

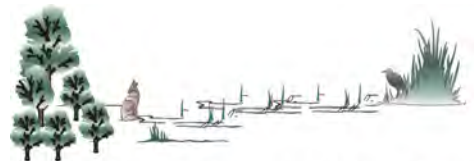
Environmental Impact Study

Beachwood Developments Inc.

Beachwood Road Subdivision

Part of Lot 34, Concession 3
Town of Wasaga Beach
County of Simcoe

January 7, 2021



Cunningham Environmental Associates

In association with

ORION Environmental Solutions

CUNNINGHAM ENVIRONMENTAL ASSOCIATES

Natural Resources Consultants

January 7, 2021

File No. 1948

Mr. Tony Romanin
Beachwood Developments Inc.
60 Pippin Road, Unit 46
Vaughan, Ontario
L4K 4M8

Re: ENVIRONMENTAL IMPACT STUDY - Beachwood Developments Inc., Beachwood Road Subdivision, Part of Lot 34, Concession 3, Town of Wasaga Beach, County of Simcoe; Our File 1948

Dear Mr. Romanin:

Enclosed is our report entitled **ENVIRONMENTAL IMPACT STUDY - Beachwood Developments Inc., Beachwood Road Subdivision, Part of Lot 34, Concession 3, Town of Wasaga Beach, County of Simcoe** (January 7, 2021).

Should you have any questions or comments, please contact the undersigned.

Sincerely,

CUNNINGHAM ENVIRONMENTAL ASSOCIATES



[digital signature]

David G. Cunningham, Hon. B.Sc.
Principal

c.c. Tony Romanin (digital copy & paper copy)
Paul Neals - Orion Environmental Solutions (digital copy & paper copy)
CEA (digital & paper file copies)

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1 INTRODUCTION

1.1 Background

Cunningham Environmental Associates (David G. Cunningham - CEA), in conjunction with Orion Environmental Solutions (Paul Neals - Orion) were retained by Beachwood Developments Inc. to prepare an Environmental Impact Study (EIS) in regards to an Official Plan Amendment (OPA), Draft Plan of Subdivision, and Zoning By-law Amendment. **Appendix A** contains the *Curriculum Vitae* of the report authors (CEA, Orion Environmental Solutions, and Sage Earth).

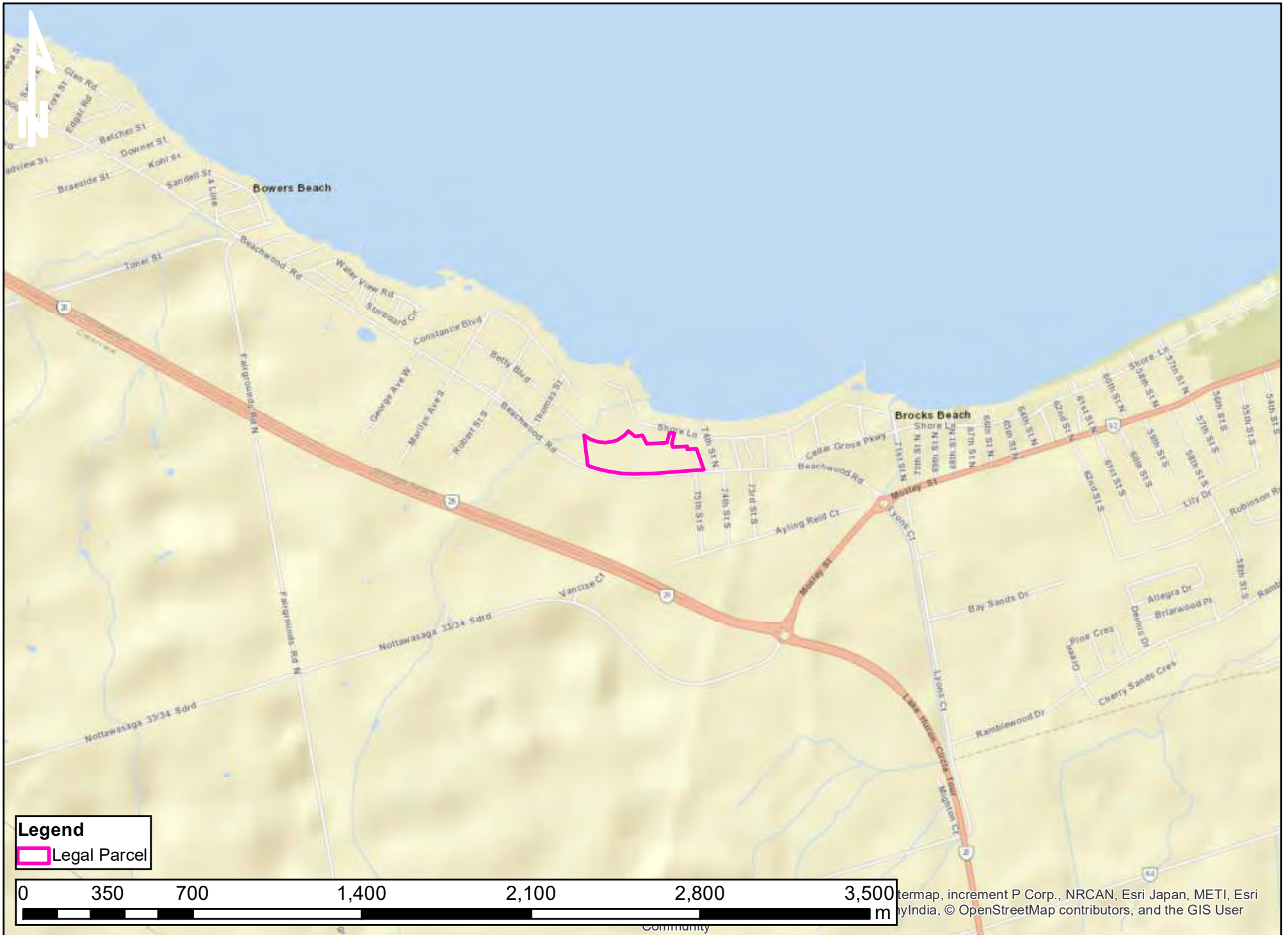
The vacant property (known herein as the “subject property”) is located along the north side of Beachwood Road on Lot 34, Concession 3, Town of Wasaga Beach, in the County of Simcoe (**Figure 1**). The subject property is bounded to the north by an unfinished portion of Betty Drive and as-built lots along Shore Lane, and Beachwood Road to the south. Scattered as-built lots that front onto Beachwood Road lie to the west. To the east lie as-built residential lots, which front onto the west side of 74 Street North (**Photographs 1 to 4**).

It is important to note, that the main source of the natural features data contained in this EIS was collected for the subject property in 2018. Beachwood Developments Inc. retained Sage Earth Environmental/Restoration Services to undertake the field work to document the natural features and their ecological functions on the subject property and note those on abutting lands. In this regard, standard Ministry of Natural Resources and Forestry (MNRF) and Ministry of Environment, Conservation and Parks (MECP) field survey protocols were followed to identify, map, inventory and assess the terrestrial vegetation communities (e.g., forest, woodland, shrub thicket, etc.), wetland vegetation communities (e.g., treed swamp, shrub thicket swamp, meadow marsh, etc.), and cultural vegetation communities (e.g., cleared and filled). The field study data was used by CEA to undertake the environmental impact analysis and prepare the EIS report.

Beachwood Developments proposes to build a Draft Plan of Vacant Land Condominium (Jones Consulting Group Ltd. September 30, 2020b). The EIS assessments/evaluations of the Draft Plan addresses the proposed impact on the natural heritage features. The Draft Plan will result in the removal of the wetland and woodland features, including alterations to the intermittent drainage swales and conversion of part of a woodland/wetland feature to a stormwater management pond (SWM pond), and a woodland feature (FOMM7-2) and a wetland feature (SWDM2-2) to a Municipal Drain (0.07ha) and Parkland (0.35 ha), both of which are to be conveyed to the Town.

This EIS is designed to satisfy the requirements under Section 13.5: Environmental Impact Studies of the Town of Wasaga Beach Official Plan. The property contains Significant Wildlife Habitat, a natural heritage feature defined by the **Provincial Policy Statement, 2020** (Province of Ontario 2020a). Additionally, the property is within a Regulated Area under Ontario Regulation 172/06, administered by the Nottawasaga

Figure 1: Key Plan





Photograph 1. Westward view of unopened portion of Betty Drive which borders the north edge of the Beachwood Developments Inc. property (CEA August 6, 2020)



Photograph 2. Westward view of Beachwood Road which borders the south edge of Beachwood Developments Inc. property (CEA August 6, 2020)



Photograph 3. Westward view of an as-built residential lot which fronts onto Beachwood Road, on the west property perimeter of the Beachwood Developments Inc. property (CEA August 6, 2020)



Photograph 4. Eastward view of an as-built residential lot which fronts onto 74 North Street, along the east property perimeter of the Beachwood Developments Inc. property (CEA August 6, 2020)

Valley Conservation Authority (NVCA) (Province of Ontario 2006). There are two intermittent drainage swales fed by culverts that cross Beachwood Road from the south. This EIS is intended to document and assess/evaluate the on-site natural and cultural features, to identify potential impacts as a result of the proposed residential development, and to provide mitigation measures. As per a landowner's due diligence under the **Endangered Species Act, 2007** (Province of Ontario 2007), the EIS is also focused on assessing the potential of the site as Species at Risk (SAR) habitat.

Sage Earth has conducted a background review of the proposed works and has conducted field investigations which included surveying the existing flora and fauna and associated habitats within the Concept Plan area and adjacent lands. The EIS report provides an overview of the existing site conditions and applicable policies, identifies any environmental constraints and opportunities, and provides recommendations with respect to the proposed project. A consolidation of the data is presented below.

1.2 Proposed Draft Plan of Condominium

The Proposed Draft Plan of Vacant Land Condominium (hereafter referred to as "The Plan") area is located on the north side of Beachwood Road, Town of Wasaga Beach, Province of Ontario. The legal parcel occupies Part of Lot 34 Concession 3, Town of Wasaga Beach, in the County of Simcoe. It is approximately 150 m long (north-south) and 470 m wide (east-west) and covers an area of approximately 5.88 hectares. A Key Plan showing the location of the subject property in a regional context is presented in **Figure 1**.

1.3 Summary of Development Proposal

The proposed land development is to build The Plan, comprised of a variety of residential buildings (e.g., singles, townhomes and high density).

The subdivision statistics are as follows:

- Residential - Singles (Units 1-33, 33 units) covering 1.1 ha
- Residential – Townhouses (Units 34-81, 48 units) covering 1.07 ha
- Residential – High Density (Units 82 & 83, 134 units) covering 2.09 ha
- Stormwater Management covering 0.31 ha
- Roadway covering 0.68 ha
- Common Elements covering 0.12 ha
- County Daylighting covering 0.02 ha
- 0.3 Reserves covering 0.01 ha
- Parkland to be Conveyed covering 0.35 ha
- Municipal Drain to be Conveyed covering 0.35 ha
- Other Lands Owned by the Applicant covering 0.06 ha

Figure 2 shows the Subdivision Total lands (5.40 ha) and Other Lands Total (0.48 ha), for a Total Land Holdings of 5.88 ha. **Figure 2** also outlines the subdivision statistics, as-built form and local context to other lands, as contained on The Plan (Jones Consulting Group Ltd. September 30, 2020b).

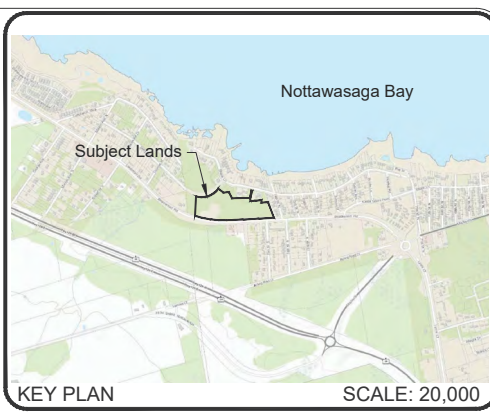
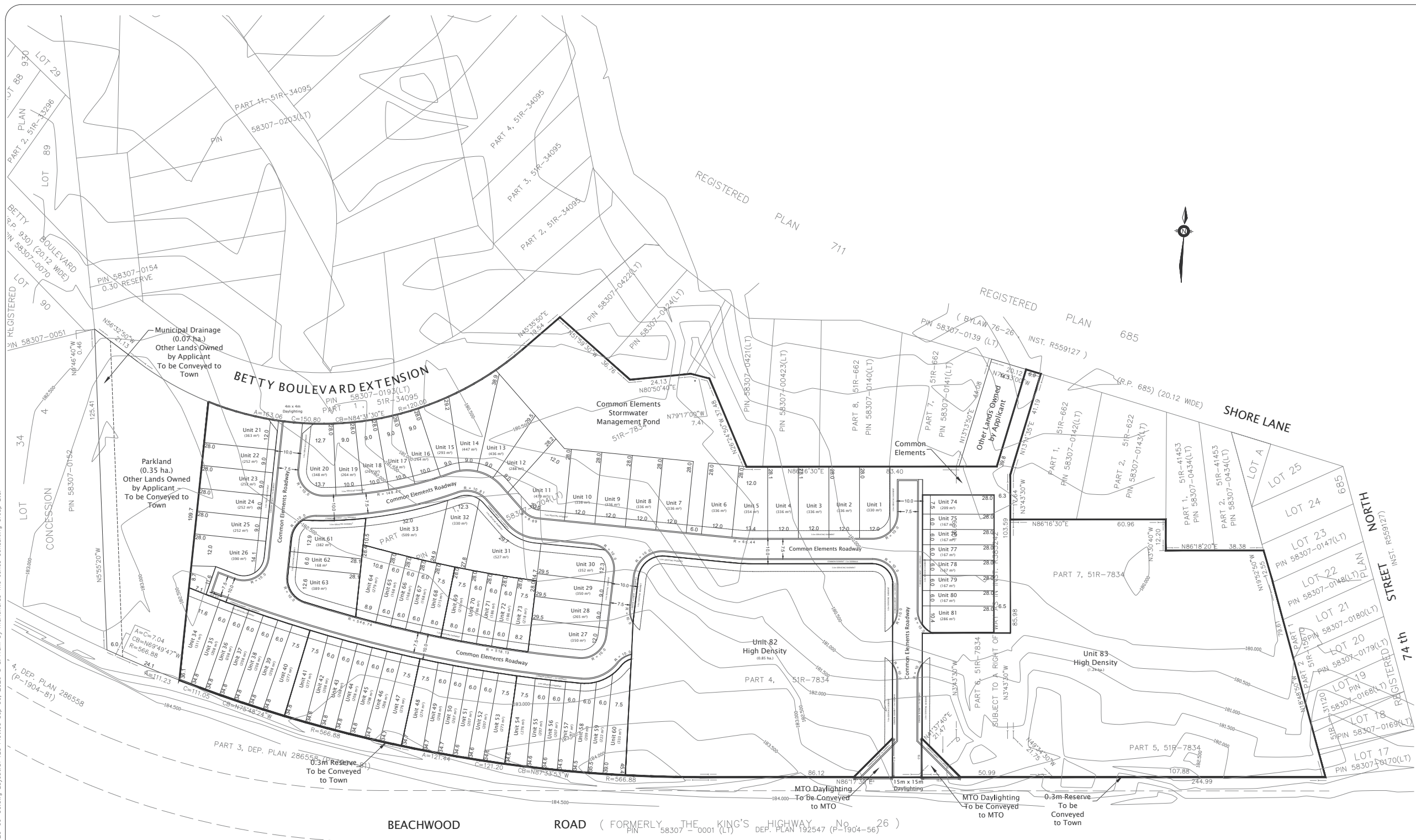
1.4 Environmental Impact Study Format

An Environmental Impact Study (EIS) is required as outlined in The Corporation of the Town of Wasaga Beach Planning Department Pre-Consultation Meeting Minutes (December 5, 2019) and other correspondence received by the Town in regards to the proposed development on Beachwood Road in the Town of Wasaga Beach (**Appendix B**).

This **EIS** is divided into a number of sections as follows:

- **Introduction**, locates the subject property, and establishes the environmental context on a local level, as well as the statistics and proposed as-built form of The Plan land area;
- **Study Approach & Methods**, describes the sources of background information and data collection methods for vegetation communities, floristics, wildlife and wildlife habitats, inclusive of Species at Risk (SAR), as per Ontario's *Endangered Species Act, 2007 (ESA 2007)*;
- **Existing Conditions**, presents site specific conditions relating to terrestrial resources, wetland resources, wildlife and wildlife habitat, and SAR;
- **Development Proposal**, provides details (subdivision statistics) of the proposed layout and as-built form of the condominium development, along with the identification and anticipated potential impacts to the on-site natural and cultural /;
- **Impacts, Policy & Environmental Designations**, provides a summary of the NHIC records and MNRF *ESA, 2007* screening pertaining to SAR known to inhabit woodland and wetland features within Simcoe County, as well as the on-site known presence of bats and Common Nighthawk. The impact assessment also identifies the importance of various provincial legislation, regulations, Official Plans and Zoning to the development proposal.
- **Recommendations to Avoid and/or Reduce Impacts**, includes a series of typical mitigation measures that can be implemented during site preparation, servicing and construction, as well as the acknowledgment of additional mitigation measures proposed by the Town, NVCA and other resource and regulatory management agencies.
- **Summaries of Opinions and Recommendations Regarding Natural Environment Issues**, recommendations and conclusions are presented and are based on the results of the EIS data and assessments/evaluations and professional opinion;

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**Proposed Draft Plan of Vacant Land Condominium
Part of Lot 34, Concession 3
Town of Wasaga Beach
County of Simcoe
2020**

OWNERS' CERTIFICATE
WE, THE UNDERSIGNED, BEING THE REGISTERED OWNERS OF THE SUBJECT LANDS, HEREBY AUTHORIZE THE JONES CONSULTING GROUP LTD. TO PREPARE THIS DRAFT PLAN OF SUBDIVISION AND TO SUBMIT SAME TO THE TOWN OF WASAGA BEACH FOR APPROVAL.

