



**Scoped Environmental Impact Study  
20 High Street Collingwood**

File number: 160621218

Prepared by:

**Stantec Consulting Ltd.**  
300 – 7270 Woodbine Avenue  
Markham, Ontario  
L3R 4B9

Prepared for:

**Holborn Property Investments Inc.**  
71 Buttermill Avenue  
Concord, Ontario  
L4K 3X2

**July 2006**

# Scoped Environmental Impact Study 20 High Street Collingwood

## Table of Contents

---

<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 BACKGROUND .....	1

---

<b>2.0 ENVIRONMENTAL POLICY CONTEXT.....</b>	<b>1</b>
2.1 NATURAL HERITAGE PLANNING CONSIDERATIONS .....	1
2.2 PROVINCIAL POLICY STATEMENT.....	1
2.3 THE COUNTY OF SIMCOE OFFICIAL PLAN.....	3
2.4 TOWN OF COLLINGWOOD.....	4
2.4.1 Land Use Designations .....	4
2.4.2 Zoning.....	4
2.4.3 Black Ash Creek Special Policy Area .....	5
2.5 BLACK ASH CREEK SUBWATERSHED STUDY - NVCA.....	5
2.6 NATURAL HERITAGE INFORMATION CENTRE.....	6

---

<b>3.0 DATA COLLECTION AND ANALYSIS .....</b>	<b>6</b>
3.1 BACKGROUND REVIEW .....	6
3.2 FIELD STUDIES AND METHODOLOGY.....	6
3.3 ANALYSIS OF SIGNIFICANCE AND SENSITIVITY .....	7

---

<b>4.0 EXISTING CONDITIONS.....</b>	<b>7</b>
4.1 PHYSIOGRAPHY AND SURFICIAL GEOLOGY.....	7
4.2 LANDSCAPE ECOLOGY.....	8

---

<b>5.0 DATA COLLECTION AND ANALYSIS .....</b>	<b>8</b>
5.1 VEGETATION ANALYSIS .....	8
5.1.1 Vegetation Communities .....	8
5.1.2 Vascular Plant Species .....	10
5.2 AQUATIC HABITAT ASSESSMENT.....	11
5.3 BREEDING BIRD SURVEY.....	12
5.4 AMPHIBIAN SURVEY .....	12

---

<b>6.0 CONCEPT PLAN .....</b>	<b>14</b>
-------------------------------	-----------

---

<b>7.0 POTENTIAL IMPACTS.....</b>	<b>14</b>
7.1 POTENTIAL DIRECT IMPACTS.....	16
7.1.1 Loss of Significant or Sensitive Wildlife Habitat or Vegetation .....	16
7.1.2 Loss of Aquatic Habitat .....	16
7.1.3 Other Direct Effects-CONSTRUCTION IMPACTS.....	17

**SCOPED ENVIRONMENTAL IMPACT STUDY  
20 HIGH STREET COLLINGWOOD**

July 13, 2006

---

<b>7.2 POTENTIAL INDIRECT IMPACTS .....</b>	<b>17</b>
7.2.1 Changes to Ground Water Quantity and Quality.....	17
7.2.2 Changes to Surface Water Quantity and Quality .....	18
7.2.3 Indirect Impacts on Adjacent Vegetation or Wildlife.....	18
7.2.4 Wildlife Movement, Linkages, and Corridors .....	18

---

<b>8.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>19</b>
--	-----------

**FIGURES**

- Figure 1 Location Map
- Figure 2 ELC Vegetation Communities
- Figure 3 Amphibian Monitoring Stations
- Figure 4 Proposed Site Plan

**APPENDICES**

**APPENDIX A – VEGETATION LIST**

**APPENDIX B – WILDLIFE LIST**

## **1.0 Introduction**

---

### **1.1 BACKGROUND**

Stantec Consulting Ltd. has been retained to complete a Scoped Environmental Impact Assessment for part of Lot 44, Concession 10, Town of Collingwood, Simcoe County, alternatively known as 20 High Street. The subject lands are located within the urban boundaries of the Town of Collingwood as identified on Figure 1.

The proposed development plan is to construct eleven commercial buildings along with associated parking within the subject lands. This application is supported in the Collingwood Commercial Development, Planning Analysis Report as prepared by Stantec Consulting Ltd., July, 2006 as well as The Town of Collingwood Commercial Policy review completed by Malone Given Parsons, January 2005, which favors the expansion of the Western Commercial Node to include the subject lands.

## **2.0 Environmental Policy Context**

---

### **2.1 NATURAL HERITAGE PLANNING CONSIDERATIONS**

An assessment of the natural heritage features and functions of the subject lands was undertaken to comply with the requirements of the following:

- The Provincial Policy Statement;
- The County of Simcoe Official Plan (2006);
- The Town of Collingwood Official Plan (2004); and,
- Black Ash Creek Subwatershed Study, 2000.

### **2.2 PROVINCIAL POLICY STATEMENT**

A new Provincial Policy Statement (PPS) was issued under Section 3 of the Planning Act, and came into effect on March 1<sup>st</sup>, 2005. Planning authorities "shall be consistent with" policy statements issued under the Planning Act. The PPS includes policies on development and land use patterns, resources, and public health and safety. This report deals with Policy 2.1 of the PPS, which is directed at protection and management of natural heritage resources.



Base Map Source: Ministry of Transportation and Communications, Ontario, Simcoe, 1980, Original Scale 1:100,000.

**INDEX MAP OF SOUTHERN ONTARIO**



REVISION NO.	REVISION DATE	DESCRIPTION	REVISED BY

PROJECT NAME:  
**COLLINGWOOD COMMERCIAL DEVELOPMENT**  
 CLIENT NAME:  
**HOLBURN PROPERTY INVESTMENTS INC.**  
 DATE INITIATED: **JUNE, 2006** FILENAME:  
**60621218\_04.cdr**

FIGURE NO. **1.0**

**LOCATION OF SUBJECT LANDS**

SCALE:	PROJECT NO.:			
1:100,000	160621218			
REV. NO.	SHEET NO.	CHECKED BY:	APPROVED:	DRAWN BY:
0	1 OF 1	MK	RH	CEW



Seven types of natural heritage features are defined in the PPS:

- significant wetlands (PSW's);
- significant portions of the habitat of endangered and threatened species;
- fish habitat;
- significant woodlands;
- significant valleylands;
- significant Areas of Natural and Scientific Interest (ANSIs); and,
- significant wildlife habitat.

Development will not be permitted in significant wetlands south and east of the Canadian Shield, or in significant portions of the habitat of endangered and threatened species. Development and site alteration may be permitted on lands adjacent to significant wetlands and the significant portions of the habitat of endangered and threatened species if it is demonstrated that there will be no negative impacts on the natural features or the ecological functions for which the area was identified.

Development may be permitted in, and adjacent to, the other five types of natural heritage features provided that there will be no negative impacts on the features and functions for which the area was identified.

Since the late 1990s, many municipalities have undertaken Official Plan updates and have incorporated policies to reflect the goals of the Provincial Policy Statement described above. Hence, as part of the background review for this report, the current Official Plans for the region and local municipality were considered as is described below.

### **2.3 THE COUNTY OF SIMCOE OFFICIAL PLAN**

The subject lands are found within the municipal boundary of the Town of Collingwood and designated Rural and Agriculture. In rural areas, permitted uses include highway commercial and business parks which correlates with the current land uses adjacent to the subject lands.

The subject lands are situated well outside of the Oak Ridges Moraine Conservation Plan as well as the Niagara Escarpment Plan.

Further review of the Official Plan identifies no Provincially Significant Wetlands or Locally Significant Wetlands on, or adjacent to, the subject lands. In addition, the subject lands and adjacent areas are not identified as Areas of Natural and Scientific Interest.

