **Construction duration:** estimate of the time required to construct the LRT alignment and associated infrastructure;
- **Maintenance requirements:** qualitative comparative assessment of the costs associated with the daily operation and maintenance of the alignment;
- **Cost for MSF connection (Phase 1):** high-level comparative cost estimate for the construction of the LRT alignment and associated infrastructure for Phase 1 of the ECLRT; and
- **Cost for ultimate configuration (i.e. Phase 2 of the ECLRT):** high-level comparative cost estimate for the construction of the LRT alignment and associated infrastructure for Phase 2 of the ECLRT.

#### **Section 2.2.4: Mount Dennis Bus Terminal - Evaluation**

The final bullet (re: Operating Costs) is removed from the list of assessment criteria:

- ~~**Operating Costs:** Costs associated with the daily operation and maintenance of the bus terminal.~~

#### **Section 4.3: Cultural Environment**

Table 4-3 is updated per the attached Table 4-3: Identified Cultural Heritage Landscapes (CHL) and Built Heritage Resources (BHR) (rev)

#### **Table 5-1: Interactions Matrix**

Table 5-1 is updated per the attached Table 5-1: Interactions Matrix (rev).

#### **Section 5.3.8.2: Potential Contamination - Construction Impacts**

The final paragraph reading:

Prior to construction, Metrolinx will require the contractor to submit the name, location and type of license of the designated soil disposal sites (as issued by MOE).

is revised as follows:

Prior to construction, Metrolinx will require the contractor to submit the name, location and type of license of the designated soil disposal sites (as issued by MOE). **The names of disposal sites, when known, will also be shared with the District Manager of the Toronto District Office of the MOE.**

### **Section 5.4.2.3: Noise and Vibration – Operations and Maintenance**

The text reading:

#### *Ventilation Noise*

Based on the “generic” sound power emission data and silencer insertion loss data used in the Noise and Vibration Assessment (Appendix D), the emergency fire ventilation fans are predicted to meet the applicable MOE NPC-205 guideline limits at all noise sensitive locations...

Is revised as follows:

#### *Ventilation Noise*

Based on the “generic” sound power emission data and silencer insertion loss data used in the Noise and Vibration Assessment (Appendix D), the emergency fire ventilation fans are predicted to meet the applicable MOE NPC-**300** guideline limits at all noise sensitive locations...

The text reading:

#### *Black Creek MSF*

Based on the modelled noise impacts from MSF activity, noise impacts are not anticipated...

is revised as follows:

#### *Black Creek MSF Operations*

**The noise assessment was undertaken for the representative Black Creek MSF layout. This facility is in an early stage of design, and a detailed assessment of potential noise impacts will be undertaken in the detailed design phase. Regardless, the design of the facility includes features which minimize the potential for noise from these sources to affect surrounding residences. For example:**

- Air conditioning for maintenance buildings is planned, and the bay doors will generally be kept closed. While doors may be briefly open for vehicle movements, for the majority of the time they will provide screening of indoor noise levels; and
- Strategic building placement to minimize noise impacts.

As a result, maintenance activity noise radiated from bay doors is anticipated to be insignificant compared to noise from LTR vehicles moving outdoors.

Based on the modelled noise impacts from MSF activity, noise impacts are not anticipated...

The following text is added:

### **Mitigation Measures**

Noise and vibration mitigation measures for sections of the ECLRT outside of this Addendum's study area are provided in the 2010 EPR.

#### ***Black Creek MSF***

Once the design progresses to a sufficiently detailed point, an Environmental Compliance Approval (ECA) will need to be obtained from the MOE. A detailed Acoustic Assessment Report will be submitted at that time, which will include a more detailed assessment of maintenance noise and outline any additional required mitigation measures.

### **Section 5.5.1: Cultural Environment - Archaeology**

The text reading:

Any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Government Services.

is revised as follows:

Any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of ~~Government~~ **Consumer** Services.

### **Section 5.5.2.2: Built Heritage and Cultural Landscapes – Construction Impacts**

The text reading:

#### **Potential Impacts**

Transit infrastructure projects have the potential to adversely affect cultural heritage landscapes and built heritage resources during construction. **Table 5-5** outlines the

sites of potential impact for built heritage resources and cultural heritage landscapes in the study area.

#### Mitigation Measures

Mitigation measures to protect built heritage resources and cultural heritage landscapes in the east and west study areas during construction are outlined in **Table 5-5**.

is revised as follows:

#### Potential Impacts

Transit infrastructure projects have the potential to adversely affect cultural heritage landscapes and built heritage resources during construction. **Table 5-4** outlines the sites of potential impact for built heritage resources and cultural heritage landscapes in the study area.

#### Mitigation Measures

Mitigation measures to protect built heritage resources and cultural heritage landscapes in the ~~east and west~~ study areas during construction are outlined in **Table 5-4**.

### **Table 5-5: Summary of Potential Impacts, Mitigation Measures, Future Work, and Contingencies**

**And**

### **Table E-1: Summary of Potential Impacts, Mitigation Measures, Future Work, and Contingencies**

Tables 5-5 and E-1 are updated per the attached Table 5-5/E-1: Summary of Potential Impacts, Mitigation Measures, Future Work, and Contingencies (rev).

## **Section 6.9: Consultation Process - Elected Officials**

The text reading:

The motions are presented, along with Metrolinx responses, in **Table 6-9**.

is revised as follows:

The motions are presented, along with Metrolinx responses, in **Table 6-10**.

## **Section 7.4: Commitments to Future Work – Construction Issues**

The text reading:

Any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Government Services.

is revised as follows:

Any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of **Government Consumer** Services.