14/10/2020
DATE
M. ROMANIN CONTRACTING LIMITED

14/10/2020
DATE
SASA KRČMAR OLS, KRCMAR SURVEYORS

SURVEYOR'S CERTIFICATE
I CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT
a) SHOWN ON DRAFT PLAN
b) SHOWN ON DRAFT PLAN
c) SHOWN ON KEY PLAN
d) RESIDENTIAL SWM & DRAINAGE
e) SHOWN ON DRAFT PLAN
f) SHOWN ON DRAFT PLAN

g) SHOWN ON DRAFT PLAN
h) MUNICIPAL PIPED WATER TO BE PROVIDED
i) SAND
j) SHOWN ON DRAFT PLAN
k) ALL MUNICIPAL SERVICES TO BE PROVIDED
l) NONE

SUBDIVISION STATISTICS	AREA (ha.)	UNITS
Residential - Singles (Units 1 - 33)	1.10 ha.	33 units
Residential - Townhomes (Units 34 - 81)	1.07 ha.	48 units
Residential - High Density (Units 82 & 83)	2.09 ha.	134 units
Stormwater Management	0.31 ha.	
Roadway	0.68 ha.	
Common Elements	0.12 ha.	
County Daylighting	0.02 ha.	
0.3m Reserves	0.01 ha.	
SUBDIVISION TOTAL	5.40 ha.	
Parkland to be Conveyed	0.35 ha.	
Municipal Drain to be Conveyed	0.07 ha.	
Other Lands Owned by Applicant	0.06 ha.	
Other Lands Total	0.48 ha.	
Total Land Holdings	5.88 ha.	215 units

Figure 2



BEACHWOOD DEVELOPMENTS INC.
WASAGA BEACH
Proposed Draft Plan of Vacant Land Condominium

Registered Professional Planner
R.P.P.

Date Issued: SEPT. 30, 2020

Checked By: BC

Project No.: ROM-17026

Drawn By: m.c.r.

Drawing Name: ROM-17026-DP-VLC-20-09-30.dwg

**BEACHWOOD DEVELOPMENTS INC.
TOWN OF WASAGA BEACH**

SCHEDULE OF REVISIONS		
DATE	DESCRIPTION	DRAWN

-
- **Concluding Remarks**, provides text and figures to rationalize the proposed development in relation to the identification, characterization, and inventory of the on-site and abutting natural and cultural features, their ecological functions, and the proposed and as-built residential developments that have and will affect the hydrology and other biophysical and flora and fauna features on-site. This section also takes into account the assessments/evaluations of potential impacts based on The Plan (**Figure 2**) and the adjacent existing and proposed residential developments and other facilities (e.g., Town Work Yard and Municipal Drain) and their affects on the subject property hydrology and the natural features and their ecological functions.
 - **References**, includes background information collected and reviewed, along with natural environment technical manuals and the required stand-alone reports such as planning, engineering, hydrological, hydrogeological, and servicing produced to-date.

1.5 Acknowledgments

All aspects of the flora and fauna data and cultural, and natural features assessments of this **EIS** were undertaken by **Sage Earth** in 2018, on behalf of Beachwood Developments Inc. Included in the **EIS** is additional data obtained through the collection of background information, field inventories, cultural and natural features assessment/evaluations, mitigation measures, recommendations and professional opinions, where warranted.

The proposed Concept Plan was prepared by The Jones Consulting Group Ltd. in September 2020 and is entitled "*Proposed Draft Plan of Vacant Land Condominium*" (Jones Consulting Group Ltd. September 30, 2020a) as shown on **Figure 2**. CEA was retained on February 14, 2020 to review and confirm the Sage Earth findings, as well provide additional data inputs and undertake the assessments/evaluations regarding a proposed development plan.

CEA is working in conjunction with Orion Environmental Solutions to prepare the Environmental Impact Study (EIS) on behalf of Beachwood Developments Inc., in regards to the proposed Beachwood Road Subdivision, as per the proposed layout (as-built form) as shown on the The Plan (**Figure 2**).

2 STUDY APPROACH & METHODS

2.1 Assessment Methodologies

This Environmental Impact Study is designed to assess the potential impacts of the proposed changes to terrestrial, wetland and aquatic natural heritage features and their ecological functions. The purpose of the Environmental Impact Study is to:

- Explain the nature of the proposed development;
- Conduct field surveys for flora, wildlife, habitat features, and Species at Risk;
- Identify, locate, delineate and comment on significant natural heritage features including Species at Risk individuals and habitat, ecological functions and linkages;
- Identify and discuss the expected impacts of the proposed works; and,
- Indicate how species of the proposed project could process without negatively affecting flora and wildlife species or significant habitat features by providing mitigation measures and recommendations.

The following tasks were followed to complete the Environmental Impact Study:

- 1) Facilitate the EIS and review process with the Nottawasaga Valley Conservation Authority (NVCA) personnel of the reviewing and commenting agencies to the conclusion of the approval process. Procure and review existing documentation of the site's natural heritage.
- 2) Address site sensitivities.
- 3) Provide buffering strategies where applicable.
- 4) Present the above information in a document suitable for circulating to the Town of Wasaga Beach.

Background information was collected from the following sources:

- 1) ***Endangered Species Act, 2007;***
- 2) ***Species at Risk Act, 2002;***
- 3) Ministry of Natural Resources and Forestry. Make a Map: Natural Heritage Areas. Interactive Map (2018 and 2020);
- 4) Ministry of Natural Resources and Forestry Natural Heritage Reference Manual (2010);
- 5) Ministry of Natural Resources and Forestry Significant Wildlife Habitat Technical Guide (2000);
- 6) Ministry of Natural Resources and Forestry Significant Wildlife Habitat Criteria Schedules For Ecoregion 6E (MNR 2015);
- 7) Official Plan of the County of Simcoe (2016);
- 8) Town of Wasaga Beach Official Plan (2016);
- 9) Nottawasaga Valley Conservation Authority Interactive Mapping (2019);
- 10) Ontario Reptile and Amphibian Atlas (ORAA) (Ontario Nature 2020); and,
- 11) Ontario Breeding Bird Atlas (OBBA) (Bird Studies Canada *et al.* 2006).

In addition to the background information sources listed above, the following technical reports prepared by Beachwood Road Developments in regards to the Proposed Draft Plan of Vacant Land Condominium area were provided to and reviewed by CEA and Orion Environmental Solutions.

Additional background information that was gathered by CEA and technical reports provided to-date by the consulting team and landowner include the following:

- State of the Lakes Ecosystem Conference 1998 Biodiversity Investment Areas – Coastal Wetland Ecosystems (Fraser and Albert 1999);
- Town of Wasaga Beach Natural Heritage System – Background Review and Landscape Model (Nottawasaga Valley Conservation Authority 2005);
- Town of Wasaga Beach West End Natural Heritage Review (Azimuth Environmental Consulting Inc. 2010);
- Drainage, Hydrology and Stormwater Management Report – Detailed Design Highway 26 New Alignment between Collingwood and Wasaga Beach (Delcan 2010);
- Environmental Impact Study South-West Portion of Lot 35, Concession 3, Town of Wasaga Beach, County of Simcoe (Azimuth Environmental Consulting Inc. 2012);
- Town of Wasaga Beach Environmental Study Report Class EA for West End Depot and Water Storage (Ainley Group Consulting Engineers & Planners (2017);
- Scoped Environmental Impact Statement for Proposed Wasaga Shorelines Subdivision, Town of Wasaga Beach, County of Simcoe (Hensel Design Group Inc. 2017);
- Drainage Review, Town of Wasaga Beach, Part of Lot 34, Concession 3, County of Simcoe (Parsons 2018);
- West End Drainage Study – Town of Wasaga Beach (Ainley Group Consulting Engineers & Planners 2019);
- Hydrogeological Assessment Report – Shore Lane Development, Wasaga Beach, Ontario (Cambium Inc. 2020);
- Beachwood Development – Beachwood Developments Inc. Functional Servicing & Stormwater Management Report (Jones Consulting Group Ltd. 2020b); and,
- Arborist Report – Proposed Residential Development for Beachwood Drive, Wasaga Beach (JDB Associates Ltd. 2020)

2.2 Surface Hydrology and Soils

Surface water features (drainage swales) and site drainage (soil texture and slope) were evaluated based upon field observations, NVCA Interactive Mapping (watercourse layer) and Simcoe County Interactive Mapping (2-meter contours). Three soil cores were taken to a depth of 120cm to determine the horizons and soil texture, depths to mottles and gleys, effective texture, soil moisture regimes, pore pattern, and drainage class throughout the Concept Plan area.

2.3 Protocol for Vegetation Community and Structure Analysis

The geographical extent, composition, structure and function of vegetation communities within the Concept Plan area were first identified through air photo interpretation and then confirmed through field investigation. Air photos were interpreted to determine the limits and characteristics of vegetation communities.

Vegetation communities were classified according to the Southern Ontario Ecological Land Classification Vegetation Type Lists (Lee *et al.* 1998, Lee 2008). The communities were sampled using a plotless method for the purpose of determining general composition and structure of the flora and the vegetation communities within the Concept Plan area. An extensive vascular plant list was compiled, as well as the height and cover of each layer and the dominant species in each layer. Plant species status was reviewed for Ontario according to the Natural Heritage Information Centre Vascular Plant List (NHIC 2017), Bradley 2007). Vascular plant nomenclature follows Newmaster *et al.* (1998).

In addition to the Sage Earth vegetation community and floristics data, additional site visits and inventories were conducted on June 6, 2020 and August 6, 2020, following similar MNRF survey techniques and protocols and the NHIC Vascular Plant List (NHIC 2020, Bradley 2007).

2.4 Wildlife and Wildlife Habitat

Wildlife species and habitat data were collected via field investigation and knowledge of the Ecological Land Classification (ELC) vegetation communities present on the site. Ecological Land Classification was utilized to describe wildlife habitat, where appropriate. Wildlife species were identified through direct observation, vocalizations, or evidence such as tracks, scat and browse. Special focus was placed upon searching for Species at Risk individuals, habitat and habitat features such as vernal pools, dens, burrows (small and large), snake thermoregulation areas, tree cavities and basking sites. Incidental wildlife surveys to search for mammals, birds and herptiles were completed every time the Concept Plan area was visited.

2.4.1 Breeding Bird Surveys

Field investigations were conducted to search for breeding bird evidence (BBE) and to characterize the nature, extent and significance of breeding bird usage within the Concept Plan area. Territorial songs along with direct observations of bird breeding behaviours were used to record BBE. Survey methodology and breeding bird behaviours used as evidence of breeding success were categorized according to the Breeding Bird Atlas five-year surveys organized by Bird Studies Canada *et al.* (2006) (BSC).

Surveys were completed within a two-week time-frame of each other, at three point-count stations. All three point-count stations were located within the Concept Plan area and were spaced approximately 250m apart (**Figure 4**). Surveys occurred in the morning hours and each station was surveyed for ten minutes. All bird surveys were undertaken in good weather with warm temperature, no precipitation and little or no wind. Species were identified through their unique vocalizations, as well as visual observations.

2.4.2 Nocturnal Bird Surveys

A nocturnal bird survey was conducted on June 25, 2018 to detect the presence of potential breeding Common Nighthawk (*Chordeiles minor*) and Eastern Whip-poor-will (*Caprimulgus vociferus*). The Common Nighthawk and Eastern Whip-poor-will survey was conducted during an appropriate breeding window for both species (mid-May to early July). The survey was conducted either a few days before or after the full moon, as males of these species are known to be most vocal during the period of the full moon. The survey was conducted with little to no wind (less than 8km/h), with an ambient temperature above 7°C, and no precipitation. Surveys began at sunset and continued for one hour. When documenting the presence of Common Nighthawk or Eastern Whip-poor-will, the following information was recorded: species name, observation time, description of habitat, bird location (compass bearing and estimated distance to bird), and the GPS coordinate of the survey station. To minimize the disturbance to these sensitive species, there were no attempts to confirm the presence of, or locate a potential nest.

2.4.3 Amphibian and Reptile Surveys

Amphibian surveys were undertaken in accordance with the Amphibian Road Call Count and Marsh Monitoring Program protocols (Bird Studies Canada *et al.* 2009). Surveys were conducted three times during the breeding season on May 2 2018, May 30 2018 and June 25 2018. Surveys began after sunset and two amphibian count stations were surveyed for three minutes. Call level codes were used to categorize the intensity of calling activity for each species. The three call codes are as follows:

- Level 1 - Individuals can be counted, calls not overlapping.
- Level 2 - Numbers of some individuals can be estimated or counted, others overlapping.
- Level 3 - Full chorus, calls continuous and overlapping, individuals not distinguishable.

Additionally, many species of amphibians, such as salamanders, can be found through searches of cover in wooded habitats. Snakes also utilize objects for cover and temperature regulation. Therefore, random searches of natural objects that provide cover (large branches, logs, rocks) were conducted. Cover objects were lifted or turned over in search of individuals underneath the object. All observed amphibian and reptile species were recorded during site visits.

2.5 Species at Risk Survey Methods

Field surveys were carried out to determine the potential population and distribution of Species at Risk individuals and to delineate the habitat and habitat features within the Concept Plan area. The survey was carried out to provide detailed and reliable information on Species at Risk presence or absence, suitable habitat, habitat features, location, distance from the proposed development, population size, management concerns and to ensure that the proposed development does not contravene the *Endangered Species Act, 2007*.

The search efforts were focused on inspecting sites and features with a high probability of supporting Species at Risk. When documenting each Species at Risk specimen/population, habitat or habitat feature the following data was recorded on paper and on a Global Positioning System (GPS):

- Species (scientific name);
- habitat or habitat feature;
- location (Universal Transverse Mercator (UTM) co-ordinates); and,
- relative abundance.

Points were used to delineate the location. UTM coordinates were recorded on hand-held GPS units, downloaded to a computer and mapped on an ortho-rectified digital air photo using a Geographic Information System (GIS).

2.5.1 *Species at Risk Bat Habitat Survey*

One SAR bat maternity roost surveys was conducted using MNRF (Midhurst District) Protocol for Maternity Roost Surveys in Treed Habitats (MNRF 2017a). The purpose of the SAR bat maternity roost survey was to determine potential breeding habitat on the legal parcel for endangered species of bats such as Little Brown Myotis (*Myotis lucifugus*) and Northern Myotis (*Myotis septentrionalis*). The methodology for the surveys is described in the sections below.

2.5.2 *Phase 1: Identification of Potential Maternity Roost Habitat*

Phase 1 consisted of an analysis of the ELC communities on the original Concept Plan area to determine if they are considered potential SAR bat habitat as per MNRF (2017a). The protocol states that SAR bat habitat can be found in: “any coniferous, deciduous or mixed wooded ecosite, including treed swamps, that includes trees at least 10cm diameter-at-breast height (DBH) should be considered suitable maternity roost habitat” (MNRF 2017a).

2.5.3 *Phase 2: Detailed Mapping of Trees/Snags*

2.5.3.1 *Leaf-off Survey*

A leaf-off survey was conducted on April 30, 2018 to determine possible maternity roost trees for Northern Myotis and Little Brown Myotis. The locations of all snags were recorded using a handheld GPS. Attributes such as diameter at breast height (DBH), decay class, as well as the presence of cavities, loose bark, cracks and knot holes were noted for each snag. For the purpose of the leaf-off survey, a “snag” was considered to be “any standing live or dead tree $\geq 25\text{cm DBH}$ with cracks, crevices, hollows, cavities, and/or loose or naturally exfoliating bark” (MNRF 2017a), that would be suitable for bats. Surveys were conducted on days with no precipitation and not after recent snowfall, so as not to obscure the features on the suitable trees and snags.

The snags and trees that were assessed were ranked according to the following criteria (in order of importance):

-
- Tallest snag/cavity tree;
 - Exhibits cavities or crevices most often originating as cracks, scars, knot holes or woodpecker cavities;
 - Has the largest diameter breast height (>25cm diameter at breast height);
 - Is within the highest density of snags/cavity trees (e.g. cluster of snags);
 - Has a large amount of loose, peeling bark;
 - Cavity or crevice is high in snag/cavity tree (>10m);
 - Tree species that provide good cavity habitat (e.g. white pine, maple, aspen, ash, oak);
 - Canopy is more open (to determine canopy cover, determine the percentage of the ground covered by a vertical projection of the outermost perimeter of the natural spread of the foliage of trees); and,
 - Exhibits early stages of decay (decay Class 1-3; refer to Watt and Caceres 1999).

