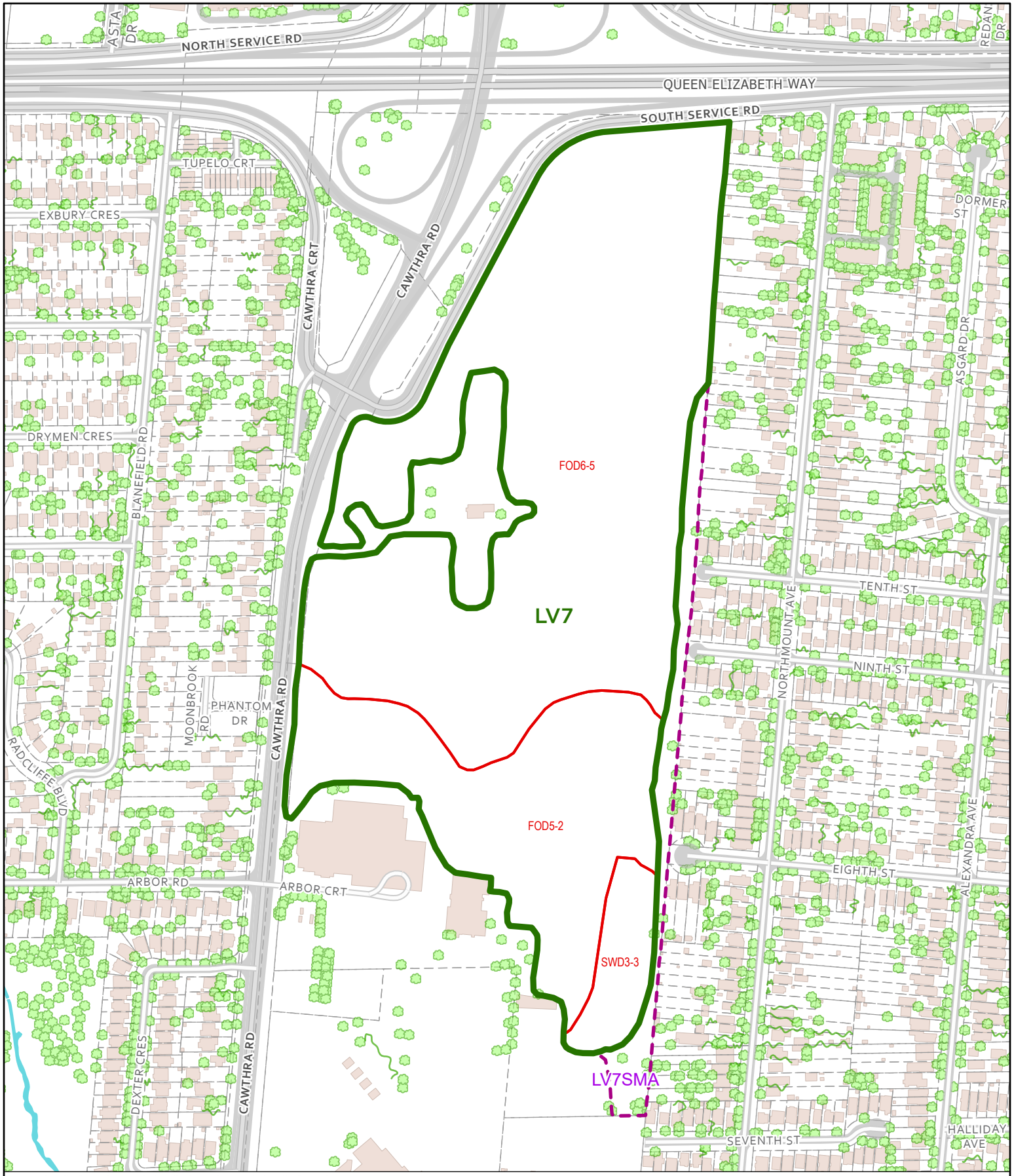

Natural AREAS SYSTEM

2024 NATURAL AREAS UPDATE

SITE LV7

- NATURAL AREAS
- VEGETATION COMMUNITIES
- SPECIAL MANAGEMENT AREAS
- LINKAGES

Street - TYPE

- HIGHW
- RAMP
- ARTER

0 30 60 120 180 240

Meters

MISSISSAUGA

Produced by IT-GIS, Client Services

LV7

CLASSIFICATION	Park Name	PLANNING DISTRICT	AREA (Ha)
Significant Natural Area	Cawthra Woods	Lakeview	22.89

CONSERVATION AUTHORITY	SUBWATERSHED	OWNERSHIP	SURROUNDING LAND USE
CVC	Serson Creek/ Cooksville Creek	Municipal	Residential

GENERAL SUMMARY

Directly east of Cawthra Road, between the Queen Elizabeth Way and Atwater Avenue. This site is not directly connected to any other natural areas. Natural areas occur approximately 1 km to the east and west of LV7.