### **Section 7.5: Commitments to Future Work – Permits and Approvals, and Section E.7**

The bullet reading:

- Environmental Compliance Approvals for Air Quality in accordance with the *Environmental Protection Act* (through MOE), including Operational Air Quality Assessment for the MSF;

Is revised as follows:

- Environmental Compliance Approvals for Air Quality **and Noise** in accordance with the *Environmental Protection Act* (through MOE), including **an** Operational Air Quality Assessment **and a detailed Acoustic Assessment** for the MSF;

**Table 4-3: Identified Cultural Heritage Landscapes (CHL) and Built Heritage Resources (BHR) (rev)**

Site #	Resource	Type	Location	Description	Heritage Recognition
1.	BHR	Educational	2690-2694 Eglinton Avenue West, north side	York Memorial Collegiate Institute (C.I.)	<b>Municipally designated</b> under the <i>Ontario Heritage Act</i> and <b>included</b> on the City of Toronto <i>Inventory of Heritage Properties</i> . There is a commemorative plaque from the Township of York set on the front lawn.
2.	CHL	Recreational	Eglinton Avenue West at Black Creek Drive	Coronation Park	<b>Not included</b> on the City of Toronto Inventory of Heritage Properties.
3.	CHL	Recreational	Eglinton Avenue West at Black Creek Drive	Keelesdale Park	<b>Not included</b> on the City of Toronto Inventory of Heritage Properties.
4.	BHR	Transportation	Black Creek at Eglinton Avenue West, east of Black Creek Drive	Black Creek Bridge	<b>Not included</b> on the City of Toronto Inventory of Heritage Properties.
5.	BHR	Transportation	Eglinton Avenue West at former Kodak site	Retaining wall 1966.	<b>Not included</b> on the City of Toronto Inventory of Heritage Properties.  A Cultural Heritage Evaluation Report (CHER) has been completed and recommended that this resource has cultural heritage value under Ontario Regulation 9/06 and not under Ontario Regulation 10/06. The CHER recommendations are subject to review by the Metrolinx Heritage Committee.
6.	BHR	Transportation	Eglinton Avenue West at former Kodak site	Road Bridge, 1965	<b>Not included</b> on the City of Toronto Inventory of Heritage Properties.  A CHER has been completed and recommended that this resource has cultural heritage value under Ontario Regulation 9/06 and not under Ontario Regulation 10/06. The CHER recommendations are subject to review by the Metrolinx Heritage Committee.

Site #	Resource	Type	Location	Description	Heritage Recognition
7.	BHR	Transportation	Eglinton Avenue West at former Kodak site	Railway Subway, c1965	<b>Not included</b> on the City of Toronto Inventory of Heritage Properties.
8.	BHR	Industrial	3500 Eglinton Avenue West	Kodak Building No. 9	The Cultural Heritage Evaluation Report (CHER) completed in July 2012 under the requirements of the Standards and Guidelines for the conservation of provincial heritage properties (July 2010) determined that Building No. 9 is of heritage value based on Ont. Reg 9/06 of the <i>Ontario Heritage Act</i> , however, it not considered to be of provincial heritage value under Ont. Reg. 10/06 for provincially owned properties.
9.	BHR	Commercial	1151 Weston Road at Eglinton Avenue West	Bank of Nova Scotia	<b>Not included</b> on the City of Toronto Inventory of Heritage Properties.  A CHER has been completed and recommended that this resource has cultural heritage value under Ontario Regulation 9/06 and not under Ontario Regulation 10/06. The CHER recommendations are subject to review by the Metrolinx Heritage Committee.
10.	CHL	Historical Community	Eglinton and Weston Road	Mount Dennis	Mount Dennis buildings <b>not included</b> on the City of Toronto Inventory of Heritage Properties
11.	CHL	Recreational	3601 Eglinton Avenue West at Jane Street	Eglinton Flats Park	<b>Not included</b> on the City of Toronto Inventory of Heritage Properties.
12.	CHL	Recreational	3700 Eglinton Avenue West at Jane Street	Fergy Brown Park	<b>Not included</b> on the City of Toronto Inventory of Heritage Properties.

**Table 5-1: Interactions Matrix (rev)**

Environmental Factors Facilities/Activities		Natural Environment								Socio-Economic Environment			Cultural Environment		Transportation			
		Groundwater	Surface Water	Fish and Fish Habitat	Vegetation and Vegetation Communities	Wildlife and Wildlife Habitat	Designated Natural Areas and Parks	Air Quality	Potential Contamination	Noise and Vibration	Land Use	Utilities	Archaeology	Built Heritage and Cultural Heritage Landscapes	Transit System	Pedestrian and Cycling Network	Road Network	Navigable Watercourses
Footprint Impacts	LRT Runningway		S								S							
	New Bridges		S	W	M	M					S							
	Bridge/Culvert Improvements		S	S	S	S	S						S					
	Intersection Improvements		S		S	S				S	S							
	Road Improvements		S		S	S					S							
	Stations	S			S	S				S	S		S					
	Stops		W								S							
	Traction Power Substation		W		S	S				W	S							
	Ventilation Shafts		W							W								
	Portal	S																
	Maintenance and Storage Facility	M	S		S	S				W			M					
	Tunnel	S									S							
Bus Terminal		S		S	S					S		M						
Construction Impacts	Tunneling / Work Yards	S	W				S	M	M/S	W		S						
	Cut and Cover Construction	S						M	M	S	S			S	S	S		
	Surface Excavation	S	S					M	M/S	S								

Environmental Factors		Natural Environment							Socio-Economic Environment			Cultural Environment		Transportation			
		Groundwater	Surface Water	Fish and Fish Habitat	Vegetation and Vegetation Communities	Wildlife and Wildlife Habitat	Designated Natural Areas and Parks	Air Quality	Potential Contamination	Noise and Vibration	Land Use	Utilities	Archaeology	Built Heritage and Cultural Heritage Landscapes	Transit System	Pedestrian and Cycling Network	Road Network
Facilities/Activities																	
	Clearing and Grubbing		S		S	S				S							
	Utility Relocation										S				W	W	
	Roadwork							M		S	M					S	
	Building Demolition							W/M		W	W		S		W		
	Soil Removal and Disposal		W					W/M	M/S							S	
	Dewatering	S	W		M	M						S					
	Reinforcement of Existing Buildings				M	M				S							
	Erosion and Sedimentation Control		S				S										
	Heavy Equipment Operations and Maintenance				M	M	S			S							
	Traffic Management														S	S	S
	Material Import/Stockpiling						S		W/M								S
	Trackwork									W	S						S
Concrete Forming		S		M	M												
Operations and Maintenance Impacts	LRT Operations									M / W				S	S / M	S	
	Track and Structure Maintenance													M		M	
	Stormwater Management		S		W	W											
	Bus Operations									M				M			