2.5.3.2 *Snag Density Calculation*

Snag density calculations were then performed on the area that was assessed as potential maternity roost habitat in Phase 1. The following formula was used to calculate snag density:

Snag Density = number of suitable trees/snags/areas of potential bat habitat (ha)

As per MNRF Midhurst Protocol for Maternity Bat Roost Surveys in Treed Habitat (MNRF 2017a), an area with more than 10 snags/ hectare is considered to be high quality potential SAR bat maternity roost habitat.

Appendix C contains the ESA Screening Request submitted to the MNRF by John Tress (Sage Earth) on May 15, 2018. Appendix D contains the ESA Screening Response from Jodi Benvenuti (MNRF Midhurst District Office) on August 31, 2018.

3 EXISTING CONDITIONS

3.1 Designated Significant Natural Areas

The Ministry of Natural Resources and Forestry (MNRF) - Make a Map: Natural Heritage Areas internet application (MNRF 2018, NHIC 2018) indicates that the subject property supports a woodland feature (**Figure 3**).

3.2 Field Work

Sage Earth conducted field work on the following dates in 2018:

1. April 30 – leaf off bat survey by John Tress – 12°C, overcast, light breeze
2. May 2 – amphibian survey by John Tress and Dan Barcza – 12°C, overcast, light breeze
3. May 30 – amphibian survey by John Tress – 26°C, clear skies, light breeze
4. June 6 – breeding bird survey, spring flora survey, wetland boundary delineation by Dan Barcza – 11°C, clear skies, light breeze
5. June 18 - breeding bird survey by Nicole Wajmer – 32°C, clear skies, no wind
6. June 25 - amphibian survey and nocturnal bird survey by Nicole Wajmer - 13°C, clear skies light breeze
7. October 24 – fall vegetation, ELC survey, soil survey and wetland boundary delineation by Dan Barcza and Nicole Wajmer - 6°C, light rain.

Additional field work was conducted by CEA on June 16, 2020 and August 6, 2020. The site reconnaissance and field work consisted of reviewing and confirming the classification, extent and composition of the identified forest/woodland and wetland features as illustrated on **Figure 4** – Existing Conditions, Beachwood Road and **Figure 5** – Regulated Area, Drainage Swales and Wetlands.

3.3 Soils

According to the Ontario Soil Survey of Simcoe County Report No. 29 (Hoffman *et al.* 1962) the soils within The Plan area are composed mostly of Sargent Gravelly Sandy Loam (Stsl). It is a relatively coarse and well-drained soil class.

3.3.1 Soil Cores

Three soil cores were taken on the property. Their locations are illustrated on **Figure 4**.

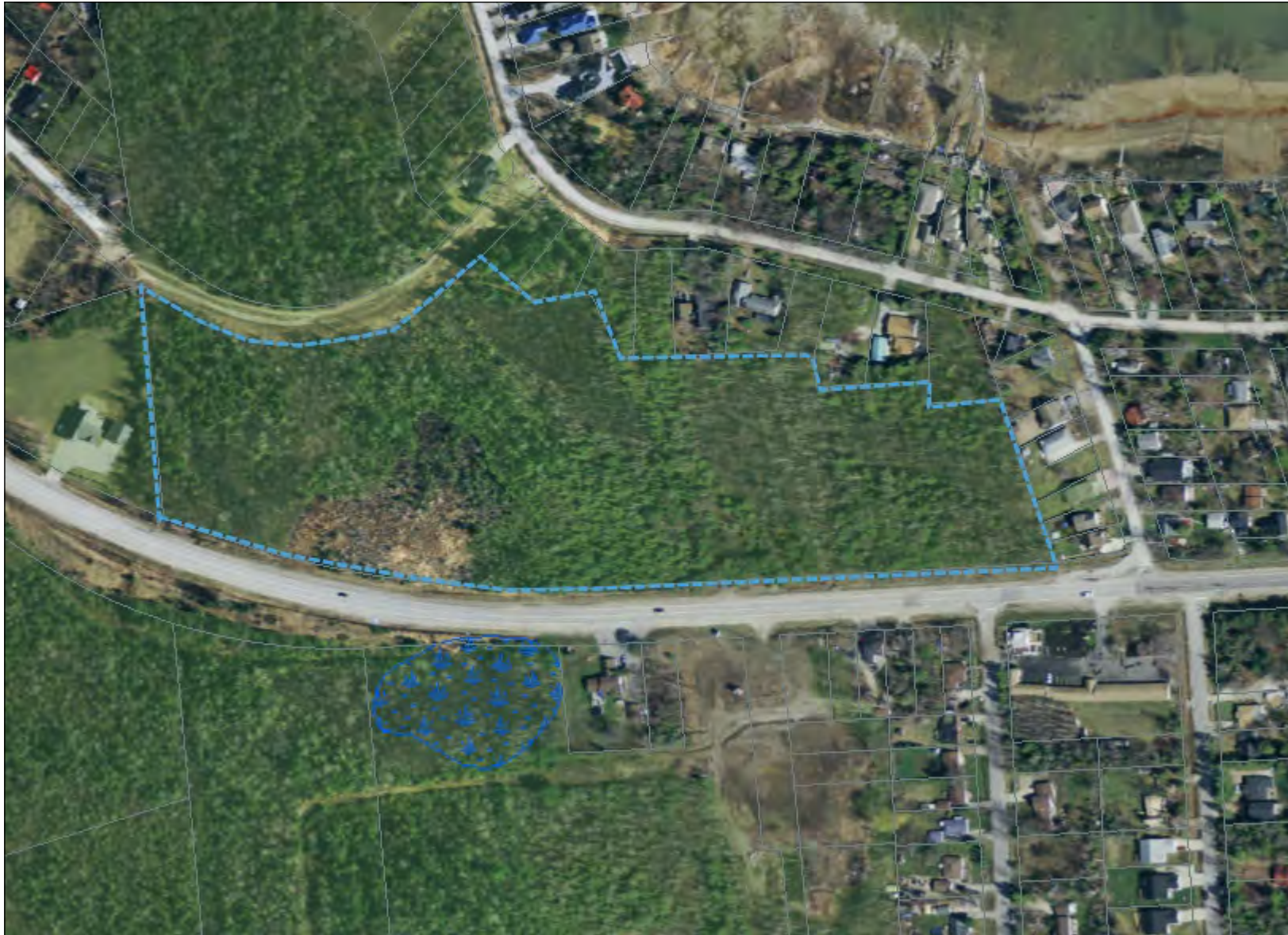
Soil core #1 had an effective texture of silty sand and a moisture regime of 4 – moderately moist.

Soil core #2 had an effective texture of silty sand and a moisture regime of 5 – moist.

Soil core #3 had an effective texture of silt loam and a moisture regime of 6 – very moist.

Figure 3 - Natural Heritage Features

Notes: Blue dotted line = legal parcel boundary



Legend

- Assessment Parcel
- Woodland
- Conservation Reserve
- Provincial Park
- Natural Heritage System
- Ecoregion

Wetland

- Provincially Significant Wetland Evaluated
- Non-Provincially Significant Wetland Evaluated
- Unevaluated Wetland

Area of Natural Heritage & Scientific Interest (ANSI)

- Provincially Significant Life Science ANSI
- Provincially Significant Earth Science ANSI

Greenbelt Plan

- Boundary
- River Valley Connections

Land Use Designations

- Protected Countryside
- Towns and Villages
- Hamlets
- Urban River Valley
- Specialty Crop Area

Niagara Escarpment Plan (NEP)

- Boundary
- Parks and Open Space System

Land Use Designations

- Escarpment Natural Area
- Escarpment Protection Area
- Escarpment Rural Area
- Mineral Resource Extraction Area
- Escarpment Recreation Area
- Urban Area
- Minor Urban Centre

Oak Ridges Moraine Conservation Plan (ORM)

- Boundary

Land Use Designations

- Natural Core Area
- Natural Linkage Area
- Countryside Area
- Rural Settlement
- Palgrave Estates Residential Community
- Settlement Area

0.2 0 0.11 0.2 Kilometers

Scale: 1 : 4,513



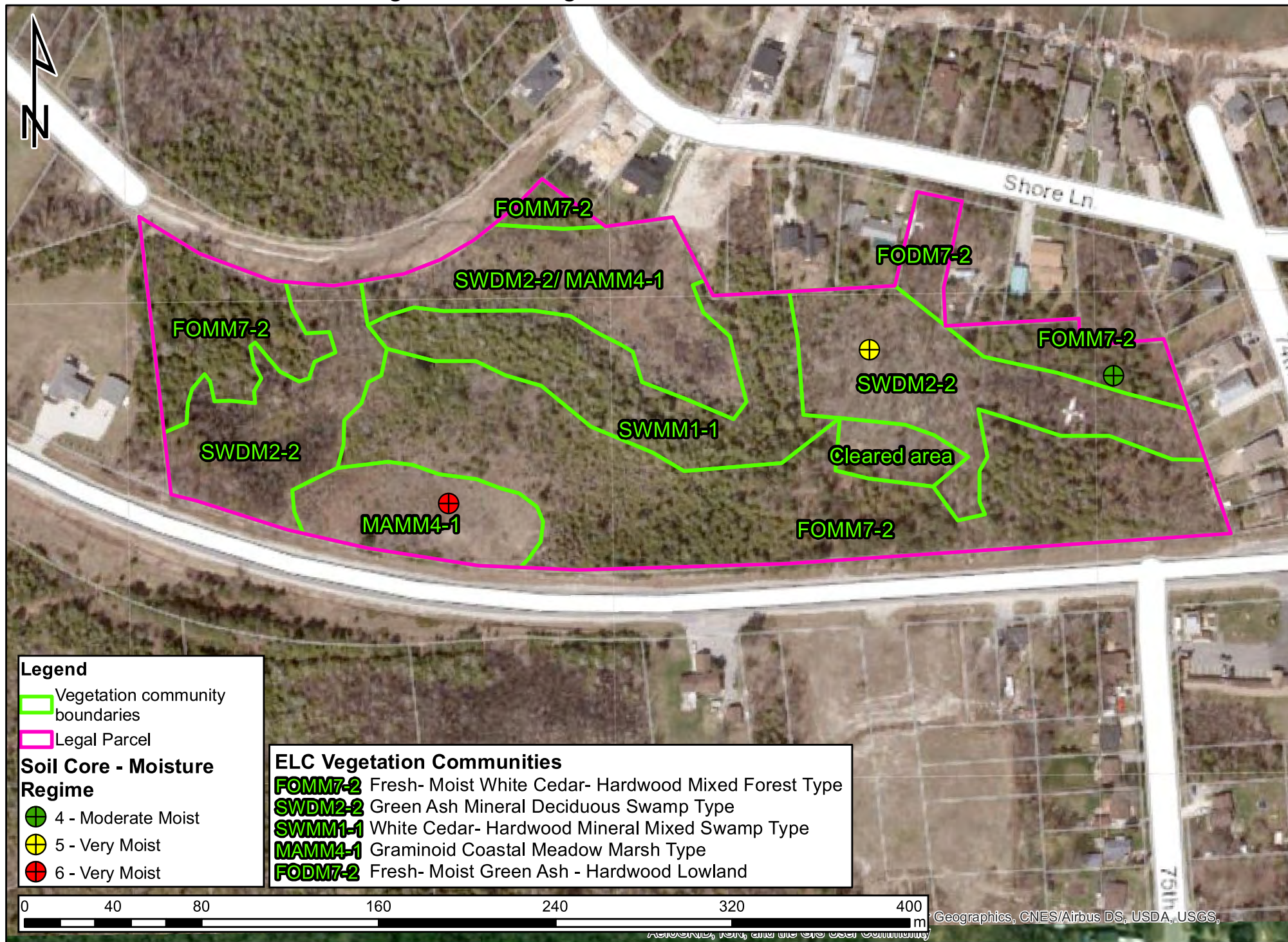
This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Natural Resources and Forestry (OMNRF) shall not be liable in any way for the use of, or reliance upon, this map or any information on this map.

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Figure 4: Existing Conditions, Beachwood Road



Legend

Vegetation community boundaries

Legal Parcel

Soil Core - Moisture Regime

⊕ 4 - Moderate Moist

⊕ 5 - Very Moist

⊕ 6 - Very Moist

ELC Vegetation Communities

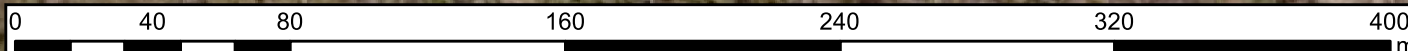
FOMM7-2 Fresh- Moist White Cedar- Hardwood Mixed Forest Type

SWDM2-2 Green Ash Mineral Deciduous Swamp Type

SWMM1-1 White Cedar- Hardwood Mineral Mixed Swamp Type

MAMM4-1 Graminoid Coastal Meadow Marsh Type

FODM7-2 Fresh- Moist Green Ash - Hardwood Lowland



3.4 Hydrology

3.4.1 *Culverts and Drainage Swales*

Two small drains cross the property, one on its western border and one on the eastern end (**Figure 5**). The drains flow out of culverts located under Beachwood Road. The western culvert supplies flow and is delineated as an intermittent drainage swale, the east culvert provides intermittent flows with seasonal fluctuations in rainfall and meltwater. It is to be noted, that most of this drainage will be diverted to the west, by the proposed construction of a Municipal Drain, which will service the planned Town Work Yard abutting the subject property on the south side of Beachwood Road, as well as future designated residential parcels on the south side of Beachwood Road, to the west of the Town's Work Yard.

3.4.2 *Shoreline and Wetland*

The Plan area is located approximately 150 m from the shoreline of Georgian Bay. The permeability of the land affects the runoff into the Bay. Additionally, the property contains approximately 3.1 hectares of wetland which helps control flow from major precipitation events and cleanses runoff before flowing to the Lake. It is to be noted, that the hydrology of the subject property has and will be affected by the proposed work yard municipal drain and has been affected by the Collingwood Highway 26 By-pass road.

3.4.3 *Soil Moisture Regime*

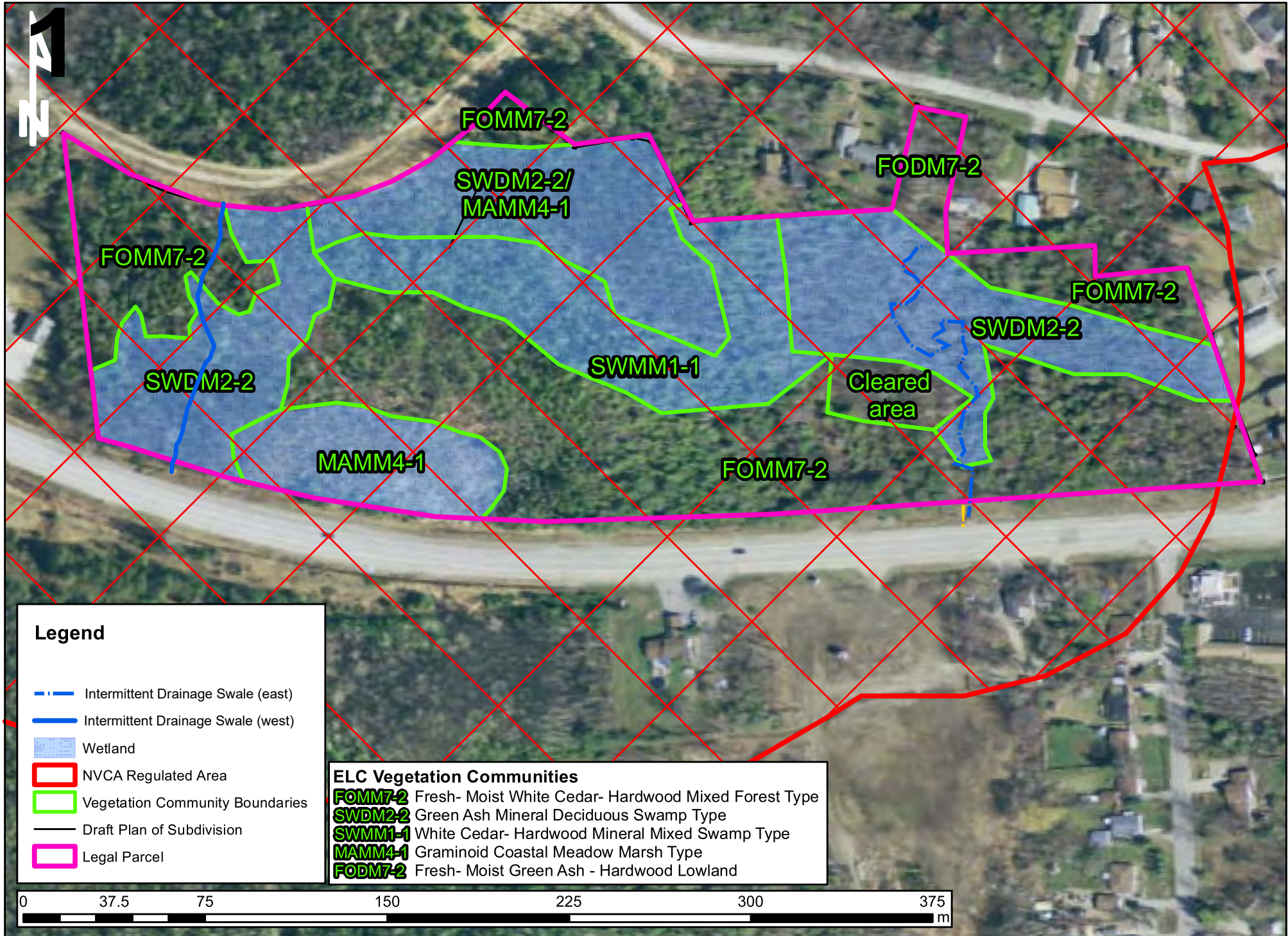
The average soil moisture regime across the 3 soil cores is 5 – Moist. This indicates that the soil is wet to mesic. It also indicates the extent of wetland coverage. No groundwater was encountered in of the any auger samples.