## **2.4 TOWN OF COLLINGWOOD**

### **2.4.1 Land Use Designations**

The Town of Collingwood Official Plan designations are as follows: the subject lands are designated as *industrial* as identified on Schedule 'A' (Land Use Plan) of the Official Plan, with portions of the subject lands, along the western edge found within the Watershed Boundary of the Black Ash Creek as identified on Schedule 'B' of the Official Plan. The lands associated with Black Ash Creek, along the western edge are also designated as "valley lands", as well as Fish Habitat Category 1 & 2. The subject lands also fall within the Black Ash Creek Special Policy Area as identified on Schedule 'B1' of the Official Plan. The limits of the subject lands are within the Collingwood Trail System as shown on Schedule 'D1' of the Official Plan.

Schedule "A", Land Use Plan, further identifies Environmental Protection Areas. This designation encompasses:

- Those lands situated below defined flood and fill lines prepared by the NVCA, where available,
- Category 1 – Natural Heritage Resource areas as identified on Schedule B of the official plan
- Areas derived using "Top of Bank" approach along certain watercourses where flood and/or fill lines are not available.

Schedule "B", Environmental Protection / Natural Heritage Resource Areas identifies, PSW's, Valleylands, Category 1 and 2 Woodlands, Significant Spawning Areas.

It should be noted that no Environmental Protection or Natural Heritage Resource Features noted in Schedule "A" or "B" other than the previously noted along Black Ash Creek, have been identified within, or adjacent to, the Subject Lands.

Discussions with the Town indicate that the NVCA was part of the mapping review for the Official Plan. However no Environmental Protection or Natural Resource Features were designated within the subject lands at that time.

### **2.4.2 Zoning**

A review of Stantec's Planning Analysis report indicates that an application for amendments to the Official Plan and Zoning By-law have been made with the Town of Collingwood, and have requested the Town to change the designation of the subject lands from Industrial to Commercial to permit retail commercial uses within the Town of Collingwood Official Plan, and, from Employment M1 to Commercial C-5, to permit retail commercial uses within the Zoning By-law.

It is our understanding that this Official Plan and Zoning amendment is compatible and compliments the existing commercial zones to the north of the subject site, and follows the provisions of the zones created for commercial development in the Western Commercial Node.

### **2.4.3 Black Ash Creek Special Policy Area**

The Black Ash Creek Special Policy area requires that developments be controlled and a channelization program of the Black Ash Creek be initiated for a portion of the creek from Nottawasaga Bay to a point approximately midway between the north and south halves of Lot 41, Concession 10 in the south. The Nottawasaga Valley Conservation Authority's goal is to contain the floodwaters produced in the event of a regulatory flood.

A 30 meter setback from the high water mark on both sides of the Black Ash Creek is required. The proposed development plan provides for the required setback.

### **2.4.4 Town of Collingwood Commercial Policy Review**

In January, 2005, The Town of Collingwood received a report prepared by Malone Given Parsons Ltd. titled "The Town of Collingwood Commercial Policy Review: Opportunities and Options. This report was prepared to give the Town of Collingwood an assessment of:

1. commercial Issues,
2. identify the planning options that should be considered to provide clear direction for the future and,
3. to translate that direction into amendments to Collingwood's Official Plan.

A review of this report identifies the subject lands as the preferred direction in which to expand the existing western commercial node by changing the industrial lands to commercial.

## **2.5 BLACK ASH CREEK SUBWATERSHED STUDY - NVCA**

The Nottawasaga Valley Conservation Authority has completed a comprehensive sub-watershed plan for the Black Ash Creek designed to identify and protect significant natural features and functions as well as natural hazards.

Only a portion of the subject lands, primarily along the western boundary, are within the Black Ash Creek Subwatershed. The watercourse that forms the western boundary of the subject lands is the main branch of the Black Ash Creek. The subwatershed study identifies this branch of Black Ash Creek as a high priority site for rehabilitation. As noted in Section 5.2 below this section of Black Ash Creek has been channelized and rehabilitated as part of the Town's stormwater management and flood control strategy. A small portion of the extreme western portion of the subject lands associated with the Black Ash Creek has been identified as part of the Natural Heritage System.



## **2.6 NATURAL HERITAGE INFORMATION CENTRE**

The Ministry of Natural Resources's Natural Heritage Information Centre database was accessed to check for sensitive or rare species; no rare species of flora or fauna or provincially significant ANSI's or ESA's have been identified on, or adjacent to, the subject lands.

## **3.0 Data Collection and Analysis**

---

### **3.1 BACKGROUND REVIEW**

Before fieldwork commenced, vegetation communities and other natural heritage features were identified on, and adjacent to, the subject lands through air photo interpretation. This interpretation was used to develop an understanding of the terrain and drainage patterns on site and to generate preliminary maps of vegetation communities that could be ground-truthed during field investigations.

As described in the previous section, documents relevant to the natural heritage planning for the site were reviewed. These included the Simcoe County Official Plan, and the Town of Collingwood Official Plan.

The Natural Heritage Information Centre (NHIC) database, maintained by the Ontario Ministry of Natural Resources (MNR), was also accessed to search for records of provincially significant vegetation and wildlife on, and in the vicinity of, the subject lands.

### **3.2 FIELD STUDIES AND METHODOLOGY**

As described at the outset, field inventories and surveys have been conducted on, and adjacent to, the subject lands. These surveys are summarized below and the findings described in Section 4 - Biological Environment:

- **Wildlife Surveys:** incidental wildlife observations occurred during the various other surveys;
- **Vegetation Assessment/Botanical Survey** May 2006;
- **Aquatic Habitat Survey** June 2006;
- **Amphibian Survey** June 2006; and,
- **Breeding Bird Survey** May 2006.

Vegetation community boundaries delineated from air photo interpretation were field-checked and characterized based on the Ecological Land Classification (ELC) system developed by Lee et al. (1998). Wetland indicator plants, listed in the Wetland Evaluation Manual (MNR, 1994) and Wetness Index values (Oldham et al., 1995), were used in the demarcation of potential wetland habitats. In order to ensure a thorough survey of plant species and vegetation communities, the botanical fieldwork consisted of systematically walking the study area during summer conditions. Evaluation of wildlife habitat involved visual assessment of corridors, linkage opportunities, food sources and habitat use. The presence of amphibians and breeding birds was determined through targeted seasonal surveys during spring 2006, and the presence of mammals was determined through opportunistic sightings, sounds or distinctive signs.

### **3.3 ANALYSIS OF SIGNIFICANCE AND SENSITIVITY**

Field investigations were conducted to confirm and assess the character of existing conditions. The work included Ecological Land Classification of vegetation communities and a floristic survey of the lands and immediate vicinity. Vegetation communities were delineated on aerial photographs and checked in the field; community characterizations (ecosites and ecotypes) were based on the Ecological Land Classification (ELC) system (Lee et al., 1998). Common and Latin nomenclature of plant species generally follows Newmaster et al. (1998).

Natural heritage information collected from the subject lands was evaluated to confirm potential significance. Provincial significance of vegetation communities was based on the draft rankings assigned by the Natural Heritage Information Centre (Bakowsky, 1996). The provincial status of all plant species is based on Newmaster et al. (1998), with updates from the database of the Natural Heritage Information Centre (NHIC, 2001). Identification of potentially sensitive plant species is based on assignment of a coefficient of conservatism value (CC) to each native species in southern Ontario (Oldham et al., 1995). The value of CC, ranging from 0 (low) to 10 (high), is based on a species' tolerance of disturbance and fidelity to a specific natural habitat. Species with a CC value of 9 or 10 generally exhibit a high degree of fidelity to a narrow range of habitat parameters.