Environmental Factors		Natural Environment							Socio-Economic Environment			Cultural Environment		Transportation			
		Groundwater	Surface Water	Fish and Fish Habitat	Vegetation and Vegetation Communities	Wildlife and Wildlife Habitat	Designated Natural Areas and Parks	Air Quality	Potential Contamination	Noise and Vibration	Land Use	Utilities	Archaeology	Built Heritage and Cultural Heritage Landscapes	Transit System	Pedestrian and Cycling Network	Road Network
Facilities/Activities																	
	Station Maintenance													M	W		
	Stop Maintenance													M	W		
	Testing of Emergency Equipment								S								
	Snow Removal				W	W										W	

**Table 5-5/E-1: Summary of Potential Impacts, Mitigation Measures, Future Work, and Contingencies (rev)**

Factor	Environmental Issue / Concern	Effect / Impact (During Construction; Operations)	Mitigation Measures	Monitoring / Future Work / Contingency
Natural Environment				
Groundwater	Impacts to groundwater during construction and operation of the ECLRT.	It is anticipated that ECLRT facilities will not interrupt existing groundwater migration pathways and permanent groundwater dewatering systems will not be used.	<p>Groundwater will be managed in accordance with provincial legislation and regulations including Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the <i>Environmental Protection Act</i>, dated April 15, 2011. This may include management within the right-of-way depending on circumstances</p> <p>Further investigation to determine the radius of influence of any required dewatering will be necessary to fully consider the impacts to nearby structures and infrastructure. These studies are also needed to support the Ministry of the Environment's Permit to Take Water (PTTW) applications Further mitigation plans will be developed prior to construction.</p>	<p>A Soil and Groundwater Management Strategy will be developed prior to construction. Groundwater monitoring wells will be installed prior to construction.</p> <p>For excavations or property acquisitions in areas of known or high potential for environmental impacts, additional environmental investigations will be conducted in accordance with provincial regulatory requirements.</p> <p>Contaminated groundwater will be managed in accordance with provincial legislation and regulations including MOE Guidelines for Use at Contaminated Sites in Ontario (1997).</p> <p>Obtain PTTW from MOE and water disposal permit from the City of Toronto, where appropriate, as determined in the detailed design phase of the</p>

Factor	Environmental Issue / Concern	Effect / Impact (During Construction; Operations)	Mitigation Measures	Monitoring / Future Work / Contingency
				project.  A contingency plan will be developed prior to construction where appropriate.
Surface Water	Impacts to drainage and stormwater systems from the ECLRT.  Fuel spills, due to accidents during construction refueling and accidents during operation.  Impacts to quality and quantity of surface water.	The general direction of roadway overland flow routes and drainage patterns will not be altered.  There will be no significant changes to peak flow as a result of the implementation of the proposed changes to the ECLRT design.  At the MSF, the overall site will be highly impervious.  Construction activities could result in increased rates of erosion and sedimentation within and adjacent to the site area and tributaries to major watersheds.	The stormwater management system will be designed to achieve an Enhanced Level of water quality treatment, as per the Ministry of the Environment's Stormwater Management Planning and Design Manual (2003).  A storm water drainage and management system (SWM) is required at the MSF site, which will be consistent with the Toronto Green Development Standard.  In order to prevent and minimize the release of sediment to watercourses, the sediment and erosion control measures discussed in <b>Section 5.3.2</b> will be implemented during ECLRT construction.	Prior to construction, the contractor will submit a comprehensive environmental controls and methods plan to address, among other elements, effluent (water) control.  Environmental inspections of the construction site will be conducted to assess the performance of erosion and sedimentation control measures and identify any required maintenance.
Fish and Fish Habitat	Potential impacts to fish and fish habitat (Black Creek).	At Black Creek the proposed bridge structure will span the bed and banks of the watercourse with no encroachment in the wetted portion of the channel.	Implement mitigation measures as identified for <b>Surface Water</b> .  Implement best management practices identified in the 2010 EPR during construction to reduce the	Any additional mitigation measures, monitoring and commitments agreed to in consultation with provincial and federal agencies will be complied with.

Factor	Environmental Issue / Concern	Effect / Impact (During Construction; Operations)	Mitigation Measures	Monitoring / Future Work / Contingency
		Direct impacts to fish and fish habitat are not anticipated.	<p>potential for impacts to fish and fish habitat.</p> <p>All works will be completed in accordance with the <i>Fisheries Act</i>, the <i>Endangered Species Act</i>, and the <i>Species at Risk Act</i>.</p> <p>The Humber River floodplain and crossing of Black Creek are within the regulated areas of the City of Toronto's Ravine and Natural Feature Protection Bylaw and TRCA's Ontario Regulation 166/06, and a permit will be needed before the project works can be initiated. The TRCA will also review the project as it relates to Fish Habitat under their Level III agreement with Fisheries and Oceans Canada (DFO) to determine whether there is a potential for the proposed works to result in a Harmful Alteration Disruption or Destruction (HADD) of fish habitat. As the proposed elevated LRT bridge structure will span the bed and banks of the watercourse with no encroachment in the wetted portion of the channel, it is anticipated that a HADD will not result from the proposed works and the TRCA will issue a Letter of Advice (LoA) accordingly.</p>	Implement monitoring and contingency plans as identified for <b>Surface Water</b> .
Vegetation and	Direct and indirect	If not properly protected	Under the Ravine and Natural	Implement monitoring and

Factor	Environmental Issue / Concern	Effect / Impact (During Construction; Operations)	Mitigation Measures	Monitoring / Future Work / Contingency
Vegetation Communities	impacts to vegetation during construction.	<p>vegetation not impacted by the footprint of the ECLRT may be directly impacted during construction.</p> <p>Potential indirect impacts to vegetation include exposure to sediment and contaminant runoff from construction activities.</p>	<p>Feature Protection Bylaw, a permit is required to dump fill or refuse, or alter the grade, or injure or destroy any tree, in specified protected areas. There are other City of Toronto bylaws that give the same tree protection to park trees, street trees and certain trees on private land. On private land, trees that have a diameter at breast height of 30 cm or more are protected, and smaller trees are protected if they are part of a registered site plan agreement. Direction for adhering to the tree protection bylaws, including minimum protection zones, is provided in the City of Toronto's Tree Protection Policy and Specification for Construction Near Trees.</p> <p>The project works may impact trees in protected areas, in parks, on the road allowance and/or on private land. In support of the bylaws, a tree inventory will be required for the locations where trees are likely to be impacted. Mitigation, restoration or compensation measures (including potential for plantings within the Keelesdale Drive area) will be identified following the tree inventory and will be based on detailed site assessments undertaken during the detail design phase, refined to the satisfaction of the issuer of the</p>	<p>contingency plans as identified for <b>Surface Water</b>.</p> <p>It is possible that additional mitigation measures, monitoring, and commitments may be identified in consultation with relevant provincial and federal agencies. Any additional mitigation measures, monitoring and commitments agreed to will be complied with.</p>