This site is a public park (Cawthra Woods) with maintained trails and a beautiful display of spring wildflowers.

PHYSICAL DESCRIPTION

The topography of this site is undulating with numerous shallow depressions present in the northern portion that are inundated with water for part of the year. A high perched water table is present in the northeast section of the site. The underlying bedrock geology consists of the grey shales of the Georgian Bay Formation. In the northern portion of the site the soil is Berrien sandy loam which has developed within the Iroquois sand plain. The southern portion has Chinguacousy clay loam soil which has developed within the Halton till plain. Both of these soil types are imperfectly drained. Soil moisture is wet-mesic to wet throughout the site. This site is located primarily within the Cooksville Creek sub-watershed, however, the northernmost portion is within the Serson Creek sub-watershed.

CONDITION

An Environmentally Significant Area (ESA), a regional Area of Natural and Scientific Interest (ANSI), and an evaluated wetland (Cawthra Woods) are present within this site.

This site is currently in good condition. Disturbances include old estate relicts within the forest, numerous trails, some windthrow, pit excavation, excessive trampling, abundance of litter, and excessive road noise from the Queen Elizabeth Way. Trails at this site have been limited to a few main ones that are wood chipped and clearly defined. The lack of leaf litter and exposed tree roots in some parts along the southeast boundary suggest a drying out of the soils and possible surface erosion. Extensive maple regeneration was noted on the north half of the site. Surrounding land use is residential.

Invasive plant species present include Garlic Mustard (*Alliaria petiolata*), Norway Maple (*Acer platanoides*), Japanese Barberry (*Berberis thunbergii*), European Buckthorn (*Rhamnus cathartica*), Tatarian Honeysuckle (*Lonicera tatarica*), and Multiflora Rose (*Rosa multiflora*).

ECOLOGICAL LAND CLASSIFICATION

Number of Plant Communities

Three vegetation communities are present at this site (see accompanying figure); predominately fresh-moist sugar maple-hardwood deciduous forest type (FOD6-5) in the north, and fresh-moist sugar maple-beech deciduous forest type (FOD5-2) in the south, and a small section of a regenerating mineral swamp maple deciduous swamp (SWD3-3) occurs on the southeastern corner.

Significant Plant Communities

There are no Significant Plant Communities in LV7.

SPECIES RICHNESS

Flora

There are 383 floral species documented for this site. The native FQI is 68.92 and the native mean coefficient is 4.29, both high values. Both the

native FQI and the native mean coefficient have decreased from previous values of 69.82 and 4.34, respectively. There have been 141 introduced flora species recorded at this site, representing 32.6% of the total flora species present.

One provincially significant flora species has been documented from this site.

Forty-eight locally significant flora species have been documented at this site.

One-hundred and eleven Credit Valley Conservation flora species of Conservation Concern (Tier 1-3) have been documented at this site.

Fauna

There are a total of 94 fauna species documented for this site: 71 bird, 9 mammal, 5 amphibian and /or reptile, and 9 odonata and/or lepidoptera species.

Eight provincially significant fauna species have been documented at this site.

Fifty-six Credit Valley Conservation fauna species of Conservation Concern (Tier 1-3) have been documented at this site.

MANAGEMENT RECOMMENDATIONS

1. Access to the site should be controlled.
2. The water main right-of-way lands to the east of the site are identified as a Special Management Area and could be restored to expand the area of natural habitat.
3. Non-native plants need to be controlled/removed from the site.
4. The apparent drying out of soils in areas of the southeast portion of the woods should be investigated.
5. Public education signage could be utilized to engage the public.
6. Landowners with properties adjacent should be contacted and encouraged to plant native species and remove invasive species from their properties.

