



Gartner Lee Limited

March 15, 2007

Mr. James Lane
Area Forester
Regional Municipality of York
17250 Yonge Street
Newmarket, ON L3Y 6Z1

Dear Mr. Lane:

Re: GLL 70-095 - Woodlot Evaluation on Lands owned by the Catholic Cemeteries Archdiocese of Toronto; Lots 31, 32, 33, and 34, Concession 3, Town of Whitchurch-Stouffville, York Region, Ontario

To meet the requirements of the York Region Forest Conservation By-law, as it applies to the above noted site, we are pleased to provide the results of our assessment.

1. Introduction

Gartner Lee Limited was retained by Augusta National Inc., on behalf of the Catholic Cemeteries Archdiocese of Toronto, to provide this assessment of the subject lands. The site is bounded by Highway 404 on the west, Davis Drive on the north, Woodbine Avenue on the east and farmland to the south.

To facilitate agricultural field operations on the site, this study was initiated for the purpose of assessing the possibility of removing vegetation from a large hedgerow in the north central part of the site and also from the edge of a forest block, that slightly extends into an agricultural field in the southwest part of the site. As part of this assessment, compensation for removal of trees was to be considered.

The site consists almost entirely of actively cultivated land. The York Region Forestry Department identified three woodlands on the site, each consisting of forested areas greater than 0.2 ha, which would require a permit under the Forest Conservation By-Law (TR-0004-2005-036) to remove trees. An application for the Permit must be supported by a scoped Environmental Impact Study, which is represented by this report.



The intent of the Regional Policy is to maintain forest cover, where possible, in consideration of future development scenarios. The York Regional Forester, James Lane, was contacted to discuss the Regional requirements for this site.

On January 31, 2007 a field investigation was conducted to assess the composition and condition of the three woodland features. The three areas generally consist of a wide hedgerow in the north central part of the property, a small separate woodlot in the southwest corner of the site and the third area consisting of the north edge of another woodlot, which mostly lies on the adjacent property immediately to the south of the site.

2. Existing Conditions

The woodland features assessed by this report are depicted on Figure 1.

2.1 North Central Hedgerow

The North Central Hedgerow is about 525 m long, has a maximum width of about 40 m and comprises a total area of approximately 1.92 ha. This hedgerow consists almost entirely of Manitoba Maple (*Acer negundo*), mostly in the range of 25 to 40 cm diameter at breast height (dbh) and a height of 12 to 18 m. Many of these maples are not in the best of health and show signs of stress by way of splitting branches. This portion of the hedgerow has an area of about 1.76 ha.

This hedgerow appears to have lined a former laneway that extended from Woodbine Avenue to a farmstead at the west end. The trees are in two distinct rows indicating that they were planted. The former laneway is now grown in with a dense thicket about 5 m tall, that is mostly comprised of Choke Cherry (*Prunus virginiana*), with some Red-osier Dogwood (*Cornus stolonifera*), Tartarian Honeysuckle (*Lonicera tatarica*) and Common Buckthorn (*Rhamnus cathartica*).

The western most portion of the hedgerow appears to be the site of the former farmstead. This community (0.16 ha) largely consists of Honey Locust (*Gleditsia triacanthos*) with an average dbh of 30 cm and height of about 15 m, several mature Norway Spruce (*Picea abies*) and a single mature Sugar Maple (*Acer saccharum*), with an 80 cm dbh. The maple is in good form with some dead branches in the crown.



2.2 Southwest Woodlot

In the southwestern corner of the site, there is a small woodlot of variable composition, approximately 1.21 ha in area. It is successional in nature and was likely affected by livestock grazing in the past.

This woodlot is predominantly deciduous. The northern portion is dominated by Ironwood (*Ostrya virginiana*) with some American Beech (*Fagus grandifolia*) and Sugar Maple. A younger grove of Trembling Aspen (*Populus tremuloides*) occurs in the northwest corner. A coniferous grove of medium-sized Eastern Hemlock (*Tsuga canadensis*) and White Cedar (*Thuja occidentalis*) occurs in the centre of the woodlot. A fringing contiguous tall thicket of hawthorn (*Crataegus* spp.), Common Buckthorn and Common Apple (*Malus pumila*) surrounds the woodlot. More open cultural thickets extend to the north and south of the woodlot.