Factor	Environmental Issue / Concern	Effect / Impact (During Construction; Operations)	Mitigation Measures	Monitoring / Future Work / Contingency
			<p>permit. Erosion and sediment control will be addressed as part of a comprehensive strategy for the entire ECLRT project.</p> <p>Where the City of Toronto does not have authority to issue tree permits (i.e., where there is provincial or federal interest), all works must be completed in accordance with applicable legislation including, but not necessarily limited to, the <i>Fisheries Act</i>, <i>Migratory Birds Convention Act</i>, <i>Endangered Species Act</i> and <i>Species at Risk Act</i>.</p> <p>Implement mitigation measures as identified for <b>Surface Water</b>.</p>	
Wildlife and Wildlife Habitat	<p>Habitat loss due to the preferred ECLRT alignment and construction of the MSF (see <b>Vegetation and Vegetation Communities</b>).</p> <p>Disturbance from construction noise and vibration.</p>	<p>Wildlife using the Black Creek wildlife corridor may be disturbed by noise and vibration associated with construction of the elevated LRT bridge. Barn Swallows may nest under the Black Creek bridge as they have in previous years. Northern Rough-winged Swallow and three other species considered probable nesters may be nesting near the bridge. Recent rail corridor construction works in the vicinity of the bridge may deter</p>	<p>The nests of most bird species are protected by the <i>Migratory Birds Convention Act</i>. Lands impacted by the project works should be monitored between May 1<sup>st</sup> and August 31<sup>st</sup> for active nests of bird species, and if they are observed it is recommended that they be monitored by a wildlife specialist to ensure that nesting activity continues. Potential disturbance may be sufficient to warrant the prevention of nesting under Black Creek bridge and the erection of</p>	<p>It is possible that additional mitigation measures, monitoring and commitments may be identified in consultation with relevant provincial and federal agencies. Any additional mitigation measures, monitoring and commitments agreed to will be complied with.</p>

Factor	Environmental Issue / Concern	Effect / Impact (During Construction; Operations)	Mitigation Measures	Monitoring / Future Work / Contingency
		nesting. At the MSF site, wildlife habitat may be eliminated or rendered unsuitable through construction of the MSF.	alternative nesting structures.  Caution should be exercised near Black Creek to avoid disturbing wildlife using this wildlife corridor. This is particularly important if Barn Swallows are nesting under the bridge. Implementation of mitigation measures may be sufficient such that a permit under the <i>ESA</i> will not be required for Barn Swallow, Chimney Swift and/or Milksnake. Requirements associated with the <i>ESA</i> are to be confirmed in consultation with MNR prior to construction commencing.  All works must be completed in accordance with applicable legislation including, but not necessarily limited to, the <i>Fisheries Act</i> , <i>Migratory Birds Convention Act</i> , <i>Endangered Species Act</i> and <i>Species at Risk Act</i> .	
Designated Natural Areas and Parks	Impacts to Keelesdale Park Coronation Park, and Pearan Park	The proposed location for the west temporary work site is on the south side of Eglinton Avenue, 200 m east of Black Creek Drive. The area is locally known as Keelesdale Park and the present land use consists of baseball diamonds, an indoor hockey arena and a grass soccer pitch. The soccer pitch	The ECLRT facilities will be positioned and configured to minimize intrusion into the parks to the extent possible. The ECLRT facilities will be designed to blend into their surroundings using a context sensitive solution. Metrolinx will consult with City of Toronto Parks, Forestry and Recreation Division during detailed design to	A monitoring and contingency plan will be developed prior to construction where appropriate.

Factor	Environmental Issue / Concern	Effect / Impact (During Construction; Operations)	Mitigation Measures	Monitoring / Future Work / Contingency
		<p>is located adjacent to but separated from Eglinton Avenue by a cultural woodlot (CUW1), and is bordered by a small deciduous forest parcel (FOD2-1) to the east and a parking lot to the south. The majority of the work zone will be established on the soccer pitch, but will also require removal of approximately 0.105 ha. of cultural woodlot to accommodate the northern boundary of the work zone and the 'open shaft' access to the portal. The FOD2-1 vegetation community will not be affected. The soccer pitch will also be used as the tunnel boring machine launch site and as temporary material stockpiling and heavy equipment operations site resulting in temporary impacts to its recreational use.</p> <p>Construction of relocating Eglinton Avenue West and elevated guideway in the along the ECLRT corridor will result in minor encroachment at three parks: Coronation Park, Keelestone Park and Pearen Park. The LRT facilities proposed at each park are</p>	<p>mitigate impacts on City of Toronto parks located along Eglinton Avenue.</p> <p>To ensure that the forested area remains undisturbed, the entire FOD2-1 vegetation community will be separated and isolated with a barrier to prevent encroachment by any construction related activity. Upon completion of the project, the soccer pitch will be re-instated to its present condition. The cultural woodlot (CUW-1) will also be restored to its pre-construction state as it will be replanted with suitable native species.</p>	