REFERENCES

Bird and Hale Ltd. (1989)

Bogart (1999)

Brownell (1993)

City of Mississauga (1978b)

Dougan & Associates (1997a)

Ecologistics Limited (1979)

Geomatics International Inc. (1995)

Geomatics International Inc. (1997a)

Hana (1984)

Walton and Lyons (1997)

ECOLOGICAL LAND CLASSIFICATION

Fresh-moist Sugar Maple- Hardwood Deciduous Forest Type (FOD6-5)

This is a high-quality forest with high species many spring ephemerals and an overall high species richness. This hardwood forest is dominated by mature Sugar Maple (*Acer saccharum*), with a lesser amount of Red Oak (*Quercus rubra*), American Beech (*Fagus grandifolia*), and Black Cherry (*Prunus serotina*). The canopy in this community is slightly more open as a result of historic logging activities. Canopy trees are greater than 25 m in height and covers greater than 60% of the forest. The sub-canopy is composed of Sugar Maple, American Beech, and several Yellow Birch (*Betula allegheniensis*). Sub-canopy trees are 10-25 m in height and cover 25-60% of the community. The understory is dominated by Sugar Maple and American Beech saplings, Choke-cherry (*Prunus virginiana*), Alternate-leaved Dogwood (*Cornus alternifolia*), and Maple-leaved Viburnum (*Viburnum acerifolium*). Understory shrubs are 1-2 m in height and cover 25-60% of the community. The diverse ground cover includes Goldenrod species (*Solidago sp.*), Large False Solomon's-seal (*Maianthemum racemosum*), Ostrich Fern (*Matteuccia struthiopteris*), Sensitive Fern (*Onoclea sensibilis*), and Spotted Jewelweed (*Impatiens capensis*). Spring wildflowers include White Trillium (*Trillium grandiflorum*), Red Trillium (*Trillium erectum*), Wild Leek (*Allium triccocum*), and Yellow Trout Lily (*Erythronium americanum*). Ground layer vegetation is 0.2-0.5 m in height and covers 25-60% of the community.

Fresh-moist Sugar Maple- Beech Deciduous Forest Type (FOD5-2)

The forest is dominated by mature Sugar Maple and American Beech, with some American Basswood (*Tilia americana*), and Black Cherry. The canopy is closed and is greater than 25 m in height and covers greater than 60% of the forest. The sub-canopy is also dominated by Sugar Maple and American Beech. Sub-canopy trees are 2-10 m in height and cover 25-60% of the community. The understory is virtually absent. Understory includes American Beech and Sugar Maple saplings and shrubs, such as Chokecherry and Maple-leaved Viburnum which are 1-2 m in height and cover less than 10% of the community. The leaf litter layer is thick in most places, but sparse to absent in areas near the east boundary. The ground flora is similar to that present in the northern portion of the site, however, it is not as rich. The ground layer is dominated by Zigzag Goldenrod (*Solidago flexicaulis*), Early Meadow-rue (*Thalictrum dioicum*), Northern Lady Fern (*Athyrium angustum*), and False Solomon's-seal (*Maianthemum racemosum*) which is 0.2-0.5 m in height and covers 25-60% of the community. Large erratics are present throughout the forest.

Depressional wetland vegetation inclusions occur throughout the site. These areas typically contain a canopy of Silver Maple (*Acer saccharinum*) and Green Ash with a sub-canopy of American Elm (*Ulmus americana*). The understory and ground layer in these areas is dominated by large patches of Spotted Jewelweed (*Impatiens capensis*), Silvery Glade Fern (*Deparia acrostichoides*), Christmas Fern (*Polystichum acrostichoides*), Swamp Milkweed (*Asclepias incarnata*), Swamp Aster (*Symphyotrichum puniceum*), dogwood species (*Cornus sp.*), and sedges (*Carex* spp.). The low wet pockets that exist throughout this community are identified as a provincially significant wetland complex.

Swamp Maple Mineral Deciduous Swamp (SWD3-3)

The swamp community may have previously had a higher ash canopy cover than the surrounding area and is now regenerating with Silver Maple, Manitoba Maple (*Acer negundo*), and White Elm (*Ulmus americana*). Shrub layer includes Tartarian Honeysuckle (*Lonicera tatarica*), Green Ash, and European Buckthorn (*Rhamnus cathartica*). The ground layer is thick (>60% cover) with Garlic Mustard, Fowl Mannagrass (*Glyceria striata*), Sensitive Fern, and Bittersweet Nightshade (*Solanum dulcamara*). This area should be a priority for invasive species removal to prevent their spread through an otherwise high-quality site.