

June 19, 2007

Mr. Rob Pierce, MCIP, RPP
Monarch Corporation
3584 Jockvale Road
Nepean, Ontario
K2C 3H2

Dear Mr. Pierce:

**RE: Stonebridge Phase 10 North,
Preliminary Tree Study and Conservation Plan**

This letter report represents a preliminary tree study and conservation plan, as described in Section 4.7.2 of the City of Ottawa Official Plan, for a proposed urban residential development between Greenbank and Jockvale Roads on the north side of Cambrian Road, in Lot 11, Concession II of the former City of Nepean, now the City of Ottawa. The site is 12.86 hectares and is dominated by agricultural fields, with some deciduous hedgerows.

Introduction

The objectives of the preliminary tree study and conservation plan are

- to produce a plan showing any forested areas and smaller tree stands containing trees which warrant initial consideration for conservation measures as well as major groupings of other natural vegetation;
- to provide a general description of the woody vegetation including species composition, age, vigour, soil drainage, topographic characteristics and degree of disturbance;
- to assess the existing health of the woody vegetation, the existing and potential functions, if any, with respect to ecological features and aesthetics, and the sensitivity of such areas to changes in grades, drainage, sun and wind exposure and water table elevation;
- to provide a professional opinion on the priority for retention of any wooded vegetation; and,
- to review the concept plan to determine if appropriate opportunities for tree retention and planting exist and have been taken into consideration.

Background Information

The topography of the site is virtually level. The Jock River is approximately 140 metres the north of the northwest portion of the site. The soils on the site are a mixture of glacial till in the east portion and clay deposits in the central and west portions.

Colour aerial photography (2005) was used to assess the natural environment features in the general vicinity of the site. A field review of the site was conducted on June 15th, 2007. Notes were made on wildlife usage and potential for wildlife habitat.

The site is designated *Mixed Use Centre* in the 2003 City of Ottawa Official Plan. The site is not part of a natural area, as identified in the former Region's Natural Environment System Strategy or the Urban Natural Area Environmental Evaluation Study.

The site is isolated from an environmental perspective due to active agricultural to the north, west and southwest, and residential developments to the east and southeast. Some linkage function is likely present along the Jock River corridor and associated scattered urban natural areas along the corridor, including the moderately-rated Half Moon Bay Park Urban Natural Area to the north of the site.

Existing Conditions

The site is dominated by hay fields in the west portion and corn fields in the east half of the site. Woody vegetation is limited to deciduous hedgerows along the north boundary and two north-south hedgerows between the agricultural fields.

Manitoba maple and white ash are the dominant species in the deciduous hedgerows. White elm, bur oak and basswood are also present. Manitoba maple is generally not desired from an aesthetic perspective due to its ragged appearance, including its weak, spreading branches, which are easily broken by wet snow, ice and wind. Many arbourists consider Manitoba maple a weed and it is relatively short-lived. The largest trees are bur oaks and Manitoba maples up to 65cm and 50cm diameter at breast height (dbh), respectively. Most of the trees appear to be in generally good condition, except for some of the white ash and white elm that have reduced leaf-out. A mature bur oak west of Jockvale Road along the north boundary of the site is in poorer condition with major broken limbs. Virginia creeper and riverbank grape are covering the lower portions of many of the Manitoba maples.

Regenerating Manitoba maple and trembling aspen stems, along with crabapple, hawthorn, staghorn sumac and chokecherry shrubs are among the larger tree stems in the hedgerows. The only conifer on the site is a 60cm dbh Norway spruce west of Jockvale Road in the southeast corner of the site. A 25cm dbh sugar maple is adjacent to the non-native spruce. A small area of staghorn sumac is in the east portion of the northeast field, with a clump of white ash and white elm to the southwest of the sumac shrubs. No butternuts, a species of special concern, were identified in the site.

Non-native and/or invasive species cultural meadow species such as brome grass, timothy, reed canary grass, common ragweed, Canada thistle, field sow-thistle, alsike clover, common dandelion, common milkweed, tufted vetch, Philadelphia fleabane, wormseed mustard, common mugwort, common burdock, bird's-foot trefoil and common plantain are common at the edges of the agricultural fields.

Wildlife observed during the field review included bobolink in the hay fields, grey squirrel, turkey vulture, American robin, red-winged blackbird, European starling, black-capped chickadee, chipping sparrow, song sparrow and ring-billed gull.

Recommendations

A combination of single detached residential units is proposed for the site, with the east portion of the site and two other blocks designed for townhomes. A park area is proposed for the north-central portion of the site, on the west side of the continuation of Kilbirnie Drive.

No natural environment terrestrial features of note were observed or are recorded for the site. Over the long-term the aesthetic and wildlife value of the site can be improved with a generous planting of native trees and shrubs. Potential species to plant include nannyberry, elderberry and dogwood shrubs along with sugar maple, red maple, basswood, bur oak, red oak, white cedar, white pine and white spruce trees. Where possible the woody vegetation should be planted in clusters to improve the wildlife benefit.

Most of the trees on the site are representative of species with poor aesthetic, longevity, wildlife habitat attributes and/or are specimens in poorer condition. Figure 1 identifies three specific areas of potential tree retention along the north boundary of the site in the east portion of the hedgerow:

- A. basswoods up to 45cm dbh;
- B. bur oaks up to 65cm dbh; and
- C. basswoods up to 35cm dbh.