Factor	Environmental Issue / Concern	Effect / Impact (During Construction; Operations)	Mitigation Measures	Monitoring / Future Work / Contingency
		presented below. <ul style="list-style-type: none"> <li>• Coronation Park: Foundations for Elevated Guideway</li> <li>• Keelsedale Park: Grading for Realignment of Eglinton Avenue West</li> <li>• Pearan Park: Bicycle Pathway (see below for additional details)</li> </ul>		
Air Quality	Impacts to air quality during construction.  Impacts on air quality due to implementation of the ECLRT.	Construction activities may result in temporary, localized impacts to air quality. The two major sources of construction impacts to air quality are dust and exhaust emissions from construction equipment.  Overall emissions are expected to decrease with ECLRT implementation.	Best management practices will be implemented to prevent the potential release of dust and other airborne pollutants offsite.  A dust management plan will be developed by the contractor, and will incorporate the following mitigation techniques: <ul style="list-style-type: none"> <li>• Material wetting or chemical suppressants;</li> <li>• Construction of barriers;</li> <li>• Limiting exposed areas; and</li> <li>• Equipment washing.</li> </ul>	As committed to in the 2010 EPR, air monitoring of crystalline silica, total dusts and other contaminants (as applicable) will be conducted as a check on the effectiveness on dust control measures. In particular, air quality monitoring will be conducted prior to, during or following construction as follows: <ul style="list-style-type: none"> <li>• When construction and/or demolition activities are likely to cause dust emission, air monitoring must be conducted prior to beginning activities to establish a baseline value for the quantity of suspended particulate</li> </ul>

Factor	Environmental Issue / Concern	Effect / Impact (During Construction; Operations)	Mitigation Measures	Monitoring / Future Work / Contingency
			<p>Different levels of mitigation may be required at different construction phases. The focus of the mitigation plan is to reduce the dust emissions from the material processing activities, the major contributor to total dust emissions, and not to reduce vehicle emissions.</p> <p>Environment Canada's "Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities" document will be followed for mitigation techniques, not only for dust but for other pollutants such as carbon monoxide and oxides of nitrogen as well (Environment Canada, 2005).</p> <p>These types of controls aid in minimizing impacts to the environment during the construction phase. Night time construction activities will also be considered in order to reduce the higher emissions from vehicles that are slowed down by the reduced existing road capacity during the day. It is recommended that only water be used as a dust suppressant.</p> <p>As noted in the 2010 EPR, reductions in greenhouse gases associated with the use of the</p>	<p>matter in the air. During construction and/or demolition operations where dust is being created, air quality monitoring must be conducted to establish the level of particulate matter in the air. Following construction and/or demolition operations where dust was created, confirmatory tests must be conducted to quantify the level of particulate matter in the air.</p> <ul style="list-style-type: none"> <li>• Construction Borne Particulate Matter within Existing Buildings – In instances where works are necessary to connect new works to existing buildings and stations and activities, such as sawcutting are required. Monitoring of airborne contaminants such as crystalline silica will be required to show that these contaminants are below their respective time weighted average exposure values as indicated in Regulation 833.</li> </ul>

Factor	Environmental Issue / Concern	Effect / Impact (During Construction; Operations)	Mitigation Measures	Monitoring / Future Work / Contingency
			ECLRT will far outweigh any short term increase in greenhouse gas emissions that are associated with construction activities.	<ul style="list-style-type: none"> <li>Appropriate adaptive management will be undertaken in response to findings from air quality monitoring.</li> <li>As warranted, a contingency plan will be developed prior to maintenance activities.</li> </ul>
Potential Contamination	Impacts to areas of high, moderate, and low potential for contamination present within the study area.	<p>As noted in the 2010 EPR, the overall Project will result in the displacement of approximately 1.8 million m<sup>3</sup> of surplus excavated material generated by tunnelling and cut-and-cover construction at the portals, tunnel and stations. The extension of the underground section between Mount Dennis Station and the Jane Street portal will result in approximately 75,000 m<sup>3</sup> of additional surplus excavated material. The Black Creek MSF will be designed to minimize the generation of surplus excavated material.</p> <p>On busy urban streets such as Eglinton Avenue and the major north-south arterials that already carry a large proportion</p>	<p>As documented in the 2010 EPR, excess soil will require waste classifications in accordance with applicable regulatory requirements. Regulatory requirements in place at the time of construction and excess materials management guidelines and specifications (e.g. OPSS 180) will be used when developing an excess materials management plan.</p> <p>A Soil and Groundwater Management Strategy will be developed prior to construction.</p> <p>Generally, where impacts are anticipated to all or portions of properties with high or moderate potential for contamination, further environmental investigations will be completed for these properties (or portions thereof) that would be directly impacted by construction</p>	<p>A monitoring program will be included in the Soil and Groundwater Management Strategy which will be developed prior to construction. A contingency plan will be developed prior to construction where appropriate.</p> <p>Baseline monitoring will be undertaken as outlined in the 2010 EPR in accordance with the Ontario <i>Environmental Protection Act</i> and will be documented in the Geotechnical Baseline Report and other environmental reports, which will provide the necessary information for the handling and disposing of excess soil. The disposal of contaminated materials will be directed to an MOE approved soil treatment</p>

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		<p>of truck traffic, the addition of trucks to remove the excavated material is considered a negligible increase in truck traffic. Truck haul routes will be identified during detail design as part of traffic management plans.</p> <p>Contamination-related impacts associated with construction activities are limited to potential spills associated with construction equipment or during handling of contaminated materials.</p>	<p>activities (i.e. tunneling):</p> <ul style="list-style-type: none"> <li>• Prior to construction, a Risk Assessment will be prepared covering the former Kodak lands (MSF lands) with regard to the handling of contaminated materials located at the site. The purpose of the Risk Assessment is to describe and estimate the likelihood of adverse effects to human health and the environment resulting from exposure to contaminants and to develop property-specific environmental standards that will protect the people and the environment at the site. The Risk Assessment is intended to support the filing of a Record of Site Condition in accordance with O.Reg. 153/04, as amended;</li> <li>• For other properties (or portions thereof) are to be acquired for the ECLRT construction, Phase I and Phase II Environmental Site Assessments will be conducted in accordance with O.Reg. 153/04 (i.e. to CSA standards), as amended. If a Record of Site Condition is required for a property the corresponding studies will be completed in accordance with</li> </ul>	<p>site or waste disposal site. The monitoring of these facilities is the jurisdiction of the MOE.</p> <p>Prior to construction, Metrolinx will require the contractor to submit the name, location and type of license of the designated soil disposal sites (as issued by MOE). The names of disposal sites, when known, will also be shared with the District Manager of the Toronto District Office of the MOE.</p>