## **4.0 Existing Conditions**

---

### **4.1 PHYSIOGRAPHY AND SURFICIAL GEOLOGY**

The physiographic diversity of the Black Ash Creek Subwatershed has resulted in the presence of a wide variety of soil types ranging from impermeable clay to highly porous sand and gravel. As a result of the varying soil permeability adjacent to Black Ash Creek, groundwater discharge into this stream tends to be very inconsistent. Kemble Clay Loam has been identified within the subject lands. These soils are not porous and it is unlikely they provide a great deal of groundwater discharge.

## **4.2 LANDSCAPE ECOLOGY**

The total area of the Black Ash Creek watershed is 3258 hectares. The major tributaries have a total length of approximately 32km. The section of Black Ash Creek forming the western limits of the subject lands encompasses two main branches of Black Ash Creek situated upstream. The north branch originates above the Niagara Escarpment and flows north-east for approximately 13km before discharging into Collingwood Harbour. It receives groundwater discharge in its headwaters due to the porous soils, spring seepage from cracks in the face of the Niagara Escarpment and steep gradients. The stream in this area provides excellent coldwater fish habitat, although we note that the headwaters are located many kilometres to the southwest from the subject lands.

The south branch has two additional major tributaries, Underwood, and Nottawa Creeks. Originally these creeks discharged into Collingwood Harbour through what are now the Hickory and Oak Street Canals. A diversion channel was constructed in the 1950s, linking these streams with the North Branch, in order to direct flood flows away from the centre of Collingwood. The construction of the diversion channel has effectively combined the three smaller subwatersheds into one. The south branch receives significantly less groundwater discharge, and the base flows are more dependent on runoff. As a result, stream temperatures are warmer in the south than in the north branch.

## **5.0 Data Collection and Analysis**

---

### **5.1 VEGETATION ANALYSIS**

#### **5.1.1 Vegetation Communities**

The vegetation communities recognized on the site, based on the Ecological Land Classification (ELC) system, are shown on Figure 2. The subject lands consist of mostly continuous forest, swamp and thicket cover on a series of old dune ridges and wide intervening low-lying areas. In the north-central portion there is a large, circular area of a heavily disturbed habitat. Starting at the eastern edge of the property, there are three cutover inroads, the northern one being the longest.

The vegetation patterns are both the reflection of underlying topography and past land use. The low ridges are generally covered by upland mixed and deciduous forests and the low-lying areas by forest swamps and thicket swamps. Along the western edge there is a narrow zone of willow swamp.

The central band of upland vegetation, represented by poplar dominated woodland and patches of poplar forest are regenerating communities, likely coming back after past logging.

The vegetation community types are succinctly described in Table 1 below.



- STUDY AREA BOUNDARY
- - - CUT LINE
- DECIDUOUS FOREST (FOD)
- FOD8-1/CUW1 Fresh-Most Poplar Deciduous Forest/Poplar Cultural Woodland
- MIXED FOREST (FOM)
- FOM7-2 Fresh-Most White Cedar- Hardwood Mixed Forest
- SWAMP (SW)
- SWD2-2 Green Ash Mineral Deciduous Swamp
- SWD4-1 Willow Mineral Deciduous Swamp
- \*SWT2-13 Mixed Thicket Swamp
- CULTURAL (CU)
- \*CUW2 Mixed Cultural Woodland
- \*CUT Mixed Cultural Thicket

\*not listed in Southern Ontario ELC



**Stantec**

Base Map Source: Stantec Markham

PROJECT NAME: COLLINGWOOD COMMERCIAL DEVELOPMENT  
 CLIENT NAME: HOLBURN PROPERTY INVESTMENTS INC.  
 SHEET NO.: 60621218\_01.cdr  
 DATE: MAY, 2006

FIGURE NO. 2.0

SCALE: AS SHOWN  
 PROJECT NO.: 160621218  
 SHEET NO.: 1 OF 1  
 CHECKED BY: CZ  
 APPROVED: INITIAL: CEW  
 DRAWN BY: CEW

**ELC VEGETATION COMMUNITIES**

Source: Aerial Photography 2002 - County of Simcoe, Ontario  
 Assessment: Barcol Fabric - Forest Inc.

**Table 1. ELC Vegetation Types**

<b>ELC Type</b>	<b>Description</b>
<b>DECIDUOUS FOREST (FOD)</b>	
<b>FOD8-1/CUW1</b> Fresh-Moist Poplar Deciduous Forest/ Poplar Cultural Woodland	This is a diverse unit dominated by balsam poplar and trembling aspen, with varying amounts of white birch and white cedar, the latter mostly occurring in the sub-canopy. This is very likely a regeneration community following various levels of past disturbance and logging—hence the tree canopy is very uneven, from almost savanna-like to a closed forest. The dominant shrub is the invasive common buckthorn, growing both in the tall shrub layer, and as seedlings on the ground. Herb cover is very low, with a scattered occurrence of dandelion, tall buttercup and poison ivy seedlings.
<b>MIXED FOREST (FOM)</b>	
<b>FOM7-2</b> Fresh-Moist White Cedar-Hardwood Mixed Forest	White cedar is usually the dominant tree, being accompanied by white birch and trembling aspen. The tall shrub layer is composed of thickly growing common buckthorn and white cedar seedlings and saplings. Herb layer is very poorly developed to non-existent.
<b>SWAMP (SW)</b>	
<b>SWD2-2</b> Green Ash Mineral Deciduous Swamp	This is the major wetland community on the subject lands. Green ash forms a more or less continuous, usually open tree layer, and it may be accompanied by various amounts of aspen, balsam poplar or silver maple. Common buckthorn forms most of the shrub cover, with a presence of red osier and silky dogwood, green ash and poplar saplings. The herb layer is variously developed but usually rich in species and high in cover.
<b>SWD4-1</b> Willow Mineral Deciduous Swamp	This community at the western edge of the subject lands is composed of large crack willow trees and a sub-canopy of green ash. Common buckthorn forms a continuous tall shrub layer. In the herb layer the most abundant species is alien garlic mustard, followed by native enchanter's nightshade.
<b>*SWT2-13</b> Mixed Thicket Swamp	This unit composed of various amounts of tree saplings, including white cedar, green ash, balsam poplar, white birch and aspen. The herb layer development is variable.
<b>CULTURAL (CU)</b>	
<b>*CUW2</b> Mixed Cultural Woodland	A small patch representing this community is located along the access road at the eastern boundary of the subject lands. The open tree canopy is composed of green ash and Manitoba maple, with a weedy herb cover reminiscent of old field meadows.
<b>*CUT</b> Mixed Cultural Thicket	The disturbed area at the northern boundary of the subject lands extends to the south, with the shrub layer consisting of saplings of several tree species, such as white cedar, aspen, white birch and balsam poplar.

\*not listed in Southern Ontario ELC

**5.1.2 Vascular Plant Species**

Seventy-eight species of vascular plants were recorded from the subject lands during the inventory. A high proportion (47%, or 37 species) are non-native, and these are occurring primarily in the surrounding lawns along the channels and disturbed areas within the forest

matrix. Most of the native species occur in forested swamps, thicket swamps and forest communities.

All of the vascular plant species but one is ranked S5 – “very common in Ontario and demonstrably secure”. The only S4 species (“uncommon to locally common in Ontario and apparently secure; usually more than 100 occurrences”) is Ohio goldenrod (*Solidago ohioensis*), which is, however, common in the area. Numerous specimens of this goldenrod were found along the forest edge/roadside at the eastern edge of the property.