A hydrogeological assessment was prepared by Cambium Inc. based on four (4) boreholes which were installed with monitoring wells to allow for measurement of the static groundwater elevation on site. The groundwater direction was north towards Georgian Bay. The Cambium Inc. (2020) report should be consulted of the all details regarding groundwater on the subject property.

The following section prepared by Orion Environmental Solutions is intended to provide an overall perspective and analysis of the past, present and future land use changes in proximity to the subject property, that will significantly alter both current ground and surface water contributions. The section is as follows:

The purpose of the section is to review the proposed land use changes both existing and proposed in proximity to the Beachwood Development lands that would alter ground and surface water contributions to the site. This analysis was initiated because the ecological assessment found evidence based on the vegetative community composition that the wetlands on the property were becoming dominated by facultative and/or non-wetland species. Our review of the adjacent land use found indicators that would substantiate that the water regime that historically would have supported wetland species has currently and

Figure 5: NVCA Regulated Area, Drainage Swales and Wetlands



will be altered with future development on the adjacent lands. The following sections present our assessment of these land use changes and the implications to the property.

Highway 26 Construction

In 2009 the Ministry of Transportation retained Delcan to assess the drainage, hydrology and stormwater management for the detailed design of Highway 26 (Delcan 2010). Delcan's findings are documented in the Drainage, Hydrology and Stormwater Management Report – Preliminary Design July 3, 2010.

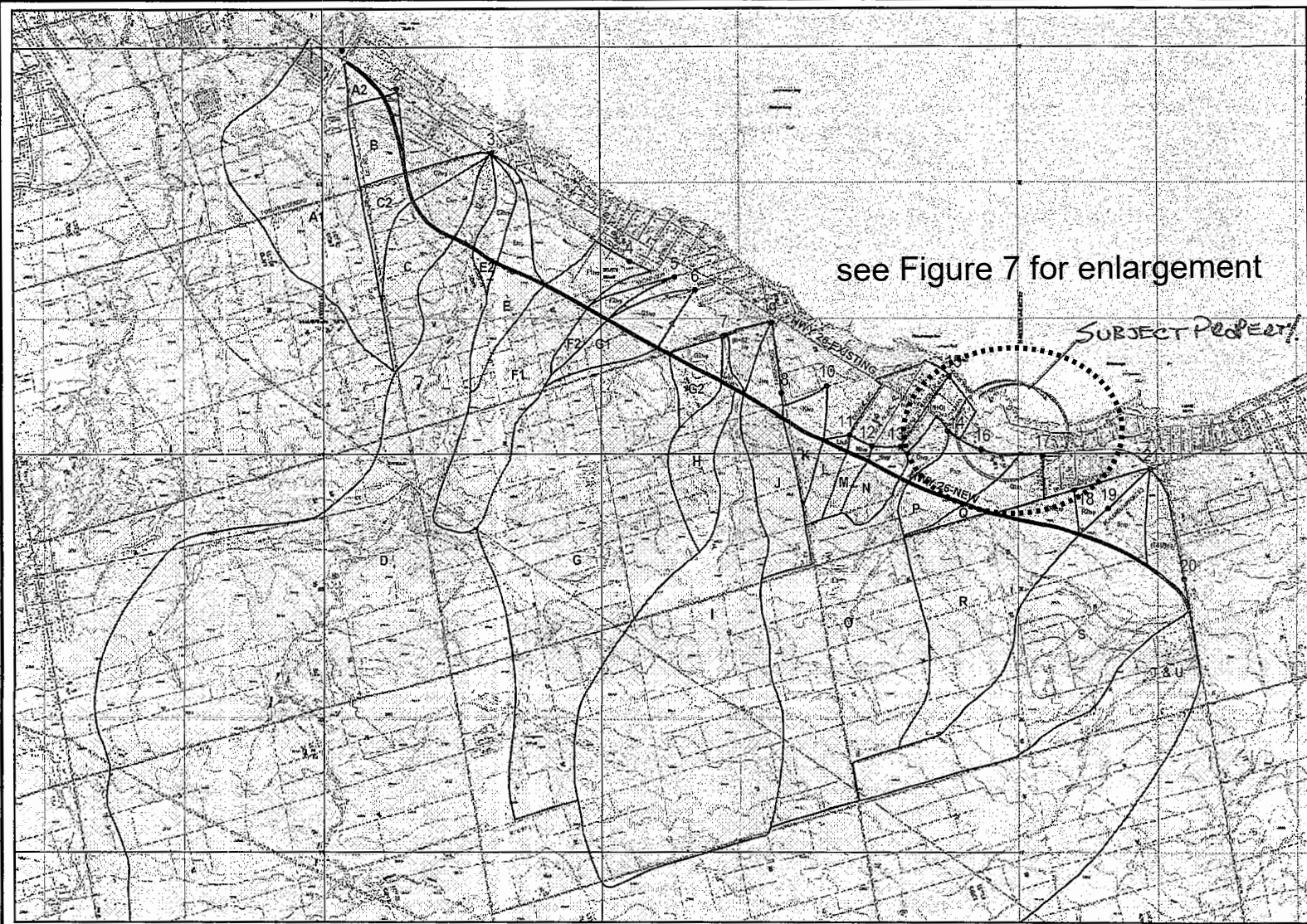
Section 3.2 Existing Drainage Conditions defined the pre-development drainage conditions for the drainage areas impacted by the highway. The drainage area in proximity to the subject property were defined as P, Q and R (copy appended). The predevelopment external area of P and the downstream area of P drains west of Joan Avenue. Delcan estimated the drainage area as approximately 10 ha. The pre-development condition external area Q and downstream area drain to 75th Street. Post development the flows from Area P were directed to the dry pond on the south side of Highway 26 located in proximity to Robert Street South (**see Figure 6**). Post development flows from Area Q continued to be conveyed to 75th Street and flows from Area R were diverted to a new ditch along the realigned through the Mosley Street/Airport Road (Lyons Court) intersection that discharges to a canal along 71st Street that discharges to bay. This drainage pattern was carried forward into the Detailed Design report dated January 27, 2010. Figure 1 of the report defined the drainage areas (**Figure 6**). To assist in the review the drainage areas specific to the subject property a zoomed in view of the area in question on Figure 1 has been reproduced as **Figure 7**.

The detailed design report stated in Section 3.2 Design Approach that the drainage from areas P and Q will be managed to address flooding issues on Airport Road. Flows from Area Q will be directed to a culvert on Highway 26 and then flow overland to the ditch along 75th street. Drainage from the external catchment area P is directed into the long linear storm water pond on the south side of Highway 26.

The management of storm water flow for Highway 26 based on the subwatersheds defined by Delcan would redirect approximately 50% of the surface runoff from the Area P drainage area into the highway storm water pond. Surface runoff from Area P north of Highway 26 is captured by the municipal ditch along Beachwood Road and conveyed through the east portion of the subject property via a drainage feature to Shore Lane where it is conveyed via the municipal drainage system to the bay.

The Town of Wasaga Beach has undertaken the approvals to construct a new water tower and public works yard south of the Beachwood Development lands, (**see Figure 8**). In August of 2019 the Ainley Group issued the Town of Wasaga Beach West End Drainage Study (Ainley Group 2019). The purpose of the report was to address storm water management for the new West End Water Storage Facility and Maintenance Depot and the construction of Joan Avenue that will be used to access the site. The study area included Beachwood Road, Shore Lane, 75th Street South, 74th Street North and Ayling Reid Court. The study resulted in the recommendation to construct a storm water management pond for the public works lands and convey the stormwater discharge north via a drainage channel through the Beachwood Development lands to the bay. The proposed development layout has been imposed on the site in **Figure**

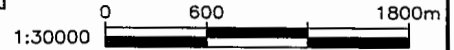
J:\Delcan\Water\Projects\MARQUETTE\HWY 26 - Drainage\CAD Files\External Drainage patterns\HWY 26 - External Drainage Patterns - 0707.dwg, Fig. 1, Jul 02, 2003 3:52pm.dwg



HRP ID	HRP-Description
HRP-1	Huronias Pathway
HRP-2	Between Huronias Pathway and Lakeview Avenue
HRP-3	Batteaux Creek
HRP-4	Glenlake Blvd
HRP-5	Broadview Street
HRP-6	Braeside Street
HRP-7	Nottawa Sideroad Channel
HRP-8	Fairgrounds Roadside Ditch
HRP-9	Intersection of Nottawa, Fairgrounds Rd and Hwy 26-existing
HRP-10	Interceptor Ditch
HRP-11	George Avenue
HRP-12	Marilyn Avenue
HRP-13	Robert Street
HRP-14	Thomas Street
HRP-15	Constance Blvd
HRP-16	West of Joan Avenue
HRP-17	75th Street
HRP-18	Existing Airport Road
HRP-19	Realligned Airport Road
HRP-20	The Canal (Nottawa East Canal)
HRP-21	Intersection of Mosley St, Airport Rd and Hwy 26-existing



Figure 6. Delcan Report (2010) Figure 1



LEGEND

BOUNDARY OF CATCHMENT AREA
 HYDROLOGIC REFERENCE POINT (HRP)
 PROPOSED HWY 26 (NEW)

A, B EXTERNAL DRAINAGE AREA ID UPSTREAM OF HWY 26-NEW
C_{UP} DRAINAGE AREA ID DOWNSTREAM OF HWY 26-NEW



SCALE: 1 : 30000 DATE: June 30, 2009
 HIGHWAY 26 NEW ALIGNMENT BETWEEN COLLINGWOOD AND WASAGA BEACH (GMP 630-91-00)
 Figure 1: DRAINAGE AREAS AND HYDROLOGIC REFERENCE POINTS (HRPs) WITHIN THE STUDY LIMITS

Georgian Bay

Beachwood Developments Inc.

**Drainage
Areas**

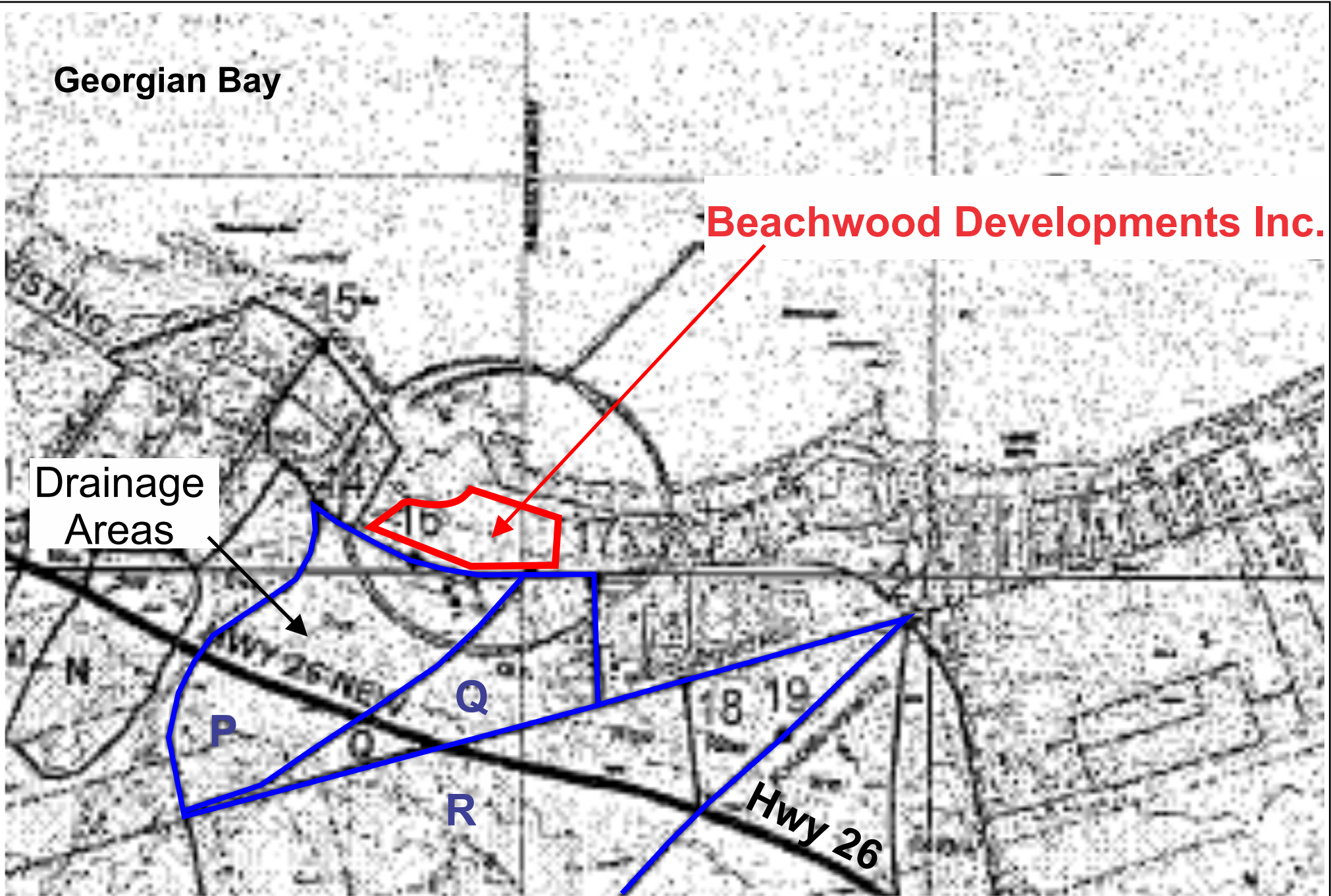


Figure 7. Delcan Report (2010) Figure 1 Area Enlargement



LEGEND

subject property

Figure 8 - Land Use & Drainage Changes

Map Source: Google Earth

ORION ENVIRONMENTAL SOLUTIONS

DATE ISSUED: SEPT 2020

CREATED BY: PCN

PROJECT NO. - 18-019

Not To Scale

Figure 8

8. The proposed alignment of the drainage channel (Municipal Drain) to convey the flow to the bay is shown on **Figure 8**. Joan Avenue will be constructed in compliance with the urban cross section and provide access to the public works facilities. An agreement was made with the previous landowner when the property was acquired for the public works depot and Joan Avenue that the stormwater management design for the Town's lands would accommodate stormwater management under built-up conditions for the adjacent properties. This study confirms storm water from the public works yard and the development of Joan Ave will be conveyed via storm water management facilities and will not be discharged into the Beachwood lands.

In reviewing the Official Plan for the Town, the lands to the west of the public works yard designated for residential development and zoned Development (D). This would indicate historic drainage patterns will be further altered on the upgradient lands to convey runoff via municipal storm water management facilities to the bay.

Based on these existing and potential future drainage modifications in our opinion, it is reasonable to assume the observed drying out of the wetlands on the subject property will continue over time as the Town's development plans for the area are realized.

3.5 Topography

The overall slope of the subject property is flat. However, there are localized subtle higher and lower areas within the parcel.

3.6 Flora and Vegetation Communities

3.6.1 *Ecological Land Classification Vegetation Communities*

There are five distinct ELC vegetation communities within The Plan area. These communities include: Fresh – Moist White Cedar – Hardwood Mixed Forest Type (FOMM7-2), Green Ash Mineral Deciduous Swamp Type (SWDM2-2), White Cedar – Hardwood Mineral Mixed Swamp Type (SWMM1-1), Graminoid Coastal Meadow Marsh Type (MAMM4-1), and a Fresh – Moist Green Ash – Hardwood Lowland Deciduous Forest Type (FODM7-2). In addition, there is a small pocket cultural feature, consisting of graded fill, with a weedy vegetation overburden.

The vegetation community type, structure and plant species dominance in each can be found in **Table 1** with their locations are shown on **Figure 4**.

3.6.1.1 *Fresh – Moist White Cedar – Hardwood Mixed Forest Type (FOMM7-2)*

The FOMM7-2 vegetation community was present in many areas of The Plan area; on the east and west, a small section on the north side, and a large section of the south side. **Photographs 5 to 7** show examples of the site conditions during field visits in 2018 and 2020.