2.3 South Woodlot

A mature upland deciduous woodlot dominated by Sugar Maple, approximately 2 ha in area, mostly occurs on the adjacent property at the southwest corner of the site. A successional fringe of young woodland (0.23 ha), bordering the north edge of this woodlot, extends onto the subject property. This fringe primarily consists of Trembling Aspen with some Paper Birch (*Betula papyrifera*) with trunks that are mostly 8-12 cm dbh and 10-15 m tall.

3. Assessment of Significance

Most of the North Central Hedgerow consists of Manitoba Maple that have reached an over-mature stage and therefore are starting to senesce. Manitoba Maple is a brittle, short-lived tree that is not native to this part of the province, and is considered undesirable. It is not a particularly attractive tree in an ornamental setting. The isolation of this hedgerow, along with the species makeup, provides very limited value as a commercial source of wood or as wildlife habitat. Consequently, we do not recommend retaining this hedgerow feature. The trees are already showing dieback and limb breakage. This trend can be expected to accelerate over the coming years.

The small community at the west end of the hedgerow, consisting of a large Sugar Maple, Norway Spruce and young Honey Locust, are in better form and can be expected to survive in the longer term. This portion of the hedgerow should be preserved.



The small woodlots, at the southwest corner of the site, are more diverse structurally and contain a variety of tree and shrub species, therefore providing a more commercially valued woodlot with better habitat potential for common wildlife species. Consequently, these woodlots have a greater environmental function and are more worthy of retention than the majority of the North Central Hedgerow. Furthermore, the environmental and commercial value of the Southwest Woodlot could be enhanced by increasing its area and strengthening the connection with the adjacent South Woodlot.

4. Recommendations

As a result of this assessment, the following recommendations are provided with respect to woodlot management on the subject lands:

1. Most of the North Central Hedgerow (1.76 ha) is not worthy of retention because it is dominated by an undesirable tree species (Manitoba Maple) that is short-lived and already showing signs of senescing.
2. The western most portion of the North Central Hedgerow (0.16 ha), containing the large Sugar Maple, Norway Spruce and Honey Locust, all in good form, should be retained.
3. The Southwest Woodlot (1.21 ha) and the northern edge of the South Woodlot (0.23 ha) should also be retained.
4. As indicated on Figure 1, a natural restoration/compensation area should be established in the southwestern portion of the site, to connect the two woodlots. This area (1.76 ha) will equal the size of the hedgerow recommended for removal. As a result, this will create a larger more contiguous woodland, which would have greater commercial value and the potential of supporting a larger and more diverse wildlife population. Consideration should be given to removing undesirable species in this area, such as Common Buckthorn.

5. Special Permit

As a result of this assessment, and on behalf of the Catholic Cemeteries Archdiocese of Toronto, we are respectfully requesting the approval of a Special Permit to remove 1.76 ha of the North Central Hedgerow on the site. In total, approximately 1.6 ha of existing woodland will be



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retained, which includes the west end of the North Central Hedgrow (0.16 ha), the Southwest Woodlot (1.21 ha) and the north edge of the South Woodlot (0.23 ha). An area of 1.76 ha will be added to the Southwest and South Woodlots for compensation/restoration purposes.

We trust the information provided is sufficient to meet the requirements of a Special Permit application under the Forest Conservation By-law. If you have any questions or require more detail, please feel free to contact us.

Yours very truly,
GARTNER LEE LIMITED

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Senior Terrestrial Biologist

Donald F. McQuay, P.Ag., P.Geo.
Environmental Geologist, Principal

JK/DFM:tmc
cc: Mike Everard, Augusta National

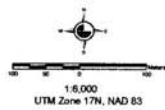
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Source: Mapping from Ontario Ministry of Natural Resources
 Orthorectified 2005

Legend

- Study Area
- Retained Woodlot
- Woodlot Recommended for Removal
- Woodlot Compensation Area



Catholic Cemeteries
 Archdiocese of Toronto

Woodlots

March 2007
 Project 70095



Gartner Lee **Figure 1**