## **5.2 AQUATIC HABITAT ASSESSMENT**

Within the subject lands no watercourses were observed. Immediately adjacent, along the western boundary of the subject lands is Black Ash Creek, which is part of the Blue Mountains Watershed. Within this section of Black Ash Creek channelization has occurred as part of the Town’s stormwater management and flood control strategy. Channelization occurs for approximately 1.4 km downstream before outletting into a point near the Collingwood Harbour, and continues for approximately 2.5 km upstream of the subject lands. The intent of the channelization was to incorporate better habitat features (such as a pool-riffle sequence and a narrow, deeper cross-section) in the low-flow channel, improving habitat for cold water species such as trout and salmon in addition to providing flood control function.

In addition, in addressing the Town’s stormwater management and flood control issues the channelization of Black Ash Creek has had an impact on the redevelopment of commercial properties that use to be within the floodplain.

The channel is situated within an open swath, limited vegetation consisting mainly of grasses is found along the banks. As depicted on vegetation mapping, Figure 2, although some trees and shrubs are found several meters from the watercourse, there would be opportunity to undertake some additional plantings within the riparian zone.

A review of the subwatershed study indicates that Black Ash Creek provides important habitat for migratory rainbow trout entering the system from Noattawasaga Bay. In addition the creek also supports a variety of other species including: common shiner, emerald shiner, mimic shiner, blacknose dace, longnose dace, northern redbelly dace, bluntnose minnow, brassy minnow, creek chub, common carp, white sucker, redhorse sucker, brook stickleback, Johnny darter, small mouth bass, native brook trout, northern pike, migratory brown trout, migratory chinook salmon.

During Stantec’s June 2006 site visit, the water temperature was 22° C while the air temperature was 25° C.

### **5.3 BREEDING BIRD SURVEY**

A breeding bird survey was conducted on May 29, 2006 between 6:00 and 9:30 a.m., at the High Street site in Collingwood. The morning temperature at the beginning of the survey was approximately 18°C and by the end of the survey the temperature was in the mid twenties, with a wind of 1 (Beaufort scale), and 0-10% cloud cover. There was no precipitation during the site visit, and the area had not experienced rain within the last 24 hours.

The methodology used for the breeding bird survey involved a thorough search and walk of the High Street property. All bird species heard or observed on the site during the survey were recorded. During the site visit 42 bird species were observed. Notable bird observations included flushing up a pair of American Woodcocks, and 6 male American Redstarts were observed or heard singing at various locations throughout the property. A male Blackpole Warbler was observed in the North-east corner of the site, but is most likely a migrant moving through the area.

Incidental wildlife observations included three mammal species, two frog species, three butterfly species, two bird species and one plant species. The two herps observed were the Northern Leopard Frog and Green Frog and they were both observed visually. The butterfly species observed were the Monarch Butterfly, Cabbage butterfly and Mourning Cloak. The incidental bird observations were of Yellow-bellied Sapsucker holes in several poplar trees, and several Cooper's Hawk feathers were found in one area.

### **5.4 AMPHIBIAN SURVEY**

An amphibian survey was conducted on June 6, 2006 in the evening between 9:30 pm and 10:30 pm. Temperature at this time was 19°C with a wind of 0 (Beaufort scale) and no precipitation. Four stations were identified and monitored (A through D) based on the presence of potential amphibian habitat. Monitoring procedures followed protocols outlined in the Marsh Monitoring Program (Bird Studies Canada) and Amphibian Road Call Counts (Environment Canada).

Station A contained a single green frog, and was located just off one of the existing cut-lines. Here, grey tree frogs could also be heard in the distance.

Station B was located at the SWD4-1 at the southwestern boundary of the subject lands. Here, a chorus of approximately 10 grey tree frogs could be heard.

Station C was situated at the northwest corner of the study area and contained about 5 grey tree frogs.

Station D was silent, as was the area between stations B and C.

Most of the stations were impacted by noise and light from neighboring factories.



- STUDY AREA BOUNDARY
- - - CUT LINE
- (B) AMPHIBIAN MONITORING STATION



Base Map Source: Simcoe Municipality, Stantec  
 PROJECT NO. 160621218  
 FILE NAME 60621218\_01.Lcdr  
 DATE REVISED MAY, 2006  
 SHEET NO. 1 OF 1  
 PROJECT NAME  
 CLIENT NAME  
 DRAWN BY  
 CHECKED BY  
 APPROVED  
 INITIAL  
 DATE  
 JULY

# AMPHIBIAN MONITORING STATIONS

SCALE: AS SHOWN  
 PROJECT NO. 160621218  
 FILE NAME 60621218\_01.Lcdr  
 DATE REVISED MAY, 2006  
 SHEET NO. 1 OF 1  
 PROJECT NAME  
 CLIENT NAME  
 DRAWN BY  
 CHECKED BY  
 APPROVED  
 INITIAL  
 DATE  
 JULY

Source: Aerial Photography 2002 - County of Simcoe, M  
 Assessment: Parcel Fabric - Toronto Inc



## **6.0 Concept Plan**

---

Stantec Consulting Ltd. prepared a site Concept Plan, as part of the Planning Analysis Report, on behalf of Holborn Property Investments Inc. as shown in Figure 4.

Although this Concept Plan provides considerable detail on a development scenario that could be used in the preparation of a final plan, it is not intended to be used as a definitive option for a site plan application for final approval.

The Concept Plan, is a comprehensive plan that integrates the existing Urban Design Guidelines of the Western Commercial Node, and locates a total of 11 structures on the property.

Proposed building locations, and sizes reflect the future needs of the community and support the overall objectives of the Town of Collingwood Official Plan. The diversity of building size is intended to attract a variety of commercial tenancies. This will help add new retail commercial uses to the Western Commercial Node.

Final zoning for the site will be developed in conjunction with the proposed site plan and will be site specific for the commercial development. The zoning for the subject lands will alter the current industrial provisions to allow for site-specific setbacks, lot coverage, height, parking, and site services.

