

Tree Conservation Report

In support of Site Plan Control Application for:

Fastrate Ottawa Warehouse Facility

301 Somme Street, Ottawa, Ontario



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Prepared by: Diane Matichuk, Landscape Architect, OALA, AAPQ, CSLA
Civitas Architecture Inc., Ottawa, Ontario
Tel: 613-447-2551

Fastfrate Ottawa Warehouse Facility - Tree Conservation Report

1.0 Introduction

The City of Ottawa requires the preparation of a Tree Conservation Plan when considering the Site Plan Control for the Fastrate Ottawa Warehouse Facility located at 301 Somme Street in the Hawthorne Industrial Park, Ottawa, Ontario. The legal description is **Block 5 Registered Plan 4M-1388 City of Ottawa**. The site is found in land use zone - RH.

The purpose of the Application is to build a warehouse and distribution centre, including a warehouse and crossdock facility and offices to support the warehouse, the crossdock facility, and e-commerce operations.

2.0 Development Site

The Fastfrate Ottawa Warehouse site is bounded by Somme Street to the west and south, Rideau Road to the north, and a development lot to the east. The total site area is 40,665.3 m² (4.067 hectares). The total building area of the new facility is 8,641.4m².

New site features include two private approaches, truck loading and circulation areas, temporary trailer parking, general vehicle parking and driveway, and main entrance pedestrian area. The rear of the building is defined by hard pavement and the front of the building is defined by a treed landscape composed of a grassed septic field, fire pond, stormwater swales and detention area.

The site is undeveloped and was subject to filling and levelling by the previous owner. There is a steep roadside ditch along Somme Street. The northern section drains to the swale along the south side of Rideau Road and the balance of the ditch drains to the east towards an existing subdivision storm water pond.

The north side of the site is elevated approximately 4-5 metres above Rideau Road. This elevation change is defined by a vegetated slope. These are the only trees on site. At the base of the slope is a roadside ditch that flows to the northeast. The ditch functions as a watercourse. A 15-metre setback from the top of the ditch is a planning requirement to protect the watercourse. For the environmental context and understanding, refer to the Owner/Consultant Planning Brief and the Scoped Environmental Impact Study (EIS) prepared by GHD included in this site plan control application package.

This Tree Conservation Report is being prepared as a requirement for Site Plan Control Application. The site is located outside the urban and suburban area subject to the City of Ottawa Tree Protection By-Law Schedule F and shows proximity only to the protected area in the specific development area described in Schedule M. As such, the site is not subject to tree protection under

the by-law. The approach to tree conservation and new planting gives regard to the Scope EIS recommendations and the objectives and principles of Ottawa’s Urban Forest Management Plan and Ottawa’s tree canopy cover goals and tree policies.

3.0 Current Vegetation

The property survey was prepared by Annis, O’Sullivan, Vollebakk Ltd. Existing trees on the north slope were not surveyed. The Landscape Architects from Civitas Architecture Inc undertook a site visit in **late Fall 2020 and in early Spring 2021** to locate, identify, and record the tree species, size (dbh), and condition of each existing tree.

The existing trees occur in two zones along the north side of the property. The generally level “roadside” adjacent to the roadside ditch is comprised of grasses, scrub vegetation, and occasional young trees. The slope that rises to where filling previously occurred is a young forest in various stage of maturation and decline. The vegetated slope extends approximately 10 metres into the building setback for most of its length. At the northeast corner, the slope steps back from the roadway and extends approximately 30 metres into the building setback.



View looking northeast along Rideau Rd



View looking north across the development site



Sample of forest character ranging from closed to open

The detailed inventory describes a mixed deciduous forest comprised predominantly by Willow, Basswood, Ash, and Poplar. Of the 258 trees over 10 cm DBH that were inventoried, 157 trees (60% of the total) were identified as these fast-growing tree species. Less common were the White Birch, Elm, American hornbeam, and Manitoba maple, totalling 35 trees (14%), and Spruce and Eastern White Cedar, totalling 12 trees (5%). One or two representatives each were identified as Sugar maple, Red maple, Yellow birch, Honeylocust, Hawthorn, Beech, and Speckled alder. A total of 44 trees were difficult to identify and expected to represent the observed mixed forest composition. No butternut was identified.

A total of **164 trees** over 10 cm DBH (64% of the total) were identified as being in good condition. The rest of the forest trees were in fair, poor, or dead and dying condition.

Refer to **Map #1 - Current Vegetation** for the layout and description of the trees described above.