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			<p>O.Reg. 153/04, as amended;</p> <ul style="list-style-type: none"> <li>For areas where spills were documented to have occurred within the study area, during construction of the ECLRT, soil testing for petroleum hydrocarbons (PHCs) will be completed along the road right-of-way where removal of soil from the road shoulders and road right of ways (i.e. excess materials) is required. If presence of PHCs is confirmed, appropriate contaminated soils management will be determined and implemented.</li> </ul> <p>Since the former waste disposal site (southeast corner of Black Creek Drive and Eglinton Avenue) was closed more than 25 years ago, no ministerial approvals are required.</p> <p>No additional environmental investigations are required for APECs with low potential for contamination.</p> <p>For the study area, trucks hauling materials associated with the ECLRT will be restricted from entering residential areas through contract provisions to the extent</p>	

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			feasible.  An excess materials management plan will be implemented in accordance to regulatory requirements during construction. Management of contaminated material encountered will follow MOE Standards, Ontario Regulation 153/04 and Ontario Provincial Standards Specification 180 – General Specification for the Management and Disposal of Excess Material.	
Socio-Economic Environment				
Property	Full or partial loss of property for the construction of the ECLRT.  Partial property takings required include underground easements and surface facilities such as station entrances.	Total of 12 properties required for EPR Addendum study area: Four full acquisitions and eight partial acquisitions are required. Three of the acquisitions are privately-owned, and the remaining are public properties.  Property impacts associated with the ECLRT beyond the limits of the EPR Addendum study areas are addressed in the 2010 EPR.  Construction activities (e.g.	Compensation for residential and commercial impacts will be provided for temporary and permanent property requirements.  Where properties to be displaced form a continuous development of retail / business streetscape, the displacement facility will ensure the continuation of the existing street wall (with respect to height setback and general architectural characteristics).  Any brownfield sites will be managed in accordance with the	Metrolinx will conduct a Property Protection Study during the detailed design phase of the project to confirm detailed property requirements and construction easements.  Metrolinx will negotiate temporary construction easements with property owners on a case-by-case basis following the procedures described in <b>Section 5.4.1</b> . Following construction, Metrolinx will reinstate lands to pre-construction conditions.

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		excavation) may result in potential for ground settlement, and corresponding impacts to existing adjacent buildings and structures.	Ontario Regulation 153/04 as amended. A Designated Substances Surveys for any buildings or structures which require demolition will be undertaken during the design phase.	<p>A contingency plan will be developed prior to construction where appropriate.</p> <p>To combat potential settlement of land on adjacent properties during excavation activities, prior to the commencement of construction operations, separate instrumentation readings will be taken to provide a pre-condition survey for all buildings to assess current conditions.</p> <p>Monitoring during construction will include ground settlement measurements, inclinometers and surface monitoring points for structures. Monitoring is undertaken on a weekly basis during active excavation. This monitoring schedule is reduced to every three months for up to a year following backfilling.</p> <p>The monitoring program will include review and alert levels. If instrument readings exceed “review” levels, Metrolinx and its contractor will jointly assess the necessity of altering the method, rate or sequence of construction. At “alert” levels, Metrolinx can</p>

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				<p>order construction operations to cease until the necessary mitigation measures are undertaken.</p> <p>Following construction, Metrolinx and its contractors will arrange for a joint post-construction inspection of buildings/structures and utilities with the respective Owners. The results of these surveys will be compared with the pre-construction surveys.</p> <p>Metrolinx will monitor horizontal and vertical movements and tilt of adjacent structures and utilities on a daily basis during active excavation or backfilling. In the event that instrument readings reach “alert” levels, (as to be defined on a structure-specific basis in the construction contract documents), Metrolinx site supervisory staff will order construction operations to cease and take necessary actions to mitigate unacceptable movements, including, but not limited to alternative construction methods or construction equipment and/or additional support/protection measures.</p> <p>In the event that a property</p>

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				owner submits a claim for property damage, Metrolinx will conduct further investigations and, if appropriate, will negotiate a settlement.
Noise and Vibration	<p>Noise level increase during construction and operation of the ECLRT.</p> <p>Vibration impacts generated from the construction and operation of the ECLRT.</p>	<p><i>Noise</i></p> <p>Construction noise levels will vary over time, as the activities at the site change.</p> <p>Noise from ECLRT surface operations in the study area is predicted to meet the requirements of the applicable MOE/TTC guideline limits at all noise sensitive locations. No further investigation of operational noise mitigation is required.</p> <p><u>Ventilation Noise</u></p> <p>Based on the “generic” sound power emission data and silencer insertion loss data used in the Noise and Vibration Assessment (<b>Appendix D</b>), the emergency fire ventilation fans are predicted to meet the applicable MOE NPC-300 guideline limits at all noise sensitive locations. Should</p>	<p>The 2010 EPR lists the applicable provincial and municipal guidelines with regard to construction noise and vibration.</p> <p>Provincial guidelines restrict maximum allowable sound levels for equipment used in certain construction activities. Municipal bylaws place restrictions on the hours of operation for all construction activity: in particular, construction is limited from 7:00 AM to 11:00 PM on weekdays, with more stringent restrictions on weekends and holidays. If construction activities occur outside the hours of operations, special exemptions need to be obtained from the City of Toronto and residents in the area must be notified several weeks in advance of the construction activities.</p> <p><u>Noise</u></p> <p>To minimize the potential for construction noise impacts associated with the new alignment in</p>	<p>Once the design progresses to a sufficiently detailed point, an Environmental Compliance Approval (ECA) will need to be obtained from the MOE. A detailed Acoustic Assessment Report will be submitted at that time, which will include a more detailed assessment of maintenance noise and outline any additional required mitigation measures.</p> <p>Pre-construction consultation, vibration monitoring, and site inspections will likely be required. Monitoring will be required during construction.</p> <p>As indicated in the 2010 EPR, noise levels for nearby sensitive uses (such as residential or institutional) will have specific monitoring locations and maximum noise levels. These levels and construction activities that may generate exceedences will be determined prior to</p>

