WSP | MMM GROUP

MEMO

To:	Marilia Cimini, P. Eng.	**Date:**	December 21, 2016
From:	Patricia Mohr	**Job No.:**	16.16021.001
Subject:	REimagining Yonge Street from Sheppard Avenue East to Finch Avenue – Municipal Class Environmental Assessment (MCEA) **Finalized Natural Environment Memo**	**CC:**	Meghan Bratt Jim Gough Jeff Warren

1.0 Introduction

MMM Group Limited, a WSP company, was retained by the City of Toronto to prepare an Environmental Study Report (ESR) under Schedule 'C' of the Municipal Class Environmental Assessment (EA) associated with the section of Yonge Street between Sheppard Avenue East and the hydro corridor north of Finch Avenue. This study will evaluate opportunities to enhance the streetscape consistent with the vision in the North York Centre Secondary Plan, which emphasizes a public realm for all users with space for movement and recreation. Enhancements may address features such as green areas, street lighting, and improved access for bicycles and pedestrians.

The following memo presents the natural environment conditions of the study area and identifies environmental constraints and opportunities. The existing conditions are derived from a review of background information and aerial photography.

2.0 Natural Environment Existing Conditions

Background information reviewed to identify existing conditions include the Don Watershed Plan, Beyond Forty Steps prepared by Toronto and Region Conservation in 2009; interpretation of aerial imagery and a search of the Ministry of Natural Resources and Forestry's Natural Heritage Information Centre (NHIC) online database. The NHIC database contains records of species at risk and designated natural areas in the vicinity of the project. Species at risk are species listed under the provincial *Endangered Species Act* (ESA) and under the federal *Species at Risk Act* and afforded protection depending on their level of risk. Some designated natural areas have policy protection. If these features are present, they may result in project constraints.

Don Watershed Plan

The project site occurs in the Don watershed and the Don Watershed Plan is a comprehensive report on the health of the watershed. The plan indicates that there are no natural watercourses or natural terrestrial cover within the project limits.

Aerial Imagery

Aerial imagery shows a highly urbanized area where vegetation is limited to street trees, small patches of lawn with trees, and beds of shrub and herbaceous plants.

Natural Heritage Information Centre

A search of the NHIC online database identifies records for ten species at risk within one kilometre of the project site. They include Butternut (*Juglans cinerea*), Redside Dace (*Clinostomus elongatus*), Eastern Musk Turtle (*Sternotherus odoratus*), Eastern Ribbonsnake (*Thamnophis sauritus*), Peregrine Falcon (*Falco peregrinus*), Spiny Softshell (*Apalone spinifera*) and four species classified as no longer present. The extirpated species at risk are Henslow's Sparrow (*Ammodramus henslowii*), Queensnake (*Regina septemvittata*), Red Mulberry (*Morus rubra*) and an unidentified species with a restricted identity (NHIC 2016). Only two of the ten species may occur within highly developed streetscapes. Butternut may be present as a street tree but since planted specimens are not protected under the ESA, it would not represent a constraint for this project. Some Peregrine Falcons have adapted to nesting on tall buildings as an alternative to their natural breeding habitat on the ledges of tall, steep cliffs. Survey information on the Canadian Peregrine Foundation website (May 2016) indicates that Peregrine Falcons have been using various buildings along Yonge Street within the project limits as recently as 2013.

The NHIC database also contains one record for a designated natural area, Earl Bales Woods Life Science Site. This site is approximately 800 m southwest of the intersection of Yonge Street and Sheppard Avenue East.

3.0 Constraints

Impacts on Peregrine Falcon from the proposed works are expected to be minimal. The individual birds inhabiting the study area are accustomed to urban activities particularly at the level of development enhancement proposed for this project. Development enhancements may, however, harm migrating birds. Large numbers of birds migrate through Toronto each year and many collide with built structures. Vegetation plantings will attract more birds to the study area and may increase collisions with built structures. The Toronto Green Standard (TGS) developed by the City of Toronto contains measures to mitigate impacts on migrating species such as bird-friendly glazing, opaque building materials and reduced lighting at night. Bird-friendly glazing on buildings facing vegetation enhancement areas will reduce collisions brought about by the plantings. Where applicable, the City should encourage developments to include bird-friendly glazing.

Should the project involve vegetation removal, bird nests in the vegetation or nesting activity may be impacted. The nests and nesting activity of most bird species are protected under the federal *Migratory Birds Convention Act*. This impact can be avoided by conducting vegetation removal outside the bird breeding period.

4.0 Opportunities

It is recommended that enhancements involving green areas include the planting of native species to increase potential benefits for native birds particularly those on migration. Use of appropriate tree, shrub and herbaceous species that increase biodiversity will enhance the health and wildlife value of the plantings. We recommend including a wide range of plant species to increase resiliency against exotic plants, insects and diseases. Plants with a range in height and breadth would support birds that inhabit different vegetative layers. Tree health can be maximized through the adoption of state-of-the-art

planting and management techniques that ensure healthy soil, adequate space and sufficient care for optimum root growth and canopy coverage.

During Detail Design and in collaboration with the City of Toronto's Urban Forestry department, a planting plan should be prepared.