TABLE 1: SUMMARY OF ECOLOGICAL LAND CLASSIFICATION

Abbreviation	Vegetation Type	Species Association	Comments
WETLAND SYSTEM			
SWDM2-2	Green Ash Mineral Deciduous Swamp Type	<p>Canopy: The canopy is dominated by Green Ash (<i>Fraxinus pennsylvanica</i>) with abundant Trembling Aspen (<i>Populus tremuloides</i>).</p> <p>Understory: The understory contains abundant Red-osier Dogwood (<i>Cornus stolonifera</i>), Green Ash (<i>Fraxinus pennsylvanica</i>) saplings, Silky Dogwood (<i>Cornus amomum ssp. obliqua</i>) and Pussy Willow (<i>Salix discolor</i>).</p> <p>Ground Cover: Contains abundant Graceful Sedge (<i>Carex gracillima</i>), Tall Meadowrue (<i>Thalictrum pubescens</i>), Fowl Manna Grass (<i>Glyceria striata</i>), Spotted Jewel-weed (<i>Impatiens capensis</i>), Yellow Avens (<i>Geum aleppicum</i>), Marsh Marigold (<i>Caltha palustris</i>), Bladder Sedge (<i>Carex intumescens</i>), Purple Avens (<i>Geum rivale</i>), Alderleaf Buckthorn (<i>Rhamnus alnifolia</i>) and Baltic Rush (<i>Juncus balticus</i>).</p>	<ul style="list-style-type: none"> • Tree cover >60% • Trees with diameter at breast height (DBH) 10-24cm dominant
SWMM1-1	White Cedar – Hardwood Mineral Mixed Swamp Type	<p>Canopy: The canopy is dominated by Eastern White Cedar (<i>Thuja occidentalis</i>) and Balsam Fir (<i>Abies balsamea</i>) with abundant White Birch (<i>Betula papyrifera</i>), and Green Ash (<i>Fraxinus pennsylvanica</i>).</p> <p>Subcanopy: Contains abundant Eastern White Cedar, Balsam Fir and Green Ash.</p> <p>Understory: The understory contains abundant Red-osier Dogwood, Green Ash, Eastern White Cedar, Common Buckthorn (<i>Rhamnus cathartica</i>), and Balsam Fir.</p> <p>Groundcover: Contains abundant Green Ash, Western Poison Ivy (<i>Rhus radicans ssp. rydbergii</i>), Starflower False Solomon's Seal (<i>Maianthemum stellatum</i>), Northeastern Sedge (<i>Carex cryptolepis</i>) and Panicked Aster (<i>Aster lanceolatus ssp. lanceolatus</i>).</p>	<ul style="list-style-type: none"> • Tree cover <60% • coniferous trees >75% of canopy cover
MAMM4-1	Graminoid Coastal Meadow Marsh Type	<p>Canopy: Dominated by Baltic Rush (<i>Juncus balticus</i>) and contains abundant Grass-leaved Goldenrod (<i>Euthamia graminifolia</i>), Jointed Rush (<i>Juncus articulatus</i>), Slender-spike Loosestrife (<i>Lythrum salicaria</i>), Slender Spikerush (<i>Eleocharis elliptica</i>), Smooth Goldenrod (<i>Solidago gigantea</i>), Woolly Sedge (<i>Carex pellita</i>), Starflower False Solomon's Seal (<i>Maianthemum stellatum</i>), Tall Goldenrod (<i>Solidago altissima var. altissima</i>), Rough Sedge (<i>Carex scabrata</i>) and Golden-fruited Sedge (<i>Carex aurea</i>). There are occasional Coastal Wetland plant species present including Hooded Skullcap (<i>Scutellaria galericulata</i>), Balsam Ragweed (<i>Senecio pauperculus</i>), small flowered purple foxglove (<i>Agalinis paupercula</i>) and Ohio Goldenrod (<i>Solidago ohioensis</i>).</p>	<ul style="list-style-type: none"> • S2 Provincial Ranking
TERRESTRIAL SYSTEM			
FOMM7-2	Fresh-Moist White Cedar-Hardwood	<p>Canopy: The canopy is dominated by Eastern White Cedar (<i>Thuja occidentalis</i>) and Balsam Fir (<i>Abies balsamea</i>) with abundant White Birch (<i>Betula papyrifera</i>), White Spruce (<i>Picea glauca</i>) and Green Ash (<i>Fraxinus pennsylvanica</i>).</p> <p>Subcanopy: Contains abundant Eastern White Cedar, Balsam Fir</p>	<ul style="list-style-type: none"> • >60% tree cover • conifer trees >25% and

	Mixed Forest Type	and Green Ash. Understory: The understory contains abundant Round-leaved Dogwood (<i>Cornus rugosa</i>), Choke Cherry (<i>Prunus virginiana</i>), Green Ash, Eastern White Cedar, Common Buckthorn (<i>Rhamnus cathartica</i>), and Balsam Fir. Groundcover: Contains abundant Green Ash, Western Poison Ivy (<i>Rhus radicans ssp. rydbergii</i>), Bracken Fern (<i>Pteridium aquilinum var. latiusculum</i>), Ebony Sedge (<i>Carex eburnea</i>), Starflower False Solomon's Seal (<i>Maianthemum stellatum</i>).	deciduous trees > 25% of canopy cover
FODM7-2	Fresh – Moist Green Ash - Hardwood Lowland Deciduous Forest Type	Canopy: The canopy is dominated by Green Ash (<i>Fraxinus pennsylvanica</i>) with abundant Trembling Aspen (<i>Populus tremuloides</i>). Understory: The understory contains abundant Green Ash (<i>Fraxinus pennsylvanica</i>) saplings. Ground Cover: Contains abundant Graceful Sedge (<i>Carex gracillima</i>) and Yellow Avens (<i>Geum aleppicum</i>).	<ul style="list-style-type: none"> • Tree cover <60% • deciduous trees >75% of canopy cover

3.6.1.2 *Green Ash Mineral Deciduous Swamp Type (SWDM2-2)*

The SWDM2-2 vegetation community was present in 2 areas of The Plan. In the west it encompasses the wetland created by the drainage swale and in the east, it occurs as a wetland fed by the seasonal drainage. **Photographs 8 to 10** show examples of the site conditions during field visits in 2018 and 2020.

3.6.1.3 *White Cedar – Hardwood Mineral Mixed Swamp Type (SWMM1-1)*

The SWMM1-1 vegetation community was present in in the north-central section of The Plan area. **Photographs 11 to 13** show examples of the site conditions during field visits in 2018 and 2020. This community type also occurs in a mosaic with the Graminoid Coastal Meadow Marsh Type (MAMM4-1) described next.

3.6.1.4 *Graminoid Coastal Meadow Marsh Type (MAMM4-1)*

The MAMM4-1 vegetation community was present in two portions of The Plan area; on the south side near the west culvert, and on the north side in combination with SWDM2-2. **Photographs 14 to 16** show examples of the site conditions during field visits in 2018 and 2020.

3.6.1.5 *Fresh – Moist Green Ash - Hardwood Lowland Deciduous Forest Type (FODM7-2)*

The FODM7-2 vegetation community was present on an outcrop section on the north east side of The Plan area. **Photographs 17 and 18** show examples of the site conditions during field visits in 2018 and 2020.

In addition to the forest/woodland and wetland features, there is a small area that has been cleared in the past, along with fill and graded shown as Cleared Area on **Figure 4**. The clearing and grading extends slightly further west than illustrated, with the removal of a small portion of wetland unit SWMM1-1 (**Photographs 19 and 20**).

3.6.1.6 *Status of ELC Vegetation Communities*

One vegetation community defined as a marginal Graminoid Coastal Meadow Marsh Type (MAMM4-1) by the Ecological Land Classification is ranked as S2 (Provincially Imperiled) by the NHIC. All other community types are common and secure globally. **Figure 4** presents the location of the marginal provincially significant Great Lakes Coastal Meadow Marsh vegetation community (MAMM4-1). However, there have been changes to the surface hydrology which have occurred since 2018 and confirmed through 2020 observations and botanical inventories. There are also on-going and future changes which will occur (municipal drain from the Town work yard and other designated and approved subdivision developments to the north, south and west) which will drastically alter the surface hydrology of this wetland feature (**Figure 5**). Based on the existing and proposed hydrology changes to the surrounding landscape, it is our professional opinion that wetland unit MAMM4-1 would no longer qualify as a coastal wetland vegetation community, let alone an S2 ranked (Provincially imperiled) wetland feature. This wetland unit is relatively



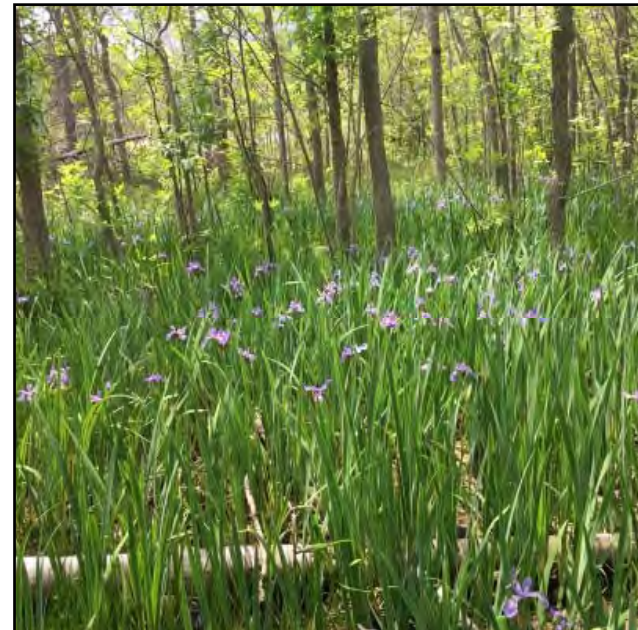
Photograph 5. View inside a portion of Fresh-Moist White Cedar Hardwood Mixed Forest Type (FOMM7-2), site conditions as per Sage Earth field visit in 2018



Photograph 6. View inside a portion of Fresh-Moist White Cedar - Hardwood Mixed Forest Type (FOMM7-2), site conditions as per CEA field visit on August 6, 2020



Photograph 7. View inside a portion of Fresh-Moist White Cedar - Hardwood Mixed Forest Type (FOMM7-2), site conditions as per CEA field visit on August 6, 2020



Photograph 8. View inside a portion of Green Ash Mineral Deciduous Swamp Type (SWDM2-2), site conditions as per Sage Earth field visit in 2018



Photograph 9. View inside a portion of Green Ash Mineral Deciduous Swamp Type (SWDM2-2) fronting onto Beachwood Road, site conditions as per CEA field visit on August 6, 2020



Photograph 10. View inside a portion of Green Ash Mineral Deciduous Swamp Type (SWDM2-2), site conditions as per CEA field visit on August 6, 2020



Photograph 11. View inside a portion of White Cedar - Hardwood Mineral Mixed Swamp Type (SWMM1-1), site conditions as per Sage Earth field visit in 2018



Photograph 12. View inside a cut portion of White Cedar - Hardwood Mineral Mixed Swamp Type (SWMM1-1) west of the cleared area, site conditions as per CEA field visit on August 6, 2020



Photograph 13. View inside a portion of White Cedar - Hardwood Mineral Mixed Swamp Type (SWMM1-1), site conditions as per CEA field visit on August 6, 2020



Photograph 14. View inside a portion of Graminoid Coastal Meadow Marsh Type (MAMM4-1), site conditions as per Sage Earth field visit in 2018



Photograph 15. View of a portion of the southern patch of a marginal (drying-out) Graminoid Coastal Meadow Marsh Type (MAMM4-1), fronting onto Beachwood Road, site conditions as per CEA field visit on August 6, 2020



Photograph 16. View of a portion of Graminoid Coastal Meadow Marsh Type (MAMM4-1), the groundcover stratum within portions of Green Ash Swamp (SWDM2-2), site conditions as per CEA field visits on August 6, 2020



Photograph 17. View inside a portion of Fresh-Moist Green Ash - Hardwood Lowland Deciduous Forest Type (FODM7-2), site conditions as per Sage Earth field visit in 2018



Photograph 18. View inside a portion of Fresh-Moist Green Ash - Hardwood Lowland Deciduous Forest Type (FODM7-2) and its interface with a block of Green Ash Swamp (SWDM2-2), site conditions as per CEA field visit on August 6, 2020



Photograph 19. View inside a portion (west edge) of a cleared area (cut, filled and graded), bordered by FODM7-2 to the south and SWDM2-2 to the north, site conditions as per CEA field visit on August 6, 2020



Photograph 20. Eastward view inside a portion of the cleared area (cut-over), lying within part of SWM1-1, site conditions as per CEA field visit on August 6, 2020

dry to moist and becoming dominated by upland grasses and forbs in some locations, in combination with small pools and stagnant water. An application of the Ontario Wetland Evaluation System – Southern Manual (MNRF 2013) 50/50% rule (upland/wetland plant species), indicates this wetland unit has and will become isolated from outside drainage sources and will likely revert to grassed/forb terrestrial meadow, albeit with coastal affinity plant species.

3.6.2 Flora

A total of 211 vascular plant taxa were recorded in 2018 within The Plan area (**Table 2**). Fifty-five species (26%) are considered exotic to Ontario while 151 species (71.5%) are classified as native.

3.6.2.1 Status of Flora

Sage Earth field investigations observed Black Ash (*Fraxinus nigra*) rarely in the northern portion of the White Cedar-Hardwood Mineral Mixed Swamp Type (SWMM1-1)/Graminoid Coastal Meadow Marsh Type (MAMM4-1) within The Plan area (**Figure 4**). Black Ash was designated by COSEWIC as Threatened in November of 2018. It has no status and is not listed under any SARA or ESA schedules. Black Ash is found occasionally throughout deciduous and mixed swamps in Simcoe County. Emerald Ash Borer is currently threatening this species and other ash trees (red ash, green ash, white ash) across its entire range, as evidenced by the relatively high percentage of dying/dead ash trees on-site.

3.7 Fauna and Wildlife Habitat

A total of 50 wildlife species were identified within The Plan area or in the adjacent lands during field investigations (**Tables 3 and 4**). These species were identified either through visual observations or through evidence of occurrence. Of the 50 species identified, there were 37 bird species, seven mammal species, one reptile species, four amphibian species and one crustacean species. **Figure 4** shows the ELC vegetation communities in which the various fauna was located.

3.7.1 Birds

Thirty-seven species of birds were recorded during field investigation, both within The Plan area and on the lands adjacent to it and are listed in **Table 3**. Species identification was confirmed through unique vocalizations (calls), visual evidence and by direct observation. Of the thirty-seven species of birds that were observed on or adjacent to The Plan area, thirty-two species are protected under the *Migratory Birds Convention Act* (MBCA), which protects and conserves migratory birds and their nests during the breeding bird season (Environment and Climate Change Canada 2020). The Blue Jay receives provincial protection under the Fish and Wildlife Conservation Act (FWCA) under Schedule 8 – Specially Protected Non-Raptor Birds. A Common Nighthawk was incidentally heard vocalizing on May 30, 2018 during an amphibian survey. Common Nighthawk is listed as Special Concern by the Committee on the Status of Species at Risk in Ontario (COSSARO) and the Committee on the Status of Endangered Wildlife in Canada

TABLE 2: OBSERVED VASCULAR PLANT LIST

Scientific Name	Common Name	Status		
		COSEWIC ¹	COSSARO ²	SRANK ³
<i>Abies balsamea</i>	Balsam Fir			S5
<i>Acer rubrum</i>	Red Maple			S5
<i>Acer x freemanii</i>	Freeman's Maple			SNA
<i>Achillea millefolium ssp. millefolium</i>	Common Yarrow			SE
<i>Actaea rubra</i>	Red Baneberry			S5
<i>Aegopodium podagraria</i>	Goutweed			SE5
<i>Aesculus hippocastanum</i>	Horse Chestnut			SE2
<i>Agalinis paupercula var. borealis</i>	Small-flowered Purple False Foxglove			SU
<i>Agrostis scabra</i>	Rough Bentgrass			S5
<i>Alisma plantago-aquatica</i>	Broad-leaved Water-plantain			S5
<i>Alliaria petiolata</i>	Garlic Mustard			SE5
<i>Alnus incana ssp. rugosa</i>	Speckled Alder			S5
<i>Amelanchier arborea</i>	Downy Serviceberry			S5
<i>Anaphalis margaritacea</i>	Pearly Everlasting			S5
<i>Anemone canadensis</i>	Canada Anemone			S5
<i>Anemone virginiana var. virginiana</i>	Virginia Anemone			S5
<i>Apocynum androsaemifolium ssp. androsaemifolium</i>	Spreading Dogbane			S5
<i>Aquilegia canadensis</i>	Wild Columbine			S5
<i>Aralia nudicaulis</i>	Wild Sarsaparilla			S5
<i>Aralia racemosa ssp. racemosa</i>	American Spikenard			S5
<i>Arctostaphylos uva-ursi</i>	Bearberry			S5
<i>Asclepias syriaca</i>	Common Milkweed			S5
<i>Asparagus officinalis</i>	Asparagus			SE5
<i>Aster ciliolatus</i>	Ciliolate Aster			S5
<i>Aster lanceolatus ssp. lanceolatus</i>	Panicled Aster			S5
<i>Aster lateriflorus var. lateriflorus</i>	Calico Aster			S5
<i>Aster novae-angliae</i>	New England Aster			S5
<i>Aster puniceus var. puniceus</i>	Purple-stemmed Aster			S5
<i>Aster urophyllus</i>	Arrow-leaved Aster			S4
<i>Athyrium filix-femina var. angustum</i>	Lady-fern			S5
<i>Barbarea vulgaris</i>	Yellow Rocket			SE5
<i>Berberis vulgaris</i>	European Barberry			SE5
<i>Betula papyrifera</i>	Paper Birch			S5
<i>Bidens tripartita</i>	European Beggar's Ticks			S5
<i>Calamagrostis canadensis</i>	Blue-joint Reedgrass			S5
<i>Caltha palustris</i>	Marsh Marigold			S5
<i>Caragana arborescens</i>	Siberian Peashrub			SE1
<i>Carex aurea</i>	Golden-fruited Sedge			S5
<i>Carex comosa</i>	Bristly Sedge			S5
<i>Carex crinita</i>	Fringed Sedge			S5
<i>Carex cryptolepis</i>	Northeastern Sedge			S5
<i>Carex eburnea</i>	Ebony Sedge			S5
<i>Carex gracillima</i>	Graceful Sedge			S5
<i>Carex granularis</i>	Meadow Sedge			S5
<i>Carex hystericina</i>	Porcupine Sedge			S5
<i>Carex intumescens</i>	Bladder Sedge			S5

