

## 14. Environmental Impacts and Mitigation Measures

This section discusses the potential environmental impacts and proposed mitigation measures that should be reviewed and incorporated during the secondary plan and/or detailed design phase, as applicable. This includes commitments to future activities in subsequent stages of work that are beyond the scope of this study. All potential impacts and mitigation measures are summarized in **Exhibit 14-1**.

### 14.1 Natural Environment

In general, the area is highly urbanized and natural features are limited to manicured lawns and gardens with planted trees. Mature street trees within the study area include native sugar maple (*Acer saccharum*) and oak (*Quercus* sp.) and non-native (Norway maple (*Acer platanoides*) and black locust (*Robinia pseudoacacia*)) species. A detailed tree inventory should be completed to confirm individual trees that may be impacted and provide appropriate tree protection measures.

Common bird species were observed in the study area. If required, the removal of woody vegetation should not occur during the breeding bird season. The breeding bird season for this area is generally mid-May to early July but should be confirmed with Canadian Wildlife Services (CWS).

### 14.2 Air Quality

Construction related air emissions can also be expected, including dust from various material handling operations, and combustion emissions from construction equipment which is typically powered by diesel engines. Such emissions will be of a temporary nature and the impact is not predicted to move far from the immediate vicinity of the construction activities.

### 14.3 Heritage Resources

The Morrish Plaza, St. Joseph's Cemetery and the Methodist Cemetery properties are listed on the City's heritage inventory. However, direct impacts to these resources are not anticipated as a result of the proposed roadway improvements. It is understood that the replacement of the non-standard angled and perpendicular parking with parallel parking on Old Kingston Road (east of Morrish Road) and Morrish Road (north of Old Kingston Road) is proposed as part of this study to allow for the widening of sidewalks / boulevard areas and to improve the pedestrian environment in the Village Centre. These improvements may encroach onto the 215 Morrish Road property. A Cultural Heritage Evaluation Report should be completed for 215 Morrish Road to identify/confirm the building's heritage attributes.

**Exhibit 14-1: Potential Impacts and Mitigation Measures**

Potential Impacts	Mitigation
<b>Archaeological Resources</b>	<ul style="list-style-type: none"> <li>Construction will not proceed without written confirmation from the Ministry of Tourism, Culture and Sport (MTCS) that all MTCS technical review requirements have been satisfied.</li> </ul>
<b>Contaminated Property</b>	<ul style="list-style-type: none"> <li>Identified areas of potential environmental concern will be further investigated to confirm or refute the presence of contamination prior to construction, where required.</li> </ul>
<b>Waste Management</b>	<ul style="list-style-type: none"> <li>All excavated soils will be handled in accordance with the MECP's guidance document entitled, <i>"Management of Excess Soil – A Guide for Best Management Practices"</i>.</li> <li>A toxicity characteristic leachate procedure (TCLP) analysis will be completed in accordance with O.Reg. 558/00 to determine the waste classification of the soil prior to disposal.</li> <li>All waste generated during construction will be disposed of in accordance with MECP requirements.</li> <li>Should any spills occur during construction, the Spills Action Centre of the Ministry of Environment, Conservation and Parks will be contacted immediately.</li> </ul>
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>A Cultural Heritage Evaluation will be completed for 215 Morrish Road (Morrish Plaza, former W.D. Morrish Store) prior to detailed design.</li> <li>A Heritage Impact Statement will be completed in accordance with the City of Toronto's Terms of Reference to provide recommendations, if required.</li> </ul>
<b>Private Property</b>	<ul style="list-style-type: none"> <li>Impacts to private property will be confirmed during detailed design.</li> <li>The City of Toronto will consult with affected property owners on an individual basis during detailed design.</li> <li>Access to adjacent properties will be maintained during construction to the extent possible.</li> </ul>
<b>Trees</b>	<ul style="list-style-type: none"> <li>An Arborist Report and Tree Protection Plan will be completed during detailed design.</li> </ul>
<b>Breeding Birds</b>	<ul style="list-style-type: none"> <li>There will be no removal of woody vegetation during the breeding bird season (i.e., generally mid-May to early July).</li> <li>The breeding bird season window will be confirmed with Canadian Wildlife Services (CWS) during detailed design.</li> </ul>