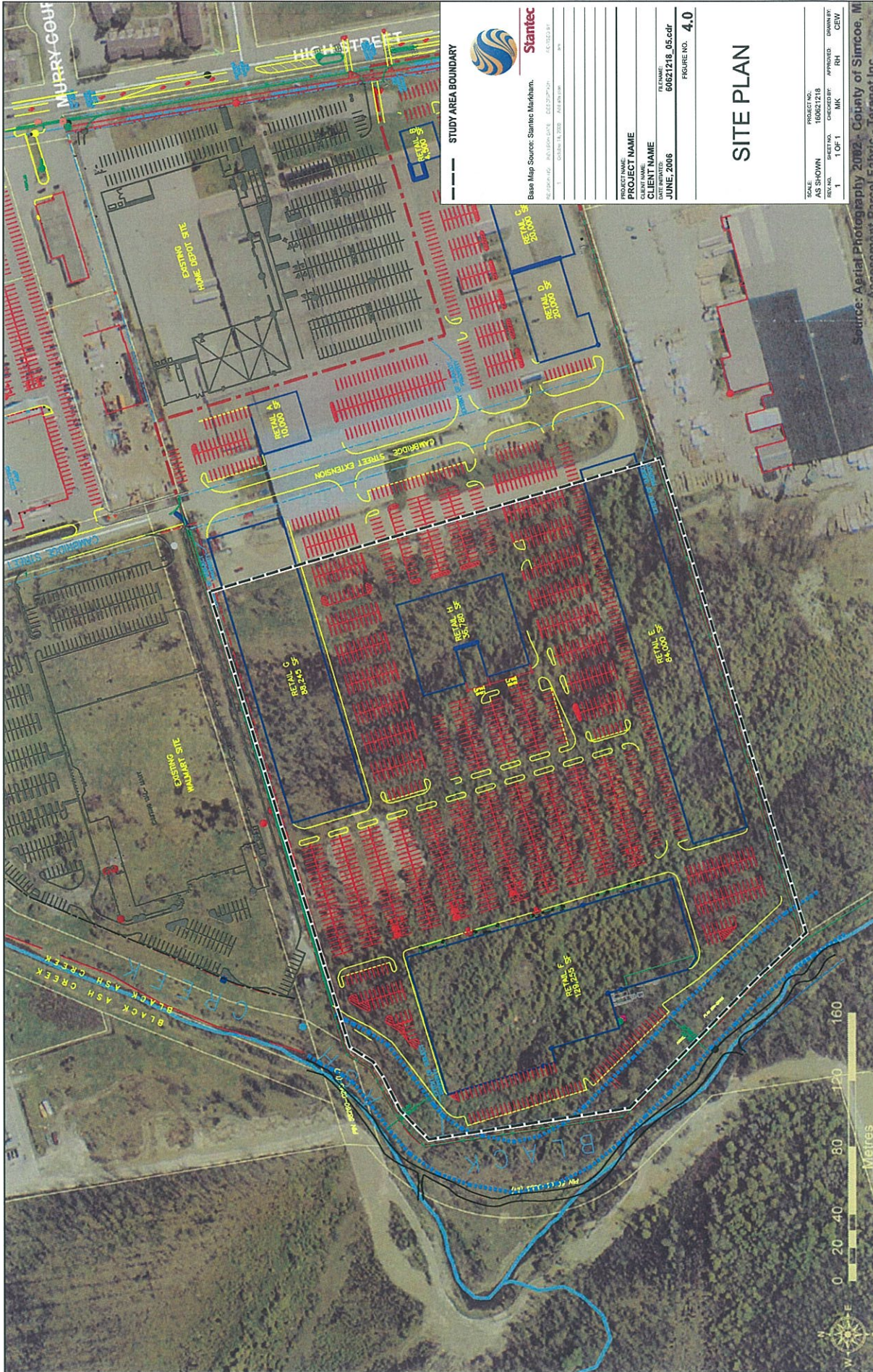
## **7.0 Potential Impacts**

---

The purpose of this environmental impact study has been to present and discuss the natural heritage features currently found on, and adjacent to, the subject lands; to identify potential constraints these features could present to proposed development plans, and to provide recommendations as to how the proposal ought to proceed in light of these constraints.

Typically, there are a range of potential impacts that could result from land development, including impairment of natural features and functions such as surface and ground water quality and quantity, direct habitat alteration, indirect effects on regional linkage systems and effects on aquatic habitat quality in receiving stream systems. In this section, we consider all these impacts from the proposed development of the subject lands.

The following impact assessment has been separated into a discussion of Potential Direct Impacts and Potential Indirect Impacts.



STUDY AREA BOUNDARY



Base Map Source: Santee Markham.  
 PROJECT NO. 160621218  
 CLIENT NAME: [REDACTED]  
 DATE ISSUED: JUNE, 2016

PROJECT NAME	FILE NAME
CLIENT NAME	60621218_05.cdr
DATE ISSUED	JUNE, 2016
FIGURE NO.	4.0

# SITE PLAN

SCALE:	PROJECT NO.:
AS SHOWN	160621218
REV. NO.:	SHEET NO.:
1	1 OF 1
MK	CHKD BY:
	CEW
	APP'D BY:

Source: Aerial Photography 2012 - County of Simcoe, M  
 Assessment - General Layout - Toronto, Inc.

## **7.1 POTENTIAL DIRECT IMPACTS**

### **7.1.1 Loss of Significant or Sensitive Wildlife Habitat or Vegetation**

Based upon review of aerial photographs, and the site surveys, the areas to the north, east, and south of the subject lands are either fully developed or committed for development in the near future. As noted in the aerial photographs, the majority of the site is vegetated with deciduous swamp or forest. Other portions of the site consist of disturbed lands that have been subject to dumping of debris.

None of the vegetation or wildlife identified within our assessment is rare or particularly sensitive.

With respect to aquatic/terrestrial linkages the Black Ash Creek corridor and associated 30m buffer on the west end of the subject lands will be maintained and continue to provide linkage opportunities. Lands south of the subject lands and immediately west of Black Ash Creek are highly vegetated and will provide additional habitat to any wildlife that may be displaced as part of the proposed development.

In summary, we do not believe the conversion of the tableland portion of the subject lands will remove significant or sensitive vegetation, nor will greatly diminish the north-south movement of animals.

Along the southwestern edge there is a Willow Mineral Deciduous Swamp. The site plan does take into account this feature and the majority of the Willow Mineral Deciduous Swamp (SWD4-1) will be retained as it is encompassed within the 30m setback from Black Ash Creek.

With respect to the potential displacement of breeding birds and other wildlife, our field surveys have identified that the species noted are all common within Ontario and secure. Wildlife species would be displaced with the removal of vegetation, however, opportunities for relocation exist in adjacent areas to the south, along the Black Ash Creek corridor, and to the west of Black Ash Creek.

### **7.1.2 Loss of Aquatic Habitat**

As noted previously, within the subject lands no watercourses were observed. Immediately adjacent, along the western boundary of the subject lands is Black Ash Creek, which has been recently channelized as part of the Town's stormwater management and flood control strategy.

The proposed site plan takes into account the 30m buffer from Black Ash Creek high water level, as recommended in the Town of Collingwood Official Plan. This 30m buffer on either side of the creek provides an ample riparian zone and ensures that vegetation will remain along adjacent to the creek.

In summary, we do not believe the aquatic habitat found within Black Ash Creek will be impacted as a result of the proposed development.

### **7.1.3 Other Direct Effects-CONSTRUCTION IMPACTS**

The direct physical impacts that can occur to adjacent vegetation or aquatic features from the use of heavy equipment must also be considered. Typically, the area of construction impact is normally larger than the actual building envelope, as the creation of access roads and staging areas, and the use of heavy equipment can cause disturbance to adjacent areas.

In this case, the areas of greatest concern relate to the construction activities that will occur near the western limits of the subject lands, ensuring that vegetation that is to remain and provide an additional buffer to Black Ash Creek is not impacted. A key requirement will be for the implementation of an effective erosion and sediment control plan that will be geared toward ensuring that sediment transport does not migrate offsite into the 30m creek corridor along the western perimeter of the site. We do not anticipate that, even under the worst case scenario that sediment would migrate far enough to reach the creek. The grading for this site will ensure that the new grades will be feathered to existing grades at the property boundary, ensuring that adjacent vegetation will not be affected. The preparation of the Tree Preservation Plan will address the proper placement of the tree preservation fencing to maximize tree retention at the rear of the residential lots.

No other potential direct effects have been identified.

## **7.2 POTENTIAL INDIRECT IMPACTS**

A discussion of potential indirect impacts typically includes a wider range of issues than that for potential direct impacts. Concerns for both ground water and surface quality and quantity below the subject lands as well as off-site, need to be considered. In addition, impacts to vegetation communities and wildlife habitat can potentially occur indirectly as a result of adjacent development, and proposed changes to existing land use can sometimes result in impacts to wildlife movement patterns and disruption of landscape-scale linkages and corridors. All these potential impacts have been assessed for this study.

### **7.2.1 Changes to Ground Water Quantity and Quality**

A geotechnical investigation was completed by Shaheen & Peaker Limited and ground water conditions were summarized within their January 2006 report. This report identified that the groundwater table was observed at some of the test pit locations varying from 1.3 to 3.1 meters below ground surface, while the majority of the testpits and boreholes were dry. All of the proposed commercial structures will be placed on footings (no basements) with surrounding areas paved. Excavations for footings above the water table are not expected to pose any major problems. Minor seepage of groundwater, in a perched condition, may occur above the groundwater table from wet seams and/or pockets of perched water. Dewatering can be

controlled through the use of conventional methods of collection by pumping from filtered temporary sumps, excavated away from footing locations.