<i>Carex lupulina</i>	Hop Sedge			S5
<i>Carex lurida</i>	Shallow Sedge			S5
<i>Carex pellita</i>	Woolly Sedge			S5
<i>Carex radiata</i>	Stellate Sedge			S5
<i>Carex scabrata</i>	Rough Sedge			S5
<i>Carex sp.</i>	Sedge Species			
<i>Carex stipata</i>	Stalk-grain Sedge			S5
<i>Carex stricta</i>	Tussock Sedge			S5
<i>Carex tenera</i>	Slender Sedge			S5
<i>Celastrus scandens</i>	Climbing Bittersweet			S5
<i>Centaureum pulchellum</i>	Branching Centaury-plant			SE3
<i>Chelone glabra</i>	Turtlehead			S5
<i>Cicuta maculata</i>	Spotted Water-hemlock			S5
<i>Circaea lutetiana ssp. canadensis</i>	Enchanter's Nightshade			S5
<i>Cirsium muticum</i>	Swamp Thistle			S5
<i>Cirsium vulgare</i>	Bull Thistle			SE5
<i>Clematis virginiana</i>	Virginia Virgin-bower			S5
<i>Clinopodium vulgare</i>	Field Basil			S5
<i>Clintonia borealis</i>	Blue Bead Lily			S5
<i>Convallaria majalis</i>	European Lily-of-the-valley			SE5
<i>Conyza canadensis</i>	Fleabane			S5
<i>Cornus alternifolia</i>	Alternate-leaf Dogwood			S5
<i>Cornus amomum ssp. obliqua</i>	Silky Dogwood			S5
<i>Cornus rugosa</i>	Round-leaved Dogwood			S5
<i>Cornus stolonifera</i>	Red-osier Dogwood			S5
<i>Cypripedium calceolus var. parviflorum</i>	Small Yellow Lady's Slipper			S5
<i>Dactylis glomerata</i>	Orchard Grass			SE5
<i>Danthonia spicata</i>	Poverty Oat-grass			S5
<i>Daucus carota</i>	Queen Anne's Lace			SE5
<i>Desmodium canadense</i>	Showy Tick-trefoil			S4
<i>Diervilla lonicera</i>	Northern Bush-honeysuckle			S5
<i>Dipsacus fullonum ssp. sylvestris</i>	Common Teasel			SE5
<i>Dryopteris carthusiana</i>	Spinulose Wood Fern			S5
<i>Dryopteris marginalis</i>	Marginal Wood Fern			S5
<i>Eleocharis elliptica</i>	Slender Spikerush			S5
<i>Eleocharis sp.</i>	Spikerush Species			
<i>Epilobium ciliatum ssp. ciliatum</i>	Hairy Willow-herb			S5
<i>Epilobium hirsutum</i>	Great-hairy Willow-herb			SE5
<i>Equisetum arvense</i>	Field Horsetail			S5
<i>Erigeron philadelphicus ssp. philadelphicus</i>	Philadelphia Fleabane			S5
<i>Eupatorium perfoliatum</i>	Common Boneset			S5
<i>Eupatorium rugosum</i>	White Snakeroot			S5
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod			S5
<i>Festuca arundinacea</i>	Kentucky Fescue			SE5
<i>Fragaria virginiana ssp. virginiana</i>	Virginia Strawberry			SU
Fraxinus nigra	Black Ash	THR		S5
<i>Fraxinus pennsylvanica</i>	Green Ash			S5
<i>Galium odoratum</i>	Sweet Woodruff			SE1
<i>Galium palustre</i>	Marsh Bedstraw			S5
<i>Galium triflorum</i>	Sweet-scent Bedstraw			S5
<i>Geranium robertianum</i>	Herb-Robert			SE5
<i>Geum aleppicum</i>	Yellow Avens			S5
<i>Geum canadense</i>	White Avens			S5
<i>Geum rivale</i>	Purple Avens			S5

<i>Glyceria grandis</i>	American Manna Grass			S4S5
<i>Glyceria striata</i>	Fowl Manna Grass			S5
<i>Hesperis matronalis</i>	Dame's Rocket			SE5
<i>Hieracium caespitosum ssp. caespitosum</i>	Field Hawkweed			SE5
<i>Hieracium piloselloides</i>	Tall Hawkweed			SE5
<i>Hypericum perforatum</i>	St. John's-wort			SE5
<i>Impatiens capensis</i>	Spotted Jewel-weed			S5
<i>Iris versicolor</i>	Blueflag			S5
<i>Juncus articulatus</i>	Jointed Rush			S5
<i>Juncus balticus</i>	Baltic Rush			S5
<i>Juncus sp.</i>	Rush Species			
<i>Juncus tenuis</i>	Slender Rush			S5
<i>Juniperus communis</i>	Ground Juniper			S5
<i>Juniperus virginiana</i>	Eastern Red Cedar			S5
<i>Lactuca serriola</i>	Prickly Lettuce			SE5
<i>Larix laricina</i>	American Larch			S5
<i>Lathyrus latifolius</i>	Everlasting Pea			SE4
<i>Lonicera dioica</i>	Glaucous Honeysuckle			S5
<i>Lonicera morrowii</i>	Morrow's Honeysuckle			SE3
<i>Lonicera tatarica</i>	Tartarian Honeysuckle			SE5
<i>Lotus corniculatus</i>	Bird's-foot Trefoil			SE5
<i>Lycopus americanus</i>	American Bugleweed			S5
<i>Lysimachia ciliata</i>	Fringed Loosestrife			S5
<i>Lysimachia nummularia</i>	Moneywort			SE5
<i>Lythrum salicaria</i>	Slender-spike Loosestrife			SE5
<i>Maianthemum stellatum</i>	Starflower False Solomon's Seal			S5
<i>Melilotus sp.</i>	Sweet Clover Species			
<i>Mentha arvensis ssp. borealis</i>	Corn Mint			S5
<i>Mentha spicata</i>	Spearmint			SE4
<i>Myosotis scorpioides</i>	True Forget-me-not			SE4
<i>Nasturtium officinale</i>	True Watercress			SE
<i>Onoclea sensibilis</i>	Sensitive Fern			S5
<i>Panicum capillare</i>	Old Panic Grass			S5
<i>Panicum dichotomiflorum</i>	Spreading Panic Grass			SE5
<i>Panicum virgatum</i>	Switch Grass			S4
<i>Parthenocissus inserta</i>	Thicket Creeper			S5
<i>Petasites frigidus</i>	Sweet Coltsfoot			S5
<i>Phalaris arundinacea</i>	Reed Canary Grass			S5
<i>Phragmites australis</i>	Common Reed			S5
<i>Physocarpus opulifolius</i>	Eastern Ninebark			S5
<i>Picea glauca</i>	White Spruce			S5
<i>Pinus resinosa</i>	Red Pine			S5
<i>Pinus sylvestris</i>	Scotch Pine			SE5
<i>Plantago lanceolata</i>	English Plantain			SE5
<i>Plantago major</i>	Nipple-seed Plantain			SE5
<i>Poa compressa</i>	Canada Bluegrass			S5
<i>Poa pratensis ssp. pratensis</i>	Kentucky Bluegrass			S5
<i>Polygala paucifolia</i>	Gay-wing Milkwort			S5
<i>Polygonum amphibium</i>	Water Smartweed			S5
<i>Populus tremuloides</i>	Trembling Aspen			S5
<i>Prunella vulgaris ssp. vulgaris</i>	Common Heal-all			SE3
<i>Prunus pensylvanica</i>	Fire Cherry			S5
<i>Prunus pumila</i>	Sand Cherry			S4
<i>Prunus virginiana ssp. virginiana</i>	Choke Cherry			S5

<i>Pteridium aquilinum</i> var. <i>latiusculum</i>	Bracken Fern			S5
<i>Quercus rubra</i>	Northern Red Oak			S5
<i>Ranunculus acris</i>	Tall Buttercup			SE5
<i>Ranunculus hispidus</i> var. <i>caricetorum</i>	Swamp Buttercup			S5
<i>Ranunculus sceleratus</i> var. <i>sceleratus</i>	Cursed Crowfoot			S5
<i>Rhamnus alnifolia</i>	Alderleaf Buckthorn			S5
<i>Rhamnus cathartica</i>	Buckthorn			SE5
<i>Rhus radicans</i> ssp. <i>rydbergii</i>	Western Poison Ivy			S5
<i>Rhus typhina</i>	Staghorn Sumac			S5
<i>Ribes</i> sp.	Currant Species			
<i>Ribes triste</i>	Swamp Red Currant			S5
<i>Rosa blanda</i>	Smooth Rose			S5
<i>Rosa multiflora</i>	Rambler Rose			SE4
<i>Rubus idaeus</i> ssp. <i>idaeus</i>	Red Raspberry			SE1
<i>Rubus odoratus</i>	Purple-flowering Raspberry			S5
<i>Rubus pubescens</i>	Dwarf Raspberry			S5
<i>Rumex crispus</i>	Curly Dock			SE5
<i>Rumex obtusifolius</i> ssp. <i>obtusifolius</i>	Bitter Dock			SE5
<i>Salix discolor</i>	Pussy Willow			S5
<i>Salix eriocephala</i>	Heart-leaved Willow			S5
<i>Salix petiolaris</i>	Meadow Willow			S5
<i>Sambucus racemosa</i> ssp. <i>pubens</i>	Red-berried Elder			S5
<i>Scirpus atrovirens</i>	Woolgrass Bulrush			S5
<i>Scirpus pungens</i>	Three-square Bulrush			S5
<i>Scutellaria galericulata</i>	Hooded Skullcap			S5
<i>Scutellaria lateriflora</i>	Mad Dog Skullcap			S5
<i>Senecio pauperculus</i>	Balsam Ragweed			S5
<i>Setaria pumila</i>	Yellow Foxtail			SE5
<i>Shepherdia canadensis</i>	Canada Buffalo-berry			S5
<i>Sium suave</i>	Hemlock Water-parsnip			S5
<i>Solanum dulcamara</i>	Climbing Nightshade			SE5
<i>Solidago altissima</i> var. <i>altissima</i>	Tall Goldenrod			S5
<i>Solidago canadensis</i>	Canada Goldenrod			S5
<i>Solidago gigantea</i>	Smooth Goldenrod			S5
<i>Solidago nemoralis</i> ssp. <i>nemoralis</i>	Field Goldenrod			S5
<i>Solidago ohioensis</i>	Ohio Goldenrod			S4
<i>Sonchus arvensis</i> ssp. <i>arvensis</i>	Field Sowthistle			SE5
<i>Sonchus asper</i> ssp. <i>asper</i>	Spiny-leaf Sowthistle			SE5
<i>Sorghastrum nutans</i>	Yellow Indian-grass			S4
<i>Sporobolus cryptandrus</i>	Sand Dropseed			S4
<i>Taraxacum officinale</i>	Common Dandelion			SE5
<i>Thalictrum pubescens</i>	Tall Meadowrue			S5
<i>Thuja occidentalis</i>	Northern White Cedar			S5
<i>Tilia americana</i>	American Basswood			S5
<i>Triosteum aurantiacum</i>	Horse Gentian			S5
<i>Tsuga canadensis</i>	Eastern Hemlock			S5
<i>Tussilago farfara</i>	Colt's Foot			SE5
<i>Typha angustifolia</i>	Narrow-leaved Cattail			S5
<i>Typha x glauca</i>	Blue Cattail			S4?
<i>Ulmus americana</i>	American Elm			S5
<i>Verbascum thapsus</i>	Common Mullein			SE5
<i>Verbena hastata</i>	Blue Vervain			S5
<i>Veronica anagallis-aquatica</i>	Brook-pimpernell			SE5

<i>Veronica officinalis</i>	Common Speedwell			SE5
<i>Viburnum lentago</i>	Nannyberry			S5
<i>Viburnum opulus</i>	Guelder-rose Viburnum			SE4
<i>Viburnum trilobum</i>	Highbush Cranberry			S5
<i>Viola sororia</i>	Woolly Blue Violet			S5
<i>Vitis riparia</i>	Riverbank Grape			S5

¹ The Committee on the Status of Endangered Wildlife in Canada (COSEWIC): **Endangered (END), Threatened (THR) & Special Concern (SC)**.

² Committee on the status of Species at Risk in Ontario (SARO): **Endangered (END), Threatened (THR) & Special Concern (SC)**. ³ S-Rank (provincial rank): **S1 (Critically Imperiled); S2 (Imperiled); S3 (Vulnerable); S4 (Apparently Secure); S5 (Secure); S#? (Rank uncertain); &, SE# (Exotic)**.

TABLE 3: BREEDING BIRD SURVEY RESULTS

Scientific Name	Common Name	Status				Protection					Location
		May 30, 2018	June 06, 2018	June 18, 2018	2018 BBE	S-Rank ¹	COSEWIC ²	COSSARO ³	FWCA ⁴	MBCA ⁵	Outside of Concept Plan Area 2018
<i>Poecile atricapillus</i>	Black-capped Chickadee		X	X	H, S, T, CF	S5				^	
<i>Zenaida macroura</i>	Mourning Dove		X	X	H, S, T	S5				^	
<i>Colaptes auratus</i>	Northern Flicker		X	X	H, S, T	S4B				^	
<i>Myiarchus crinitus</i>	Great Crested Flycatcher		X	X	H, S, T	S4B				^	
<i>Vireo olivaceus</i>	Red-eyed Vireo		X	X	H, S, P, T, V, A	S5B				^	
<i>Cyanocitta cristata</i>	Blue Jay		X	X	H, S, T	S5			S		
<i>Corvus brachyrhynchos</i>	American Crow		X	X	X, H, S, T, V, A	S5B					
<i>Sitta canadensis</i>	Red-breasted Nuthatch		X	X	H, S, T	S5				^	
<i>Troglodytes aedon</i>	House Wren		X	X	H, S, T	S5B				^	
<i>Turdus migratorius</i>	American Robin		X	X	H, S, T	S5B				^	
<i>Bombycilla cedrorum</i>	Cedar Waxwing		X	X	H, S, T	S5B				^	
<i>Mniotilta varia</i>	Black-and-White Warbler		X	X	H, S, T	S5B				^	
<i>Setophaga ruticilla</i>	American Redstart		X	X	X, H, S, T, A	S5B				^	
<i>Spizella passerina</i>	Chipping Sparrow		X	X	H, S, T	S5B				^	
<i>Melospiza melodia</i>	Song Sparrow		X	X	H, S, T	S5B				^	
<i>Zonotrichia albicollis</i>	White-throated Sparrow		X	X	H, S, T	S5B				^	
<i>Cardinalis cardinalis</i>	Northern Cardinal		X	X	H, S, T, A	S5				^	
<i>Agelaius phoeniceus</i>	Red-winged Blackbird		X	X	H, S, T, A	S5					
<i>Quiscalus quiscula</i>	Common Grackle		X	X	X, S, T	S5B					
<i>Carduelis tristis</i>	American Goldfinch		X	X	X, H, S, P, T	SNA				^	
<i>Picoides pubescens</i>	Downy Woodpecker		X		X, H	S5				^	
<i>Chordeiles minor</i>	Common Nighthawk	X			H, S	S4B	THR	SC		^	
<i>Vireo gilvus</i>	Warbling Vireo		X		H, S	S5B				^	
<i>Troglodytes troglodytes</i>	Winter Wren		X		H, S	S5B				^	

Scientific Name	Common Name	Status				Protection					Location
		May 30, 2018	June 06, 2018	June 18, 2018	2018 BBE	S-Rank ¹	COSEWIC ²	COSSARO ³	FWCA ⁴	MBCA ⁵	Outside of Concept Plan Area 2018
<i>Vermivora peregrina</i>	Tennessee Warbler		X		S	S5B				^	
<i>Dendroica pennsylvanica</i>	Chestnut-sided Warbler		X		X, H, S	S5B				^	
<i>Geothlypis trichas</i>	Common Yellowthroat			X	H, S	S5B				^	
<i>Seiurus aurocapilla</i>	Ovenbird		X		H, S	S4B				^	
<i>Melospiza georgiana</i>	Swamp Sparrow		X		H, S	S5B				^	
<i>Passerina cyanea</i>	Indigo Bunting		X		H, S	S4B				^	
<i>Molothrus ater</i>	Brown-headed Cowbird		X		H, S	S4B					
<i>Carpodacus mexicanus</i>	House Finch		X		H, S	SNA				^	
<i>Branta canadensis</i>	Canada Goose		X		X	S5B				^	^
<i>Scolopax minor</i>	American Woodcock			X	X	S4B				^	
<i>Larus delawarensis</i>	Ring-billed Gull		X		X	S5B, S4N				^	^
<i>Sphyrapicus varius</i>	Yellow-bellied Sapsucker		X		X	S5B				^	
<i>Dryocopus pileatus</i>	Pileated Woodpecker		X		X	S5				^	
Observed:		X-Species observed in its breeding season (no evidence of breeding). Presumed migrants should not be recorded.									
Possible Breeding:		H - Species observed in its breeding season in suitable nesting habitat. S - Singing male present in its breeding season in suitable nesting habitat.									
Probable Breeding:		P-Pair observed in their breeding season in suitable nesting habitat T - Permanent territory presumed through registration of territorial song on at least two days, a week or so apart, at the same place. D-Courtship or display between a male and a female or 2 males, including courtship feeding or copulation V-Visiting probable nest site A - Agitated behavior or anxiety calls of an adult. B-Brood patch on adult female or cloacal protuberance on adult male N-Nest-building or excavation of nest hole									
Confirmed Breeding:		DD-Distraction display or injury feigning NU - Used nest or egg shell found (occupied or laid within the period of study). FY - Recently fledged young or downy young, including young incapable of sustained flight. AE-Adults leaving or entering nest site in circumstances indicating occupied nest FS-Adult carrying faecal sac CF - Adult carrying food for young. NE - Nest containing eggs. NY - Nest with young seen or heard.									