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		<p>noise emissions or operations vary significantly from those outlined above, noise impacts should be reassessed to assure compliance with all relevant legislative requirements.</p> <p><u>Black Creek MSF Operations</u></p> <p>Based on the modelled noise impacts from MSF activity, noise impacts are not anticipated. However, it is recommended that HVAC equipment be chosen in order to minimize impacts at surrounding noise sensitive areas. HVAC selection recommendations are provided in <b>Appendix D</b>. There is the potential for wheel squeal to occur at some turns within the Black Creek MSF. If observed, wheel squeal will be addressed through mitigation measures as outlined in <b>Appendix D</b>.</p> <p><u>Bus Station and PPUDO</u></p> <p>Bus activity at the proposed Bus Station is anticipated to lead to noise levels exceeding guideline limits at some locations (for additional detail</p>	<p>the east and west sections, the following provisions will be written into the contract documentation for the contractor:</p> <p>Construction will be limited to the time periods allowed by the locally applicable bylaws (7:00am to 11:00pm, except in the case of emergencies). If construction activities are required outside of these hours, the Contractor must seek permits / exemptions directly from the City of Toronto in advance.</p> <p>There will be explicit indication that Contractors are expected to comply with all applicable requirements of the contract and local noise by-laws. Enforcement of noise control by-laws is the responsibility of the Municipality for all work done by Contractors.</p> <p>All equipment will be properly maintained to limit noise emissions. As such, all construction equipment will be operated with effective muffling devices that are in good working order.</p> <p>The Contract documents will contain a provision that any initial noise complaint will trigger verification that the general noise control measures</p>	<p>construction.</p> <p>Vibration resulting from construction will be monitored using seismographs. Vibrations will be monitored at locations at various distances from work operations and at critical structural (e.g. Kodak Building 9) or utility locations. As part of the baseline monitoring, a minimum of 3 consistent sets of readings will be taken prior to the start of work. Metrolinx will then continuously monitor ambient vibration levels during construction.</p> <p>The monitoring program for both noise and vibration will include review and alert levels. If instrument readings exceed “review” levels, Metrolinx and its contractor will jointly assess the necessity of altering the method, rate or sequence of construction. At “alert” levels, Metrolinx can order construction operations to cease until the necessary mitigation measures are undertaken.</p> <p>Similarly, vibration during the tunnelling process will require</p>

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		<p>see <b>Appendix D</b>). Mitigation is recommended to deal with noise impacts from bus activity.</p> <p><u>Vibration</u></p> <p>Under the City of Toronto Vibration Bylaw, the construction vibration zone of influence is the area where vibration from construction activity is likely to exceed 5 millimetres per second peak particle velocity (mm/s ppv).</p> <p>Vibration from tunnel boring in the area should be less than 5 mm/s ppv at all building foundations. Vibration from pile driving and other general construction activities will not affect any surrounding structures. A review of the surrounding land uses indicates no particularly vibration sensitive uses in the area.</p>	<p>agreed to are in effect.</p> <p>In the presence of persistent noise complaints, all construction equipment will be verified to comply with MOE NPC-115 guidelines.</p> <p>In the presence of persistent complaints and subject to the results of a field investigation, alternative noise control measures may be required, where reasonably available. In selecting appropriate noise control and mitigation measures, consideration should be given to the technical, administrative and economic feasibility of the various alternatives.</p> <p>All blasts will be designed to meet any applicable overpressure and vibration limits established by the MOE in Publication NPC-119 and by the MTO in OPSS 120.</p> <p><u>Bus Station and PPUDO</u></p> <p>Potential options for mitigating stationary source noise impacts include the installation of noise barriers surrounding the Bus Station, and/or upgrading the currently planned noise barriers to the west of the existing CP Rail / GO Transit rail</p>	<p>monitoring.</p> <p>In the event that instrument readings reach “alert” levels, (as to be defined on a structure-specific basis in the construction contract documents), Metrolinx site supervisory staff will order construction operations to cease and take necessary actions to mitigate unacceptable movements, including, but not limited to alternative construction methods or construction equipment.</p>

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			<p>line. Two potential mitigation options are:</p> <ul style="list-style-type: none"> <li>• Option 1: 3 barriers surrounding the proposed Bus Station (7.0 m, 4.5 m, and 5.0 m)</li> <li>• Option 2: 1 barrier to the northwest of the proposed Bus Station (7.0 m), and 1 upgraded GO Transit barrier to south of Eglinton Avenue</li> </ul> <p>Either of the above mitigation options will lead to compliance at surrounding noise sensitive receptors. However, the specific design of mitigation will be considered in detail during the detailed design phase of the project.</p> <p><u>Vibration</u></p> <p>Under the terms of the City Vibration By-law, a vibration control form will be provided with a Building Permit or Demolition Permit application.</p>	
Land Use	Access to businesses will be modified during construction activities.	Reduced vehicle access to the area and potential loss of on-street parking during construction	Metrolinx is committed to accelerating construction as much as possible to reduce the construction period.	Metrolinx will form a "Construction Liaison Group" in active construction zones during construction. Prior to each phase of construction Metrolinx will undertake, a comprehensive

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		During operation, the ECLRT will enhance accessibility with improved transit service, stimulating development along the corridor. The ECLRT will attract more business activity, resulting in positive economic benefits.	Auto and transit traffic will be maintained throughout the construction period with a minimum of a single lane of travel in each direction.  Every attempt will be made to replace any short-term parking loss for individual homes and businesses.	public awareness campaign.  Any complaints received will be investigated and resolved in an effective and efficient manner.  Building permits will be obtained for the Mount Dennis LRT Station and new proposed buildings on the MSF site.
Utilities	Impacts to utilities along the north side of Eglinton Avenue between Weston Road and the ECLRT portal at Black Creek. In particular, the relocation of a pole line supporting street lighting, hydro, and communications.  Impacts to subsurface municipal services.	Utilities and pipelines will be impacted by the ECLRT	Utilities and pipelines located within the underground section of the ECLRT will be avoided to the extent possible through tunneling.  In areas of cut and cover construction, small utilities that are not in direct conflict with the ECLRT facility will be temporarily supported and protected during construction or relocated.  Services will be maintained to the extent possible during relocation and notice of planned service interruptions will be provided to service users prior to interruptions.	For all utilities that will be relocated, relocation plans and construction activities will be undertaken in accordance with the <i>Road Rights of Way Act</i> and with the City's Requirements for the Installation of Services within the City of Toronto Road Allowance.  Metrolinx will pursue the necessary crossing permits required from any affected utilities during the detailed design phase of the study.
Cultural Environment				