A review of topo mapping indicates that surface and groundwater moves in an easterly direction (i.e., away from Black Ash Creek). Based upon the foregoing, we do not anticipate that this proposed development will have any impacts on local flows within Black Ash Creek.

### **7.2.2 Changes to Surface Water Quantity and Quality**

The Functional Servicing Report, prepared by Stantec Consulting, July 2006, identifies that the subject lands will require quantity and quality control as per Town and NVCA requirements.

To meet NVCA requirements it is proposed the 5-year storm be stored underground. In addition, the report further proposes that the development site drainage be split between east and west, with 7.52 ha of the western portion of the site directed to Black Ash Creek, without attenuation and the remaining 6.68 ha distributed via sewer.

Drainage to Black Ash Creek will undergo treatment via an oil/grit separator and an exfiltration/infiltration trench to further filter stormwater drainage and reduce temperature of the stormwater before out letting into Black Ash Creek. We are recommending that the owner of the site enter into an agreement to ensure that regular and on-going maintenance clean-outs of the oil/grit separator will occur to ensure that the unit continues to function properly. Based on the above, minimal impact to surface water quantity and quality is anticipated within Black Ash Creek.

### **7.2.3 Indirect Impacts on Adjacent Vegetation or Wildlife**

With proper sediment controls, we do not anticipate any indirect impacts on adjacent vegetation or on the 30m aquatic corridor along Black Ash Creek.

The creation of the proposed commercial area is not expected to have a large impact on the use of Black Ash Creek or adjacent wooded lands by birds, as there are ample wetland areas, particularly to the west, remaining in the vicinity of the subject lands.

### **7.2.4 Wildlife Movement, Linkages, and Corridors**

As described previously, considerable reference has been made to the predominance of the Black Ash Creek west of the subject lands. These lands provide a range of environmental functions including the provision of habitat, breeding areas, secure movement routes and links between natural areas. None of these functions will be altered by the proposed development of the subject lands and no intrusions into these areas will occur.

## **8.0 Overall Conclusions and Recommendations**

---

- Review of both the local and County official plans and associated environmental/land use schedules, as well as conversations with planning staff of the Town of Collingwood confirms that no environmental designations of any type have been assigned to these lands. The only areas of prominence or significance are associated with the Black Ash Creek to the west of the site, and there is 30m watercourse corridor that has been identified along both sides of the creek. No development or encroachment is to occur within this corridor, and this proposal has respected these setbacks.
- The EIS has identified a block of treed swamp existing on site and the majority of this would be removed, however, the botanical/vegetation inventories indicated that this area is comprised of common and secure plant species that are found in large numbers on adjacent lands.
- Impacts to wildlife usage of these lands would not be anticipated to be large, as the main linkage corridor Black Ash Creek will remain intact. Although there will be some loss of local habitat on the subject lands, the report notes that there are ample adjacent lands primarily to the south and west of the site where similar or improved habitat exist.
- The 30m buffer along the Black Ash Creek corridor will ensure that the proposed development could proceed with minimal impact to the overall function to the aquatic habitat within Black Ash Creek.
- We recommend that various mitigation measures, as described within this report, be utilized to minimize impacts during construction.

### **STANTEC CONSULTING LTD.**

Marielle Kennedy  
Project Manager - Environmental Assessment



Rick Hubbard  
Senior Associate, Project Manager

**APPENDIX A**  
**VEGETATION LIST**

List of the vascular plants recorded from the High Street, Collingwood property; May 2006

LATIN NAME	LOCAL STATUS SOURCE LAST UPDATE/ INITIALS	COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS BRUCE	LOCAL STATUS GREY	LOCAL STATUS SIMCOE
<u>PTERIDOPHYTES</u>		<u>FERNS &amp; ALLIES</u>										RILEY 1989 Aug 2002/JKH
<u>Equisetaceae</u>		<u>Horsetail Family</u>										
<i>Equisetum</i>	<i>arvense</i>	Field Horsetail	0	0		S5			G5	X	X	X
<u>GYMNOSPERMS</u>		<u>CONIFERS</u>										
<u>Cupressaceae</u>		<u>Cedar Family</u>										
<i>Thuja</i>	<i>occidentalis</i>	Eastern White Cedar	4	-3		S5			G5	X	X	X
<u>Pinaceae</u>		<u>Pine Family</u>										
<i>Picea</i>	<i>glauca</i>	White Spruce	6	3		S5			G5	X	X	X
<i>Pinus</i>	<i>sylvestris</i>	Scotch Pine	5	-3		SE5			G?			X
<u>DICOTYLEDONS</u>		<u>DICOTS</u>										
<u>Aceraceae</u>		<u>Maple Family</u>										
<i>Acer</i>	<i>negundo</i>	Manitoba Maple	0	-2		S5			G5	X	X	X
<i>Acer</i>	<i>saccharinum</i>	Silver Maple	5	-3		S5			G5	X	X	X
<u>Anacardiaceae</u>		<u>Sumac or Cashew Family</u>										
<i>Rhus</i>	<i>nybergii</i>	Western Poison-ivy	0	0		S5			G5T			X
<u>Apiaceae</u>		<u>Carrot or Parsley Family</u>										
<i>Daucus</i>	<i>carota</i>	Wild Carrot		5	-2	SE5			G?			X
<u>Asteraceae</u>		<u>Composite or Aster Family</u>										
<i>Achillea</i>	<i>millefolium</i> ssp. <i>millefolium</i>	Common Yarrow	3	-1		SE?			G5T?			X
<i>Ambrosia</i>	<i>artemisiifolia</i>	Common Ragweed	0	3		S5			G5	X	X	X
<i>Arctium</i>	<i>minus</i> ssp. <i>minus</i>	Common Burdock	5	-2		SE5			G?T?			X
<i>Aster</i>	<i>novae-angliae</i>	New England Aster	2	-3		S5			G5	X	X	X
<i>Chrysanthemum</i>	<i>leucanthemum</i>	Ox-eye Daisy	5	-1		SE5			G?			X
<i>Cirsium</i>	<i>arvense</i>	Canada Thistle	3	-1		SE5			G?			X
<i>Cirsium</i>	<i>vulgare</i>	Bull Thistle	4	-1		SE5			G5			X
<i>Lactuca</i>	<i>serrifolia</i>	Prickly Lettuce	0	-1		SE5			G?			X



List of the vascular plants recorded from the High Street, Collingwood property; May 2006