If the servicing of the site permits, retention of these trees is recommended along the north boundary of the site. Other tree retention should be considered where feasible, such as along the north boundary of the park area. However, any ecological and aesthetic features and functions of these trees can be relatively easily replaced over time with plantings of native species.

Tree retention can be enhanced through:

- minimizing the extent of woody vegetation removal as much as possible;
- where possible a setback in the range of three metres from the trunk of trees to be retained to provide protection for the root system. No grading or activities that may cause soil compaction such as heavy machinery traffic, should be permitted within this setback. The setback should be clearly identified with fencing before construction begins; and,

- pruning of branches on trees to be retained to improve their condition and anticipated longevity.

To protect breeding birds, no tree or shrub removal should occur between May 15th and July 10th, unless a breeding bird survey conducted within five days of the woody vegetation removal identifies no active nests in the trees or shrubs.

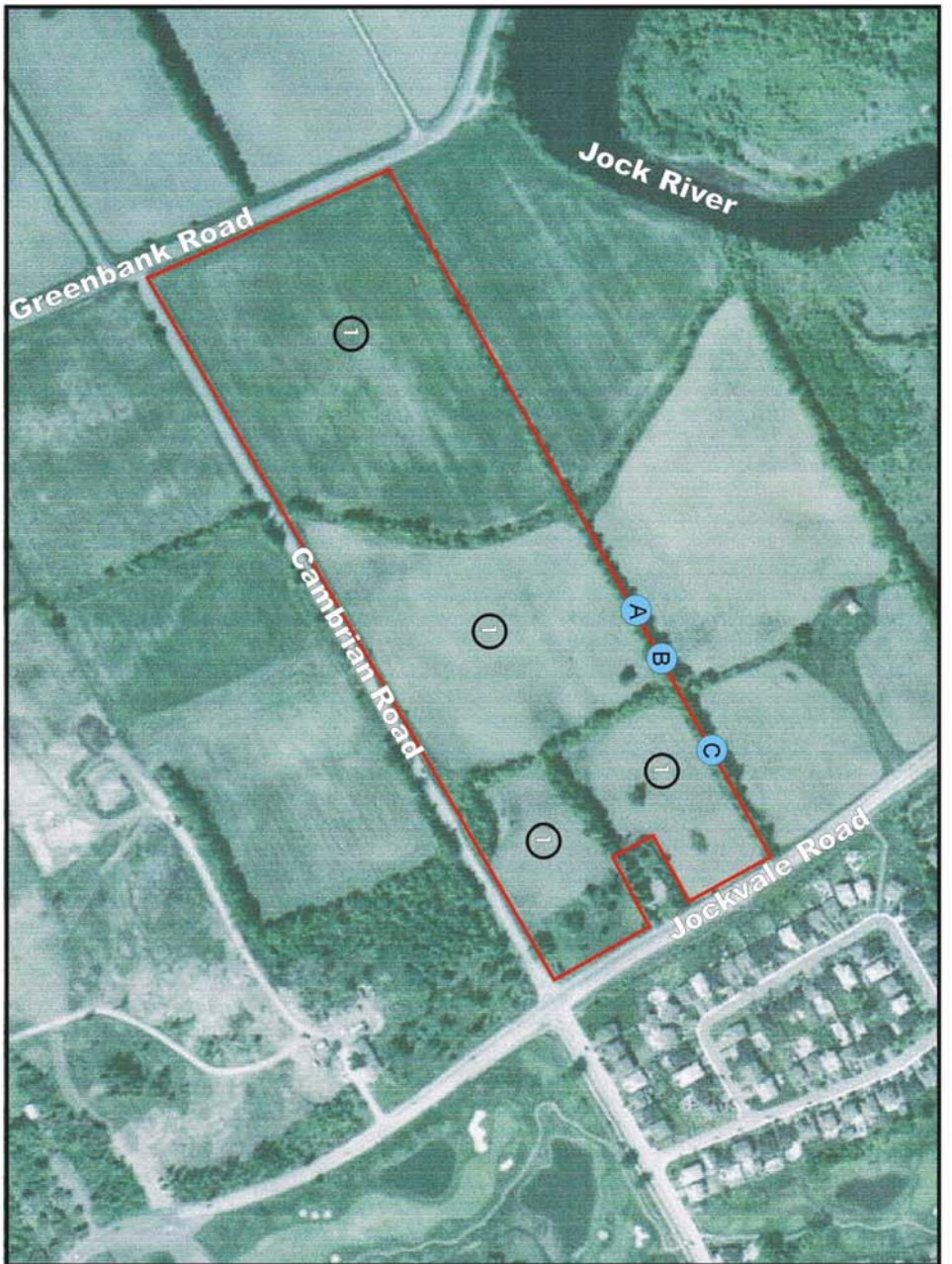
Thank you for the opportunity to provide this report. Please call if you have any questions on the above information and recommendations.

Yours Sincerely,
MUNCASTER ENVIRONMENTAL PLANNING INC.

Bernie Muncaster
Principal

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**STONEBRIDGE PHASE 10 NORTH
PRELIMINARY TREE STUDY AND CONSERVATION PLAN**



airphoto base from City's web site

Approx. Scale 1:5,500

Legend

- Site boundary
- Examples of trees with potential for retention (see text for details)

Vegetation Community

- ① Cultural Meadow



Prepared for: **Monarch Corporation**

Prepared by:



June 17, 2007

FILE: 06-63

Figure 1

**NATURAL ENVIRONMENT FEATURES
STONEBRIDGE, PHASE 10 NORTH,
CITY OF OTTAWA**