TABLE 4: OBSERVED WILDLIFE SPECIES

Scientific Name	Common Name	Status	Protection			
		S-Rank ¹	SARA ²	SARO ³	FWCA ⁴	MBCA ⁵
MAMMALS						
<i>Sylvilagus floridanus</i>	Eastern Cottontail	S5			G (2)	
<i>Tamias striatus</i>	Eastern Chipmunk	S5			S (6)	
<i>Sciurus carolinensis</i>	Eastern Gray Squirrel	S5			G (2)	
<i>Tamiasciurus hudsonicus</i>	Red Squirrel	S5			F (1)	
<i>Canis latrans</i>	Coyote	S5			F (1)	
<i>Procyon lotor</i>	Northern Raccoon	S5			F (1)	
<i>Odocoileus virginianus</i>	White-tailed Deer	S5			G (2)	
REPTILES						
<i>Thamnophis sirtalis</i>	Eastern Gartersnake	S5				
AMPHIBIANS						
<i>Anaxyrus americanus</i>	American Toad	S5				
<i>Pseudacris crucifer</i>	Spring Peeper	S5				
<i>Lithobates clamitans</i>	Green Frog	S5				
<i>Lithobates pipiens</i>	Northern Leopard Frog	S5	NAR	NAR		
CRUSTCEANS						
<i>Fallicambarus fodiens</i>	Chimney Crayfish	S4				

¹ S-Rank (Provincial): S1 (Critically Imperiled), S2 (Imperiled), S3 (Vulnerable), S4 (Apparently Secure), S5 (Secure), S#B (breeding), SNA (species not suitable target for conservation activities)

² Species at Risk Act (SARA): END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

³ Species at Risk Ontario (SARO): END (Endangered); THR (Threatened); SC (Special Concern); NAR (Not at Risk)

⁴ Fish and Wildlife Conservation Act (FWCA): G (Game species); F (Furbearers); S (Specially protected species)

⁵ Migratory Bird Convention Act (MBCA) Species Protection

(COSEWIC). However, Common Nighthawk is currently listed as Threatened (Schedule 1) under the *Species at Risk Act* (SARA) and receives federal species and habitat protection on Federal lands.

The woodland habitat to the south of The Plan area contains interior habitat that can support the breeding of sensitive interior species. This could result in The Plan area being used incidentally for foraging or migration behaviours by the interior forest species. However, approved and future residential subdivisions and the Town of Wasaga Beach Work Yard on the abutting south side of Beachwood Road will in our professional opinion, likely preclude this potential use. Close proximity of The Plan area to Georgian Bay, as well as wetland habitat found within and on adjacent lands could promote the use of The Plan area by shorebirds or waterfowl. However, given the lack of surface water, existing and proposed changes in the ground and surface water drainage patterns, and designated and approved residential and institutional developments, the use of the subject property by shorebirds or waterfowl is unlikely.

3.7.2 *Breeding Bird Survey*

A total of 36 species of birds were observed during breeding bird surveys from three point-count locations displayed in **Figure 4**. Of the 36 species, one species was confirmed breeding, 19 species were probable breeders, 11 species were possible breeders, and 5 species were observed with no evidence of breeding. The results of the breeding bird survey are summarized below and in **Table 3**.

3.7.2.1 *Confirmed Breeders*

One bird species, Black-capped Chickadee, was “Confirmed” as breeding in The Plan area. An adult was observed carrying food for young during the second breeding bird survey on June 18, 2018.

3.7.2.2 *Probable Breeders*

Nineteen species were observed as “Probable Breeders” within The Plan area including; Mourning Dove, Northern Flicker, Great Crested Flycatcher, Red-eyed Vireo, Blue Jay, American Crow, Red-breasted Nuthatch, House Wren, American Robin, Cedar Waxwing, Black-and-white Warbler, American Redstart, Chipping Sparrow, Song Sparrow, White-throated Sparrow, Northern Cardinal, Red-winged Blackbird, Common Grackle and American Goldfinch.

3.7.2.3 *Possible Breeders*

Eleven bird species were identified as “Possible Breeders” within The Plan area including; Downy Woodpecker, Warbling Vireo, Winter Wren, Common Nighthawk, Tennessee Warbler, Chestnut-sided Warbler, Ovenbird, Swamp Sparrow, Indigo Bunting, Brown-headed Cowbird and House Finch.

3.7.2.4 Observed Species

Five species including Canada Goose, American Woodcock, Ring-billed Gull, Yellow-bellied Sapsucker and Pileated Woodpecker were observed in their breeding season; however, no evidence of breeding was confirmed.

3.7.3 Herpetofauna

3.7.3.1 Amphibians

The Ontario Reptile and Amphibian Atlas indicates records (historical and recent) of the following amphibian species within the 10 km X 10 km survey square that encompasses The Plan area (square 17NK62): American Toad (*Anaxyrus americanus*), Gray Treefrog (*Hyla versicolor*), Spring Peeper (*Pseudacris crucifer*), American Bullfrog (*Lithobates catesbeianus*), Green Frog (*Lithobates clamitans*), Northern Leopard Frog (*Lithobates pipiens*), Mink Frog (*Lithobates septentrionalis*), Wood Frog (*Lithobates sylvaticus*) and Western Chorus Frog (*Pseudacris triseriata*).

The Plan area contains suitable breeding and foraging habitat for amphibians. Three amphibian species were detected through visual observation or unique vocalizations during field investigations including Green Frog, Northern Leopard Frog and Spring Peeper (**Table 4**). In addition, American Toad tadpoles were observed in dense numbers within standing water in the SWMM1- 1/MAMM4-1 vegetation community. All detected amphibian species are considered secure (S5) within Ontario. **Figure 4** shows the locations of the observed amphibian species.

3.7.3.2 Frog Call Surveys

Survey 1

During the first visit frog call survey on May 2, 2018, no frog calls were heard within The Plan area. Spring Peepers were heard calling in full chorus (calls continuous and overlapping, number of individuals cannot be reliably estimated) from the adjacent property to the south in the Unevaluated Wetland or “Other Wetland”. (**Figure 3**).

Survey 2

Approximately 5 Green Frog individuals were heard calling during the second survey on May 30, 2018. The Green Frogs were heard and visually observed within the SWDM2-2 vegetation community along the western portion of the property close to Beachwood Road. **Figure 4** presents the deepest portion of the wetland where the Green Frog calls were the loudest.

Survey 3

No frogs were heard or observed within The Plan area on June 25, 2018.

3.7.3.3 Reptiles

The Ontario Reptile and Amphibian Atlas (Ontario Nature 2020) indicates records of the following reptile species within the 10km X 10 km survey square that encompasses the proposed subject property and well as other as-built and vacant properties. (Tracking Square 17NK62): Snapping Turtle (*Chelydra serpentina*), Midland Painted Turtle (*Chrysemys picta marginata*), Eastern Milksnake (*Lampropeltis triangulatum*), Eastern Gartersnake (*Thamnophis sirtalis*) and Massasauga (*Sistrurus catenatus*).

A gravid female Eastern Gartersnake was observed on the western side of The Plan area on June 6, 2018. It is possible that other species of reptiles utilize the area for breeding or foraging as a result of the presence of the woodland, wetland and riverine habitats. Also, The Plan area is in close proximity to Georgian Bay. Reptile cover items were observed including rocks, logs, and brush piles. However, an abundance of shoreline residential development is extensive, which would preclude any quality reptile habitats and/or life cycle functions (**Figure 4**).

3.7.4 Mammals

Seven species of mammals were observed on The Plan area (**Figure 4**) during Sage Earth's field investigations; Eastern Cottontail (*Sylvilagus floridanus*), Eastern Chipmunk (*Tamias striatus*), Eastern Gray Squirrel (*Sciurus carolinensis*), Red Squirrel (*Tamiasciurus hudsonicus*), Coyote (*Canis latrans*), Northern Raccoon (*Procyon lotor*) and White-tailed Deer (*Odocoileus virginianus*). The Eastern Chipmunk is protected by the **Fish and Wildlife Conservation Act, 1997** – FWCA (Province of Ontario 1997) on Schedule 6 – Specially Protected Mammal. The Eastern Cottontail, Eastern Gray Squirrel and White-tailed Deer are listed as Game Mammals (Schedule 2) in the **FWCA, 1997**.

3.7.5 Status of Wildlife

Sage Earth field investigations heard Common Nighthawk on one occasion within The Plan area. This species is listed as Special Concern provincially by COSSARO and the **ESA, 2007** and is listed as Threatened federally in the **Species at Risk Act, 2002**.

3.7.6 Movement Corridors and Connectivity

The Plan area is located in a fragmented landscape along Georgian Bay. The subject property is isolated from a larger woodland patch to the south by Beachwood Road and surrounded by residential development to the north, east and west. The Plan area at present provides the largest woodland refuge north of Beachwood Road for over 2 km east or west. Hedgerows and small woodland areas within the residential areas provide some connectivity for wildlife to travel to surrounding areas, but it is very limited and of low

quality and diversity. The woodland located approximately 45 metres to the south of The Plan area at present provides the largest undisturbed habitat for wildlife in the immediate vicinity (**Figure 3**). However, it is to be noted that this area (south of Beachwood Road) is comprised of wetland and woodland features, which will be removed due to the proposed construction of the Town's Work Yard, as well as to be built Residential and Development lands to the west. The remaining vacant land to the south is used primarily for agricultural practices and is considered relatively fragmented. Narrow movement corridors in the form of hedgerows and small woodlots provide some habitat for wildlife to rest, forage and move, but is not a considered high-quality habitat.

4 DEVELOPMENT PROPOSAL

The proposed land development is to build The Plan, comprised of a variety of residential buildings (e.g., singles, townhomes and high density).

The subdivision statistics are as follows:

- Residential - Singles (Units 1-33, 33 units) covering 1.1 ha
- Residential – Townhouses (Units 34-81, 48 units) covering 1.07 ha
- Residential – High Density (Units 82 & 83, 134 units) covering 2.09 ha
- Stormwater Management covering 0.31 ha
- Roadway covering 0.68 ha
- Common Elements covering 0.12 ha
- County Daylighting covering 0.02 ha
- 0.3 Reserves covering 0.01 ha
- Parkland to be Conveyed covering 5.40 ha
- Municipal Drain to be Conveyed covering 0.35 ha
- Other Lands Owned by the Applicant covering 0.06 ha

Figure 2 shows the Subdivision Total lands (5.40 ha) and Other Lands Total (0.48 ha), for a Total Land Holdings of 5.88 ha. **Figure 2** also outlines the subdivision statistics, as-built form and local context to other lands, as contained on The Plan.

4.1 Impact Assessment

4.1.1 Site Selection

The Plan area is located in a Settlement Area of Simcoe County and in a Residential area within the Town of Wasaga Beach. The entire area will undergo land use changes which includes the removal of the existing woodlands, wetlands and Candidate Significant Wildlife Habitat (SWH). Refer to **Section 5.2** of this EIS for details about the natural heritage features that are afforded some protection by the **Provincial Policy Statement, 2020** (Ministry of Municipal Affairs and Housing 2020a). No natural features on the subject property will be retained by The Plan area (**Figures 2, 4, 5 and 7**). Part of SWDM2-2/MAMM4-1 will be converted to a stormwater management pond (SWM pond). It is intended that the parts of the SWM pond will be naturalized through native plant species plantings, following NVCA SWM pond construction guidelines, where feasible. Details regarding servicing and stormwater management are contained in the Functional Servicing and Stormwater Management Report (Jones Consulting Group Ltd. 2020c).

4.1.2 Hydrology

4.1.2.1 Nottawasaga Valley Conservation Authority (NVCA)

Almost the entire subject property is within the NVCA Ontario Regulation 172/06 area. There are two intermittent drainage swales present on the subject property. There are wetland features on the subject property. Refer to **Figure 5** for the locations of the wetland features. The wetland features are subject to

the policies of Ontario Regulation 172/06: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses. Refer to **Section 5.7** of this report for further details about the **Conservation Authority Act, 1990** (Province of Ontario 1990).

In order to determine the impacts of The Plan area and to mitigate for potential changes to the hydrology of the area, the NVCA will require additional technical reports to be submitted under separate cover: **Section 2.1** of this report provides a list of technical reports produced to-date in regards to The Plan area and relevant abutting lands. The list also includes other environmental and development reports within which the subject lands lie.

4.1.3 *Proposed Water Storage and Storm Water Management Pond*

Seven alternatives for water storage, stormwater management and conveyance to Georgian Bay have been evaluated by the Town of Wasaga Beach. One of the seven alternatives (Alternative 2) is located to the south of Beachwood Road and south of The Plan area. If this facility is constructed, the Stormwater Pond Outlets may drain through both the existing culverts that run into The Plan area. The paths of the intermittent drainage swales will be used as potential drainage paths to Georgian Bay. Refer to **Figure 5** for the location of the culverts and the existing west and east drainage swales that are proposed as potential drainage paths. The exact drainage paths and methods of conveyance (pipe vs. ditch) since 2018 have been confirmed. As we understand presently, the Town Work Yard will abut the subject property on the south side of Beachwood Road. The drainage from the Work Yard will be collected in a stormwater management pond (SWM pond) and outlet to the Municipal Drain to the west, which will cross Beachwood Road. Existing drainage to the current subject property's west culvert will be diverted to the Municipal Drain. The Municipal Drain will flow in a northerly direction along the western edge of the subject property, within a 6.0m wide easement, through the Wasaga Shorelines Subdivision (north of Betty Boulevard). The subject property 6.0m wide easement will be conveyed to the Town.

4.1.3.1 *Importance to the Development Proposal*

The Plan area is located in a residential area within the Town of Wasaga Beach. According to Section 5.1.1 of the Town of Wasaga Beach Official Plan the first objective of a residential area is "*To provide distinct residential areas which have a harmonious integration of housing types*". The Plan area presented in **Figure 2** in our professional opinion, conforms to that objective.

5 IMPACTS, POLICY & ENVIRONMENTAL DESIGNATIONS

5.1 Endangered Species Act (2007)

The Species at Risk in Ontario (SARO) List (COSSARO 2020) is Ontario Regulation 230/08 issued under the **Endangered Species Act, 2007 - ESA 2007** (Province of Ontario 2007). The **ESA 2007** provides both species protection (Section 9) and habitat protection (Section 10) to species listed as Endangered or Threatened on the COSSARO list. If an activity or project will result in adverse effects to Endangered or Threatened species and/or their habitat, additional action would need to be taken by a proponent to remain in compliance with the **ESA 2007**. Species listed as “Special Concern” (SC) are not afforded legal protection under the **ESA, 2007**.

5.1.1 NHIC Species at Risk Records and MNRF ESA Screening

The NHIC Make-a-Map online application was searched for historical records (EO – Element Occurrence records) of Species at Risk and Species of Conservation Concern within 1 km of the subject property. Additionally, an ESA Information Gathering Form request was sent to the MNRF Midhurst District Office. Jodi Benvenuti - Management Biologist responded with a detailed response on all Species at Risk (SAR) that could potentially occur on the subject parcel. The request is contained in **Appendix C** and the MNRF response is contained in **Appendix D**. **Table 5** contains the results of the NHIC and MNRF ESA screenings.

One federally Threatened species, Common Nighthawk, was heard on one occasion during Sage Earth’s field investigations. The results of the ESA Information Gathering Request are further discussed in **Section 5.1.2**.

5.1.2 Importance to Development Proposal

Based on Species at Risk information gathering efforts and field investigations conducted by Sage Earth and CEA contend that the proposed development will not likely contravene the **ESA, 2007** and will have no negative impacts to any SAR Endangered (END) or Threatened (THR) species or their habitats.

5.1.3 Species at Risk Bat Habitat Assessment

The response to Sage Earth’s ESA Screening Request from the MNRF Midhurst District Office (**Appendix D**) indicated that there is potential SAR bat habitat on the property. Field assessments were focused on determining habitat suitability for SAR bat species. It is the current position of the Ministry of Environment, Conservation and Parks (MECP) and through CEA’s experience to-date on other lands with similar features, that a tree-cutting timing window to address both SAR bats and migratory birds is appropriate, rather than snag tree surveys and acoustical surveys. The MECP current tree-cutting window for Simcoe County is October 15th to April 15th.