4.0 Proposed Development and New Tree Planting

4.1 Tree Removal and Reforestation Planting

The north slope within the building setback is planned for re-grading to accommodate building construction and vehicular circulation. A new geo-structural embankment has been designed along the edge of the building setback to allow for the new transition between the upper development area and the roadside landscape below. Refer to the Civil engineering plans for details on the proposed geo-structural embankment and soil and erosion control measures for constructing adjacent to the roadside ditch.

Tree removal is proposed in the following zones:

- Within the building setback to accommodate the level parking area.
- Between the 15 m watercourse setback and the building setback to construct and accommodate the proposed geo-structural embankment.

An estimated 70% of the existing vegetation will be removed. The limit of construction will regard the 15 m watercourse setback and an additional 1-2 m for construction mobilization and to meet and match the grade at the setback. Tree protection and siltation control fencing will be installed prior to construction mobilization to protect trees to be conserved during construction.

Planting strategy:

The geo-structural embankment will be constructed at a general incline of 45 degrees from horizontal for over half of the frontage and transitioning to 60 degrees for the balance of the escarpment to suit site conditions. The base of the escarpment will be replanted to integrate with the landscape along Rideau Road using native trees species naturalizing on the site. Along the new escarpment will be mix of native shrubs adapted to steep slope conditions and a groundcover mix of grasses and native herbaceous plants.

The area for replanting is approximately 220 metres long running the length of the northern boundary and approximately 8.5 metres wide between the watercourse setback and the building setback. The total area for replanting is 1,870 m².

Plant species composition:

- Trees as the base of the slope: to be deciduous trees, primarily native species (common names): Eastern White Cedar, Yellow birch, American hornbeam, Sugar maple, Red Maple, Hawthorn, and Beech.
- Shrubs on the slope: to be a mix of Ontario native shrub species with taller shrubs maturing to heights up to 3 metres in the lower escarpment and smaller shrubs in the upper escarpment (botanical names): Viburnum lentago, Corylus americana, Sambucus canadensis, Physocarpus opulifolius, Aronia melanocarpa, and the smaller shrubs, Rhus aromatica, and Diervilla lonicera.

Plant sizes:

- Tree species: 40mm caliper trees, random planting, average spacing to be 1 tree for every 8 metres of frontage.
- Shrub species: planted on the stepped tiers of the 45-degree geo-structural embankment; supplied in 50 cm, 3-gal pots, based on nursery availability.

Map #2 – Proposed Development and Conserved Vegetation includes the revegetation plant list. The detail sheet accompanying Map #2 provides planting details for caliper trees and shrubs planted on slopes.

Specific **environmental concerns** to be included in the Contractor’s specifications include:

- Area to be revegetated to be under 1-year warranty; at the end of warranty, the area to be left unmaintained by the Owner.
- Vegetation clearing shall occur outside of the breeding bird timing window of April 15th – August 15th.
- Tree clearing to occur outside of the active bat roosting timing window of May – August 31st.

4.2 Development Site Planting

The planting plan for the building site proposes a total of 50 new caliper trees: 33 deciduous trees and 17 coniferous trees. The planting design also includes shrub planting along the front of the building.

The planting strategy is as follows:

- Tree species to be primarily native tree species.
- Mix of large-growing deciduous, small-growing deciduous and coniferous trees along the western edge of the property within the building setback; outside the setback is a step slope and ditch which is unsuited to planting.
- Mix of coniferous trees in the front open space to provide a year-round three-dimensional landscape to the ground plane which dominated by the septic field and detention/fire pond.

- Row of poplars along the eastern property to frame the main truck entrance and wind screen.
- Mix of small trees and shrubs beds along the front of the building, by the front entrance, and along the sidewalks for visual interest

4.3 Offsetting Vegetation Loss and New Planting

Along the northern boundary of the site are 164 young trees are in good condition. An estimated 70% of trees, or approximately 115 trees, will be removed for construction of the geo-structural embankment. New plantings will be a mix of caliper trees, potted native shrubs, and a groundcover mix of grasses and herbaceous plants.

New tree planting is proposed as follows:

- 50 caliper trees on the development site.
- 36 caliper trees at the base of the new escarpment.
- 234 potted shrubs on the escarpment.

Survival rate of the shrubs planted on the escarpment, following 1-year maintenance and warranty, is estimated to be 75 - 90%.

The new plantings on the site and the escarpment will offset the tree removals and create a diverse ecological landscape attractive to wildlife.

Attachments:

Map #1: Current Vegetation

Map #2: Proposed Development and Conserved Vegetation



Diane Matichuk

Diane Matichuk, Landscape Architect, OALA, AAPQ, CSLA
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