LATIN NAME	LOCAL STATUS SOURCE LAST UPDATE/ INITIALS	COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS BRUCE	LOCAL STATUS GREY	LOCAL STATUS SIMCOE
<i>Solidago</i>	<i>altissima</i> var. <i>altissima</i>	Tall Goldenrod	1	3		S5				X		RILEY 1989
<i>Solidago</i>	<i>ohiensis</i>	Ohio Goldenrod	10	-5		S4			G4	X		Aug 2002/KH
<i>Taraxacum</i>	<i>officinale</i>	Common Dandelion		3	-2	SE5			G5			X
<i>Tragopogon</i>	<i>pratensis</i> ssp. <i>pratensis</i>	Meadow Goat's-beard		5	-1	SE5			G?T?			X
<i>Tussilago</i>	<i>farfara</i>	Coltsfoot		3	-2	SE5			G?			X
<b>Betulaceae</b>		<b>Birch Family</b>										
<i>Betula</i>	<i>papyrifera</i>	White Birch		2		S5			G5	X		X
<b>Brassicaceae</b>		<b>Mustard Family</b>										
<i>Alliaria</i>	<i>petiolata</i>	Garlic Mustard		0	-3	SE5			G5			X
<i>Barbarea</i>	<i>vulgaris</i>	Yellow Rocket		0	-1	SE5			G?			X
<i>Lepidium</i>	<i>campestre</i>	Field Cress		5	-1	SE5			G?			X
<b>Caprifoliaceae</b>		<b>Honeysuckle Family</b>										
<i>Lonicera</i>	<i>tatarica</i>	Tartarian Honeysuckle		3	-3	SE5			G?			X
<i>Viburnum</i>	<i>opulus</i>	Guelder Rose		0	-1	SE4			G5			X
<b>Caryophyllaceae</b>		<b>Pink Family</b>										
<i>Silene</i>	<i>vulgaris</i>	Catchfly		5	-1	SE5			G?			X
<b>Cornaceae</b>		<b>Dogwood Family</b>										
<i>Cornus</i>	<i>amomum</i> ssp. <i>obliqua</i>	Silky Dogwood		5	-4	S5			G5T?	X		X
<i>Cornus</i>	<i>stolonifera</i>	Red-osier Dogwood		2	-3	S5			G5	X		X
<b>Dipsacaceae</b>		<b>Teasel Family</b>										
<i>Dipsacus</i>	<i>fullonum</i> ssp. <i>sylvestris</i>	Wild Teasel		5	-1	SE5			G?T?			X
<b>Elaeagnaceae</b>		<b>Oleaster Family</b>										
<i>Shepherdia</i>	<i>canadensis</i>	Canada Soapberry		7		S5			G5	X		X
<b>Fabaceae</b>		<b>Pea Family</b>										
<i>Medicago</i>	<i>lupulina</i>	Black Medick		1	-1	SE5			G?			X
<i>Mellilotus</i>	<i>alba</i>	White Sweet-clover		3	-3	SE5			G?			X

List of the vascular plants recorded from the High Street, Collingwood property; May 2006

LATIN NAME	LOCAL STATUS SOURCE LAST UPDATE/ INITIALS	COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS BRUCE	LOCAL STATUS GREY	LOCAL STATUS SIMCOE
<i>Trifolium repens</i>		White Clover		2	-1	SE5			G?			X
<i>Vicia cracca</i>		Tufted Vetch		5	-1	SE5			G?			X
<b>Grossulariaceae</b>		<b>Currant Family</b>										
<i>Ribes americanum</i>		Wild Black Currant	4	-3		S5			G5	X	X	
<i>Ribes cynosbati</i>		Prickly Gooseberry	4	5		S5			G5	X	X	
<b>Guttiferae</b>		<b>St. John's-wort Family</b>										
<i>Hypericum perforatum</i>		Common St. John's-wort		5	-3	SE5			G?			X
<b>Lamiaceae</b>		<b>Mint Family</b>										
<i>Glechoma hederacea</i>		Creeping Charlie	5	-2		SE5			G?			X
<i>Nepeta cataria</i>		Catnip	1	-2		SE5			G?			X
<b>Oleaceae</b>		<b>Olive Family</b>										
<i>Fraxinus pennsylvanica</i>		Red Ash	3	-3		S5			G5	X	X	
<b>Onagraceae</b>		<b>Evening-primrose Family</b>										
<i>Circaea luteiana</i> ssp. <i>canadensis</i>		Yellowish Enchanter's Nightshade	3	3		S5			G5T5	X	X	
<b>Plantaginaceae</b>		<b>Plantain Family</b>										
<i>Plantago lanceolata</i>		Ribgrass	0	-1		SE5			G5			X
<i>Plantago major</i>		Common Plantain	-1	-1		SE5			G5			X
<b>Polygonaceae</b>		<b>Smartweed Family</b>										
<i>Rumex crispus</i>		Curly-leaf Dock		-1	-2	SE5			G?			X
<b>Ranunculaceae</b>		<b>Buttercup Family</b>										
<i>Actaea rubra</i>		Red Baneberry	5	5		S5			G5	X	X	
<i>Ranunculus acris</i>		Tall Buttercup			-2	SE5			G5			X
<i>Thalictrum dioicum</i>		Early Meadow-rue	5	2		S5			G5	X	X	
<b>Rhamnaceae</b>		<b>Buckthorn Family</b>										
<i>Rhamnus alnifolia</i>		Alder-leaved Buckthorn	7	-5		S5			G5	X	X	

List of the vascular plants recorded from the High Street, Collingwood property; May 2006

LATIN NAME	LOCAL STATUS SOURCE LAST UPDATE/ INITIALS	COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS BRUCE	LOCAL STATUS GREY	LOCAL STATUS SIMCOE
<i>Rhamnus</i>	<i>cathartica</i>	Common Buckthorn		3	-3	SE5			G?			RILEY 1989 Aug 2002/KH
<b>Rosaceae</b>		<b>Rose Family</b>										
<i>Amelanchier</i>	<i>arborea</i>	Downy Juneberry		3		S5			G5	R		X
<i>Fragaria</i>	<i>virginiana</i> ssp. <i>virginiana</i>	Scarlet Strawberry	2	1		SU			G5T?	X	X	X
<i>Potentilla</i>	<i>anserina</i> ssp. <i>anserina</i>	Silverweed	5	-4		S5				X	X	X
<i>Potentilla</i>	<i>recta</i>	Rough-fruited Cinquefoil		5	-2	SE5			G?			X
<i>Prunus</i>	<i>virginiana</i> ssp. <i>virginiana</i>	Choke Cherry	2	1		S5			G5T?	X	X	X
<i>Rubus</i>	<i>idaeus</i> ssp. <i>melanolasius</i>	Wild Red Raspberry	0	-2		S5			G5T	X	X	X
<i>Sorbus</i>	<i>aucuparia</i>	European Mountain-ash		5	-2	SE4			G5			
<b>Rubiaceae</b>		<b>Madder Family</b>										
<i>Galium</i>	<i>mollugo</i>	White Bedstraw		5	-2	SE5			G?			X
<b>Salicaceae</b>		<b>Willow Family</b>										
<i>Populus</i>	<i>balsamifera</i> ssp. <i>balsamifera</i>	Balsam Poplar	4	-3		S5			G5T?	X	X	X
<i>Populus</i>	<i>tremuloides</i>	Trembling Aspen		0		S5			G5	X	X	X
<i>Salix</i>	<i>species</i>	Willow species										
<i>Salix</i>	<i>fragilis</i>	Crack Willow		-1	-3	SE5			G?			X
<b>Scrophulariaceae</b>		<b>Figwort Family</b>										
<i>Linaria</i>	<i>vulgaris</i>	Butter-and-eggs		5	-1	SE5			G?			X
<i>Verbascum</i>	<i>thapsus</i>	Common Mullein		5	-2	SE5			G?			X
<b>Ulmaceae</b>		<b>Elm Family</b>										
<i>Ulmus</i>	<i>americana</i>	White Elm	3	-2		S5			G5?	X	X	X
<b>Violaceae</b>		<b>Violet Family</b>										
<i>Viola</i>	<i>sororia</i>	Woolly Blue Violet				S5			G5		X	X
<b>Vitaceae</b>		<b>Grape Family</b>										
<i>Parthenocissus</i>	<i>inserta</i>	Inserted Virginia-creeper	3	3		S5			G5	X	X	X
<i>Vitis</i>	<i>riparia</i>	Riverbank Grape	0	-2		S5			G5	X	X	X

List of the vascular plants recorded from the High Street, Collingwood property; May 2006