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Archaeology	Potential loss of archaeological resources.	Given the findings of the Stage 1 and 2 Archaeological Assessments completed in support of the 2010 EPR (Archeoworks Inc. 2009a, Archeoworks Inc. 2009b) and the EPR Addendum (New Directions Archaeology 2013 [Appendix F]) no archaeological resources are anticipated to be impacted.	No mitigation measures are proposed since no archaeological resources are known to occur within the footprint of ECLRT facilities and the project is clear of any further archaeological concerns based on the identified footprint impacts. The Stage 1 and 2 Archaeological Assessment reports have been submitted to the Ministry of Tourism, Culture and Sport (MTCS) in compliance with Section 65 (1) of the <i>Ontario Heritage Act</i> .	<p>Should additional property be required outside of the current plan, an archaeological assessment will be required.</p> <p>Should previously unknown or unassessed deeply buried archaeological resources be uncovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the <i>Ontario Heritage Act</i>. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the <i>Ontario Heritage Act</i>.</p> <p>Any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of <b>Government Consumer Services</b>.</p> <p>Consultation with relevant stakeholders, including any applicable Aboriginal communities, will be initiated in the event that archaeological resources or human remains are</p>

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				discovered.
Built Heritage and Cultural Landscapes	<p>Potential for displacement and/or disruption of cultural heritage landscapes and built heritage resources during and after construction.</p> <p>Potential for indirect impacts by the introduction of physical, visual, audible or atmospheric elements not in keeping with their existing character and, or setting.</p>	Direct and indirect impacts to built heritage resources and cultural heritage landscapes as outlined in <b>Tables 5-3</b> and <b>5-4</b> .	<p>Mitigation as outlined in <b>Tables 5-3</b> and <b>5-4</b>.</p> <p>Conservation options for properties determined to be of heritage value by the Metrolinx Heritage Committee will be investigated through the completion of Heritage Impact Assessments (HIAs).</p> <p>Each HIA will evaluate the impact of the proposed activities on the cultural heritage value and the heritage attributes and propose measures to mitigate impacts. It will be completed in consultation with the City of Toronto, MTCS and other stakeholders, as required. Terms of Reference (ToR) to confirm the scope of, and approach to the preparation of the HIA will be based on the City of Toronto's HIA ToR.</p> <p>For any properties determined by the Metrolinx Heritage Committee to be of heritage value, Metrolinx will include the property on the list of Provincial heritage properties maintained by MTCS and will provide all related documents (e.g. CHERs, committee decision forms, etc) to the MTCS.</p>	A contingency plan will be developed prior to construction where appropriate.

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Transportation				
Public Transit	Changes to TTC bus routes and stops.	Changes to the existing bus network related to the ECLRT:  No parallel bus routes along Eglinton Avenue;  North-south arterial bus routes will continue to operate; and  Mount Dennis Station will include a new fifteen-bay bus terminal	No additional mitigation measures beyond the proposed rerouting of bus operations are proposed.	Transit schedules are part of the TTC and Metrolinx normal operating procedures. This will allow for either agency to identify future issues and to develop corrective actions.
Pedestrian and Cyclist Network	Relocation of existing sidewalks in the study area. Ultimately, the project will provide for a more comfortable pedestrian and cycling environment.	Temporary closures of pedestrian linkages and traffic lanes during construction.	The pedestrian and cyclist environment will be improved through the Weston Road to Black Creek Drive section. The specific design of improvements will be confirmed during the detailed design phase of the project.  Pedestrian and cyclist access may be detoured at times but will also be maintained throughout construction.	None.
Road Network	Reduction in the road capacity available for automobile movements.  Changes to traffic	Disruption to traffic operations along Eglinton Avenue from Jane Street to the proposed Mount Dennis LRT Station.	As discussed in <b>Section 3.4.5</b> , a signalized intersection is proposed to facilitate bus-only left-turns into and out of the Mount Dennis Bus Terminal. The new signal is proposed to be coordinated with the	Traffic volumes on public roads and transit schedules are part of the City of Toronto's and TTC normal operating procedures. This will allow for either agency to identify future issues and

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	movements with the introduction of a right-in/right-out arrangement at non-signalized intersections.	Emergency service providers will continue to operate at current service levels with the LRT in place.	Eglinton Avenue/Black Creek Drive intersection to minimize the potential for impacts to general traffic.  Metrolinx and their consultants/contractors will work with the City of Toronto to develop an acceptable approach for traffic maintenance during construction.	notify Metrolinx in order to develop corrective actions.
Navigable Waters	There are no navigable waterways present in the EPR Addendum study area.	N/A	N/A	N/A
Rail Network	Metrolinx' proposed spur line at the MSF site will require a localized modification of the CP Rail facilities in order to implement the connection to the LRV storage area at the MSF site.	Construction of the spur line will require a temporary closure of the existing easterly CP Rail line at the MSF site as the rail switch is installed to connect the spur to the mainline.  The operation of the spur line will, at the time of vehicle delivery, have the potential to conflict with regular operation on the CP rail line.	Rail traffic will have to be temporarily detoured to the adjacent parallel track during construction at the point of switch installation.  In order to mitigate any operational impacts associated with the proposed spur line, Metrolinx will coordinate the delivery of any vehicles or material to the MSF site with CP Rail to ensure that the schedule of deliveries are coordinated with the regular CP Rail operations to avoid conflicts.	Metrolinx will coordinate with CP Rail during the detailed design phase of the project to obtain the necessary approvals required to implement the proposed spur line.
Other				
Electromagnetic Interference	Potential generation of electromagnetic	The proposed changes to the ECLRT do not result in different	As noted in the 2010 EPR, EMI can be mitigated through the setback of	N/A

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(EMI)	interference.	impacts related to electromagnetic interference (EMI) than those identified in the 2010 EPR.	the overhead catenary wire.	
Stray Current	Potential impacts from stray current.	<p>Stray current corrosion occurring on buried metallic structures.</p> <p>The proposed changes to the ECLRT do not result in different impacts related to stray current than those identified in the 2010 EPR.</p>	<p>The ECLRT traction power distribution system will be ungrounded and will have no direct connection to the earth.</p> <p>The running rails will be insulated from earth with the use of insulating pads and hardware, and by the isolation of all rail associated metal ware from earth. Where applicable, the negative running rails will be connected to the AC ground system through a floating negative automatic ground switch (FNAGS).</p>	A monitoring program as described in <b>Section 5.7.2</b> will be put in place where the ECLRT crosses a high-pressure steel pipeline.