Potential Impacts	Mitigation
<b>Noise</b>	<ul style="list-style-type: none"> <li>• Construction activities will be limited to the time periods allowed by the locally applicable by-laws</li> <li>• If construction activities are required outside of these hours, the Contractor must seek permits / exemptions directly from the City in advance.</li> <li>• In the Contract Documents, there shall 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 City for all work done by Contractors.</li> <li>• All equipment shall 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.</li> </ul>
<b>Air</b>	<ul style="list-style-type: none"> <li>• During construction, vehicles/machinery and equipment will be in good repair, equipped with emission controls, as applicable, properly maintained and operated within regulatory requirements.</li> <li>• A minimal number of machines operating in any one area shall be carefully considered during construction activities.</li> <li>• Water and dust suppressants (non-chloride) will be applied during construction to protect air quality due to dust.</li> </ul>
<b>Surface Water</b>	<ul style="list-style-type: none"> <li>• Stormwater Management planning and detailed design for the Schedule C projects recommended as part of this TMP will consider the potential sources of contamination, including those identified in the Contamination Overview Study for the Highland Creek Village TMP.</li> <li>• Stormwater management recommendations will be further reviewed during detailed design, in consultation with the TRCA, prior to implementation of the preferred approach.</li> <li>• The MECP Environmental Approvals Branch will be consulted during the early stages of detailed design should the stormwater management system need to be approved through the Environmental Compliance Approval process.</li> <li>• The MECP, Central Region, Permit to Take Water (PTTW) Evaluator will be consulted prior to detailed design to confirm any approval requirements for water takings during construction or operation. This includes groundwater or surface water extraction, and the active diversion of surface water flows by pumping in exceedance of 50,000 liters/day.</li> <li>• If a PTTW is required for construction dewatering, a monitoring program for discharge water quality and quantity, as well as a mitigation program will be developed.</li> </ul>

## 14.4 Archaeological Resources

The findings of the Stage 1 Archaeological Assessment (AA) carried out in the study area identified areas having archaeological potential within three separate parcels of land. The property located at 28 Morrish Road was determined to be potentially impacted by the project. As such, a Stage 2 archaeological field assessment was carried out at 28 Morrish Road, the findings of which indicated that the property has been extensively previously disturbed and no further archaeological assessment is required.

No excavations shall take place prior to the Ministry of Tourism, Culture and Sport (MTCS) (Heritage Operations Unit) confirming in writing that all archaeological licensing and technical review requirements for the Stage 1 and 2 AAs carried out for this project have been satisfied.

It should be noted that the balance of the properties within the study area identified as having archaeological potential are subject to further assessment should potential impacts to these properties be identified as part of future development planning.

## 14.5 Contaminated Property

A number of areas of potential environmental concern have been identified within the study area. Phase Two ESA activities are recommended to confirm or refute the presence of subsurface contamination.

The results of the soil analyses conducted on selected soil/fill material samples as part of the geotechnical investigation identified exceedances of Electrical Conductivity (EC) and Sodium Adsorption Ratio (SAR), both of which are typically associated with historical road salting practices. EC and SAR impacted soils are considered exempt when re-used within a highway (as defined by the *Highway Traffic Act*).

The soil/fill material should be re-tested once excavated and stockpiled to better characterize the material before its re-use. If excess material is generated, available analytical data pertaining to the material should be forwarded to the potential receiver for review prior to the removal of the excavated material. Written authorization, indicating that these data were received and reviewed, and that the receiver accepts the excavated material, should be provided to the site representative by the potential receiver. If excess soil fill and/or native materials vary from those tested as part of the geotechnical investigation, additional testing is recommended to determine suitability for disposal. A toxicity characteristic leachate procedure

(TCLP) analysis completed in accordance with O.Reg. 558/00 may be required to determine the waste classification of the soil prior to disposal.

## 14.6 Direct Property Impacts

Acquisition of private property will be required to accommodate roadway modifications. In addition, private property may be affected by the proposed reconfiguration of on-street parking. Direct impacts to private property will be confirmed during detailed design, at which time the City will consult with affected property owners and/or negotiate property acquisition (i.e., prior to construction).

Permission to enter for grading will be required at selected locations. Exact grading limits will be finalized in detailed design and the City will contact property owners well in advance of construction to seek permission to grade on private lands.

Some entrance modifications will require construction work on private property. Property owners will be contacted for permission to enter, where necessary and informed of modifications to entrances during detailed design. All entrances will be designed to City of Toronto standards.

## 14.7 Temporary Disruption to Traffic Flow and Property Access

Local property owners, affected public and agencies shall be notified of the construction schedule prior to commencement of the construction activities. In addition, closure events and restricted access to local residents and/or businesses shall be minimized to the greatest extent possible to facilitate vehicle and pedestrian movement during construction.

## 14.8 Streetscaping

Streetscaping improvements will be confirmed during detailed design and will follow the objectives of the Highland Creek Village Urban Design Guidelines. New street lighting will be provided as per the recommendations of the Highland Creek Village Urban Design Guidelines.