LATIN NAME	LOCAL STATUS SOURCE LAST UPDATE/ INITIALS	COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS BRUCE	LOCAL STATUS GREY	LOCAL STATUS SIMCOE
<b>MONOCOTYLEDONS</b>												
<b>Cyperaceae</b>												
<i>Carex eburnea</i>		Sedge Family	6	4		S5			G5	X	X	X
<i>Carex pennsylvanica</i>		Pennsylvania Sedge	5	5		S5			G5	R	X	X
<i>Eleocharis acicularis</i>		Needle Spike-rush	5	-5		S5			G5	R	R	X
<b>Iridaceae</b>												
<i>Iris versicolor</i>		Iris Family	5	-5		S5			G5	X	X	X
<b>Juncaceae</b>												
<i>Juncus balticus</i>		Rush Family	5	-5		S5			G5	X	R	X
<b>Liliaceae</b>												
<i>Maianthemum canadense</i>		Wild Lily-of-the-valley	5	0		S5			G5	X	X	X
<b>Orchidaceae</b>												
<i>Cypripedium calceolus</i> var. <i>pubescens</i>		Orchid Family	5	-1		S5			G5T			X
<b>Poaceae</b>												
<i>Dactylis glomerata</i>		Grass Family		3	-1	SE5			G?			X
<i>Poa compressa</i>		Orchard Grass	0	2		S5			G?	X	X	X
<i>Poa pratensis</i> ssp. <i>pratensis</i>		Canada Blue Grass	0	1		S5			G5T	X	X	X
<b>FLORISTIC SUMMARY &amp; ASSESSMENT</b>												
Species Diversity		Large Yellow Lady's Slipper										
Total Species:	78	Grass Family										
Native Species:	41	Orchard Grass	53%									
Exotic Species:	37	Canada Blue Grass	47%									
Regionally Significant Species	enter manually											
S1-S3 Species	0	Kentucky Bluegrass	0%									
S4 Species	1		3%									
S5 Species	39		98%									

List of the vascular plants recorded from the High Street, Collingwood property; May 2006

LATIN NAME	LOCAL STATUS SOURCE LAST UPDATE/ INITIALS	COMMON NAME	COEFFICIENT OF CONSERVATISM	WETNESS INDEX	WEEDINESS INDEX	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	GLOBAL STATUS	LOCAL STATUS BRUCE	LOCAL STATUS GREY	LOCAL STATUS SIMCOE
												RILEY 1989 Aug 2002/KH
<b>Co-efficient of Conservatism and Floristic Quality Index</b>												
		<b>Co-efficient of Conservatism (CC) (average)</b>	<b>3.5</b>									
		CC 0 to 3 lowest sensitivity	17	46%								
		CC 4 to 6 moderate sensitivity	17	46%								
		CC 7 to 8 high sensitivity	2	5%								
		CC 9 to 10 highest sensitivity	1	3%								
		<b>Floristic Quality Index (FQI)</b>	<b>21</b>									
<b>Presence of Weedy &amp; Invasive Species</b>												
		mean weediness	-1.7									
		weediness = -1 low potential invasiveness	18	49%								
		weediness = -2 moderate potential invasiveness	12	32%								
		weediness = -3 high potential invasiveness	7	19%								
<b>Presence of Wetland Species</b>												
		average wetness value	1.3									
		upland	20	26%								
		facultative upland	20	26%								
		facultative	18	24%								
		facultative wetland	13	17%								
		obligate wetland	5	7%								

**APPENDIX B**  
**WILDLIFE LIST**

COMMON NAME	SCIENTIFIC NAME	ONTARIO STATUS	GLOBAL STATUS	COSSARO	COSEWIC	REGION	AREA	COMMENTS
<b>ODONATA</b>								
<b>BUTTERFLIES</b>								
Cabbage White	<i>Pieris rapae</i>	SE	G5					
Mourning Cloak	<i>Nymphalis antiopa</i>	S5	G5					
Monarch	<i>Danaus plexippus</i>	S4	G4	NIAC	SC			
<b>AMPHIBIANS</b>								
Northern Green Frog	<i>Rana clamitans</i>	S5	G5					
Northern Leopard Frog	<i>Rana pipiens</i>	S5	G5	NIAC	NAR			
<b>REPTILES</b>								
<b>BIRDS</b>								
Canada Goose	<i>Branta canadensis</i>	S5	G5					Overhead
Cooper's Hawk	<i>Accipiter cooperii</i>	S4	G5	NIAC	NAR		4-50+	
Red-tailed Hawk	<i>Buteo jamaicensis</i>	S5	G5	NIAC	NAR			
Killdeer	<i>Charadrius vociferus</i>	S5	G5					
American Woodcock	<i>Scolopax minor</i>	S5	G5					
Ring-billed Gull	<i>Larus delawarensis</i>	S5	G5					
Mourning Dove	<i>Zenaidra macroura</i>	S5	G5					
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	S5	G5				30	
Downy Woodpecker	<i>Picoides pubescens</i>	S5	G5					
Eastern Wood-Pewee	<i>Contopus virens</i>	S5	G5					
Alder Flycatcher	<i>Empidonax alnorum</i>	S5	G5					
Least Flycatcher	<i>Empidonax minimus</i>	S5	G5					
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	S5	G5					
Red-eyed Vireo	<i>Vireo olivaceus</i>	S5	G5					
Blue Jay	<i>Cyanocitta cristata</i>	S5	G5					
American Crow	<i>Corvus brachyrhynchos</i>	S5	G5					
Tree Swallow	<i>Tachycineta bicolor</i>	S5	G5					
Black-capped Chickadee	<i>Poecite atricapilla</i>	S5	G5					
White-breasted Nuthatch	<i>Sitta carolinensis</i>	S5	G5				10	
Brown Creeper	<i>Certhia americana</i>	S5	G5				30	
House Wren	<i>Troglodytes aedon</i>	S5	G5					
Winter Wren	<i>Troglodytes troglodytes</i>	S5	G5				30	
Wood Thrush	<i>Hylocichla mustelina</i>	S5	G5				4	
American Robin	<i>Turdus migratorius</i>	S5	G5					
Gray Catbird	<i>Dumetella carolinensis</i>	S5	G5					
Brown Thrasher	<i>Toxostoma rufum</i>	S5	G5					
European Starling	<i>Stumus vulgaris</i>	SE	G5					
Cedar Waxwing	<i>Bombycilla cedrorum</i>	S5	G5					
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	S5	G5					
Black-throated Green Warbler	<i>Dendroica virens</i>	S5	G5				30	
Blackpoll Warbler	<i>Dendroica striata</i>	S4	G5					
American Redstart	<i>Setophaga ruticilla</i>	S5	G5				30	
Common Yellowthroat	<i>Geothlypis trichas</i>	S5	G5					
Chipping Sparrow	<i>Spizella passerina</i>	S5	G5					
Song Sparrow	<i>Melospiza melodia</i>	S5	G5					
White-throated Sparrow	<i>Zonotrichia albicollis</i>	S5	G5				20	
Northern Cardinal	<i>Cardinalis cardinalis</i>	S5	G5					
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	S5	G5					
Indigo Bunting	<i>Passerina cyanea</i>	S5	G5					
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	S5	G5					
Common Grackle	<i>Quiscalus quiscula</i>	S5	G5					
Brown-headed Cowbird	<i>Molothrus ater</i>	S5	G5					
American Goldfinch	<i>Carduelis tristis</i>	S5	G5					
House Sparrow	<i>Passer domesticus</i>	SE	G5					
<b>MAMMALS</b>								
Eastern Cottontail	<i>Sylvilagus floridanus</i>	S5	G5					
Raccoon	<i>Procyon lotor</i>	S5	G5					
White-tailed Deer	<i>Odocoileus virginianus</i>	S5	G5					
<b>SUMMARY</b>								
Total Butterflies:								
Total Amphibians:								
Total Reptiles:								
Total Birds:								
Total Breeding Birds:								
Total Mammals:								
<b>SIGNIFICANT SPECIES</b>								
Global:								
National:								
Provincial:								
Regional:								
Local:								
<b>Explanation of Status and Acronyms</b>								