TABLE 5: SPECIES AT RISK NOTED BY NHIC AND MNRF SCREENING

Scientific Name	Common Name	S-RANK	COSEWIC	COSSARO	Suitable Habitat or Feature	Potential Habitat Description in Concept Plan Area	Observed During 2018 Field Survey
NHIC 1 km Search Species							
<i>Acipenser fulvescens pop. 3</i>	Lake Sturgeon (Great Lakes / St. Lawrence pop.)	S2	THR	THR	No	N/A	No
N/A	Restricted Species						
ESA Screening Request							
<i>Juglans cinerea</i>	Butternut	S3	END	END	Yes	Forests and hedgerows. ESA Protection: Species and general habitat protection.	No
<i>Wilsonia canadensis</i>	Canada Warbler	S4B	THR	SC	Yes	Wet, mixed deciduous-coniferous forests with a developed shrub layer. Shrub marshes, red-maple forest, white cedar forest, black spruce swamps, larch and riparian woodlands along rivers and lakes. (COSEWIC,2008). ESA Protection: N/A.	No
<i>Chordeiles minor</i>	Common Nighthawk	S4B	SC (2018)	SC	Yes	Open areas with little to no ground vegetation, such as logged or burned-over areas, forest clearings (present), rock barrens, peat bogs, lakeshores, and mine tailings. Also nests in cultivated fields, orchards, urban parks, mine tailings and along gravel roads and railways (MNRF, 2014). ESA Protection: N/A.	Yes
<i>Heterodon platirhinos</i>	Eastern Hog-nosed Snake	S3	THR	THR	Yes	Usually only occur in areas where toads are found (abundant American Toad tadpole population in northern SWDM1-1/MAMM4-1 polygon (Figure 4)). Prefer sandy, well-drained habitats such as beaches and dry forests where they can lay their eggs and hibernate (MNRF, 2014). ESA Protection: Species and general habitat protection.	No

TABLE 5: SPECIES AT RISK NOTED BY NHIC AND MNRF SCREENING

Scientific Name	Common Name	S-RANK	COSEWIC	COSSARO	Suitable Habitat or Feature	Potential Habitat Description in Concept Plan Area	Observed During 2018 Field Survey
<i>Myotis leibii</i>	Eastern Small-footed Myotis	S2S3	END	END	Yes	Roosts in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees (present) - (MNRF 2014). ESA Protection: Species and general habitat protection.	No
<i>Caprimulgus vociferus</i>	Eastern Whip-Poor-Will	S4B	THR	THR	Yes	Areas with a mix of open and forested areas, such as savannahs, open woodlands or openings in more mature, deciduous, coniferous and mixed forests (present) - (MNRF, 2014). ESA Protection: Species and general habitat protection.	No
<i>Contopus virens</i>	Eastern Wood-Pewee	S4B	SC	SC	Yes	Deciduous and mixed forests with little understory vegetation; often found in clearings or on edges of deciduous and mixed forests (MNRF, 2015). ESA Protection: N/A.	No
<i>Vermivora chrysoptera</i>	Golden-winged Warbler	S4B	THR	SC	Yes	Prefers areas with young shrubs surrounded by mature forest including locations that have recently been disturbed, such as field edges, hydro or utility right-of-way's, or logged areas (MNRF, 2014). ESA Protection: N/A.	No
<i>Myotis lucifugus</i>	Little Brown Myotis	S4	END	END	Yes	Forests (present) and regularly aging human structures as maternity roost sites. Overwintering sites are characteristically mines or caves, but can often include buildings (COSEWIC,2013). ESA Protection: Species and general habitat protection.	No
<i>Danaus plexippus</i>	Monarch	S2N, S4B	END	SC	Yes	Monarch caterpillars reply on milkweed plants (present) as a primary food source and are confined to meadows and open areas where this plant grows (present). As adults, monarchs can be found in a wide variety of habitats where they feed on nectar from wildflowers. ESA Protection: N/A.	No

TABLE 5: SPECIES AT RISK NOTED BY NHIC AND MNRF SCREENING

Scientific Name	Common Name	S-RANK	COSEWIC	COSSARO	Suitable Habitat or Feature	Potential Habitat Description in Concept Plan Area	Observed During 2018 Field Survey
<i>Myotis septentrionalis</i>	Northern Myotis	S3	END	END	Yes	Maternity roost sites are generally located within deciduous and mixed forests and focused within leaves (present). Overwintering sites are characteristically mines or caves, but can include buildings (COSEWIC, 2013). ESA Protection: Species and general habitat protection.	No
<i>Melanerpes erythrocephalus</i>	Red Headed Woodpecker	S4B	THR	SC	Yes	Prefers open woodland and woodland edges, and is often found in parks, golf courses and cemeteries. Require dead trees for nesting and perching (MNRF, 2014). ESA Protection: N/A	No
<i>Chelydra serpentina</i>	Snapping Turtle	S3	SC	SC	Yes	Marsh (present), swamp (present), fen wood (poor fens). Shallow waters in lakes or along streams, use open areas of sand or gravel for nesting. ESA Protection: N/A	No
<i>Asio flammeus</i>	Short-eared Owl	S2N,	SC	SC	No	Open areas such as grasslands, marshes and tundra where it nests on the ground (MNRF, 2014). ESA Protection: N/A	No
<i>Perimyotis subflavus</i>	Tricolored Bat/Eastern Pipistrelle	S3	END	END	Yes	Maternity roost sites include forests (present) and modified landscapes (barns or human-made wood structures). Overwintering sites include mines and caves (COSEWIC, 2013). ESA Protection: Species and general habitat protection.	No
<i>Hylocichla mustelina</i>	Wood Thrush	S4B	THR	SC	No	Typically associated with moist mature deciduous and mixed forests with a well-developed understory (present) - (COSEWIC,2012i). ESA Protection: N/A	No

5.1.3.1 Phase 1: Bat Habitat Suitability Assessment

Four ELC vegetation community types on the subject property meet the requirements for candidate SAR bat maternity roost habitat; Fresh-Moist White Cedar Hardwood Mixed Forest Type (FOMM7-2), Fresh-Moist Green Ash Hardwood Lowland (FODM7-2), White Cedar-Hardwood Mineral Mixed Swamp Type (SWMM1-1), and Green Ash Mineral Deciduous Swamp Type (SWDM2-2). A leaf off snag assessment was conducted within these ELC communities to determine the location and quality of the potential trees and snags for SAR bats. **Figure 9** displays the location of all suitable snags that were encountered during the survey.

5.1.3.2 Phase 2: Suitable Maternity Roost Tree Survey

During the leaf-off survey, a total of eight trees and snags were identified on The Plan area as candidate maternity roost habitat for Northern Myotis and Little Brown Myotis (**Table 6**). The details for each of the eight trees are summarized below in **Table 6**. The snag density for the entire property was 8 snags (8 snags/ 5.88 ha = 1.4 snags/ha).

5.1.3.3 SAR Bats

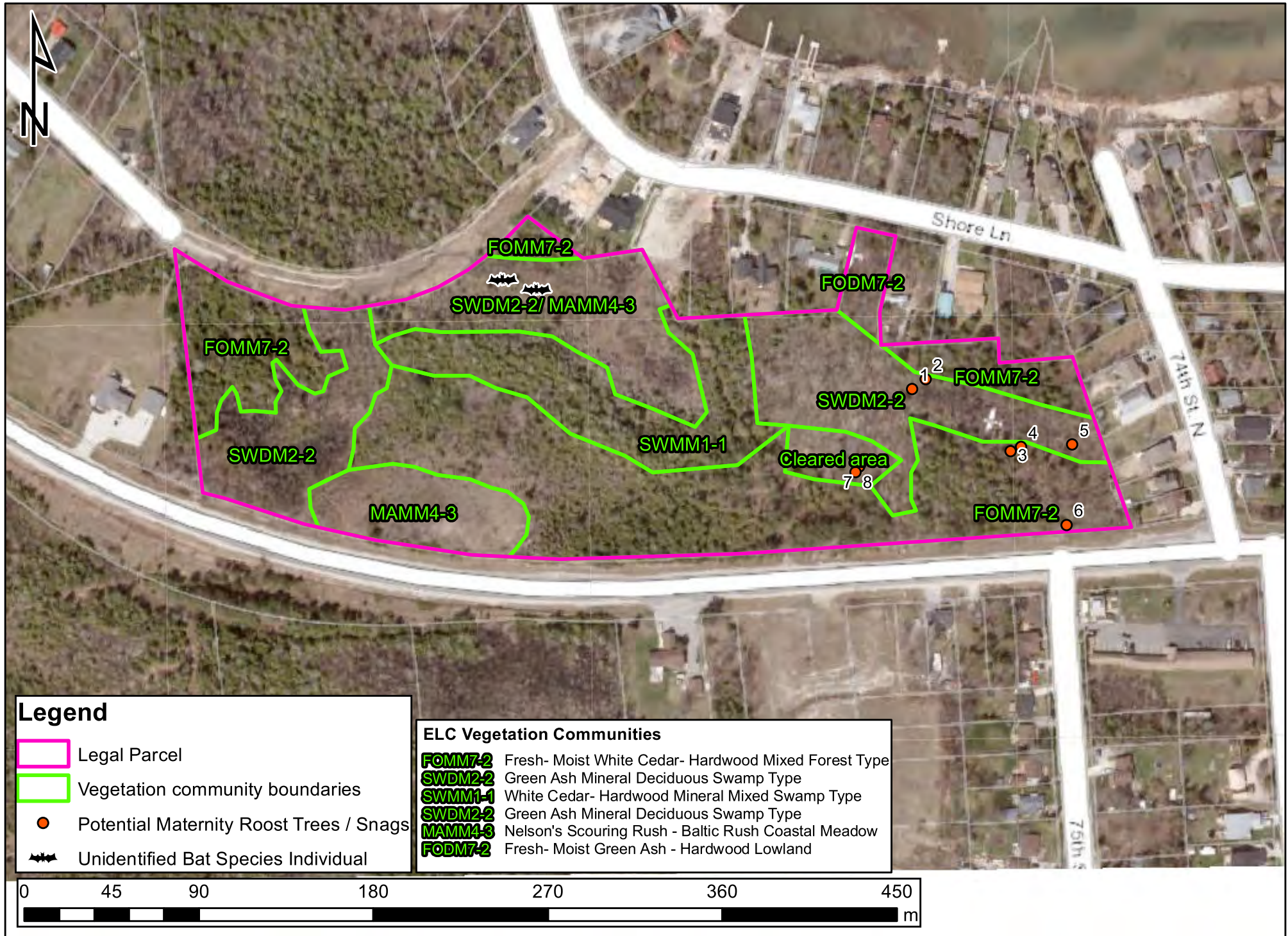
Leaf-off snag surveys determined that the snag density results for the entire property was 1.4 snags/ha (8 snags/ 5.88 ha = 1.4 snags/ha) confirming that the area contains poor quality habitat for Northern Myotis and Little Brown Myotis (OMNRF Protocol, 2007). Of the eight trees identified as having a cavity suitable for maternity roosting, only two had roosting features such as loose bark or knot holes. Therefore, it is unlikely that SAR bats would utilize the woodland within the subject property for maternity roosting.

In addition, the subject property is located less than 50m from a larger woodland (more than 100ha) which extends to the south of The Plan area. It is uncertain what will happen to this large natural heritage feature to the south. As of 2020, it is the approved site for a Town of Wasaga Beach water storage and stormwater treatment plants (Town Work Yard) and the area to the west of the Town Work Yard is proposed for a subdivision. Extensive roosting and foraging habitat for any bat species that may have utilized the area in 2018, will now be removed, once the Town's Work Yard is constructed.

5.1.3.4 Importance to the Development Proposal

Leaf-off snag surveys determined that the snag density results for the entire property was 8 snags/ 5.88 ha = 1.4 snags/ha confirming that the Proposed Draft Plan of Vacant Land Condominium area contains poor quality habitat for Northern Myotis and Little Brown Myotis. It is in the professional opinion of Sage Earth and CEA that the proposed development will not contravene the **ESA, 2007** Section 9 or 10 as relates to SAR bats. Bat maternity roosting habitat may remain in some of woodlands to the south of The Plan area that are not proposed and/or approved for development.

Figure 9: SAR Bat Habitat Assessment



Legend

- Legal Parcel
- Vegetation community boundaries
- Potential Maternity Roost Trees / Snags
- 🦇 Unidentified Bat Species Individual

ELC Vegetation Communities

FOMM7-2	Fresh- Moist White Cedar- Hardwood Mixed Forest Type
SWDM2-2	Green Ash Mineral Deciduous Swamp Type
SWMM1-1	White Cedar- Hardwood Mineral Mixed Swamp Type
SWDM2-2	Green Ash Mineral Deciduous Swamp Type
MAMM4-3	Nelson's Scouring Rush - Baltic Rush Coastal Meadow
FODM7-2	Fresh- Moist Green Ash - Hardwood Lowland



TABLE 6: LEAF OFF BAT MATERNITY ROOST ASSESSMENT

Tree ID	Common Name	Scientific Name	DBH (cm)	Suitable Maternity Roost Features							Cavity or Crack Height (m)	Overall Snag Quality
				Height Class	Cavity	Loose Bark	Crack	Knot Hole	Snags Within 10 m	Decay Class 1-3		
1	Green Ash	<i>Fraxinus pennsylvanica</i>	35	1	Yes				Yes	Yes	10	Low
2	Green Ash	<i>Fraxinus pennsylvanica</i>	26	1	Yes			Yes	Yes	Yes	6	Medium
3	Northern White Cedar	<i>Thuja occidentalis</i>	29	1	Yes					Yes	2 - 6	Low
4	Northern White Cedar	<i>Thuja occidentalis</i>	28	1	Yes					Yes	5	Low
5	Silver Maple	<i>Acer saccharinum</i>	29	1	Yes					Yes	6	Low
6	Green Ash	<i>Fraxinus pennsylvanica</i>	26	1		Yes					8 - 10	Low
7	Green Ash	<i>Fraxinus pennsylvanica</i>	55	1	Yes				Yes	Yes	10	Low
8	Green Ash	<i>Fraxinus pennsylvanica</i>	54	1	Yes					Yes	7	Low

5.1.4 *Special Concern/Threatened Species – Common Nighthawk*

One Common Nighthawk was incidentally detected vocalizing during amphibian surveys conducted on May 30, 2018 near the southeast boundary of The Plan area (**Figure 4**). Common Nighthawk nest in a wide range of open, vegetation-free habitats such as recently harvested forests, burnt-over areas, logged areas, rocky outcrops, rocky barrens, grasslands, pastures, marshes, lakeshores but have also been found to inhabit mixed and coniferous forests. The southern MAMM4-1 polygon was cleared of trees approximately 20 years prior, in addition to the loss of eastern white cedar trees due to flooding, as evidenced by the dead trees throughout this feature.

5.1.4.1 *Importance to the Development Proposal*

The MAMM4-1 community in the subject property may provide marginal suitable habitat for Common Nighthawk foraging and breeding. In addition, Common Nighthawks were not detected during the nocturnal bird survey conducted on June 25, 2018. As such, it is unknown whether this species is utilizing the subject property for breeding or if the first detection was the result of an incidental occurrence in potential habitat, without breeding evidence.

Common Nighthawk is not allotted any protection under the provincial **ESA, 2007** as this bird species is listed as a Special Concern (SC) species with no regulated general or specific habitat protection. However, this species receives protection on a federal level under the Species at Risk Act (SARA) as it is listed as Threatened. As is CEA's understanding, the federal government only requires protections on federal lands or on lands involving federal financing, and not on private lands.

5.2 Provincial Policy Statement (2020)

The Planning Act establishes that regional and municipal authorities, when making decisions that affect a planning matter, "shall be consistent with" the **Provincial Policy Statement, 2020**, issued under The Planning Act. As noted in Ontario's **Provincial Policy Statement, 2020**; "to achieve long-term prosperity, environmental health and social well-being, the province must depend on protecting its various resources; natural heritage, agricultural, water, mineral, archaeological and cultural." Section 2.1 in the **PPS, 2020** deals with Natural Heritage resources. These policies are further expanded and described in the Natural Heritage Reference Manual (Sections 5-11) (Ontario Ministry of Natural Resources, 2010).

5.2.1 *Natural Heritage*

Subsection 2.1.1 of the **Provincial Policy Statement, 2020** suggests that natural features and areas should be protected for the long term. To achieve this goal Subsections 2.1.4, 2.1.5, 2.1.6, 2.1.7 and 2.1.8 indicate where development and site alteration shall not be permitted. Specifically, these include; Significant Wetlands, Significant Woodlands, Significant Valleylands, Significant Wildlife Habitat, Significant Areas of Natural and Scientific Interest, Fish Habitat and Habitats of Endangered and Threatened Species; except in accordance with provincial and federal requirements. Subsection 2.1.8 goes onto state; "*Development*

and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.”

The **PPS, 2020** also defines Natural Heritage Features (NHF) and areas as “*features and areas, including significant wetlands, significant coastal wetlands, other coastal wetlands in Ecoregions 5E, 6E and 7E, fish habitat, significant woodlands and significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary’s River, habitat of endangered species and threatened species, significant wildlife habitat, and significant areas of natural and scientific interest, which are important for their environmental and social values as a legacy of the natural landscapes of an area.”*

The following sections discuss the potentially protected natural features within the subject property and adjacent lands, as well as any impacts presented by The Plan.

5.2.2 Other Coastal Wetlands

The **PPS, 2020** defines a Coastal Wetland as:

“a any wetland that is located on one of the Great Lakes or their connecting channels (Lake St. Clair, St. Mary’s, St. Clair, Detroit, Niagara and St. Lawrence Rivers; or

b any other wetland that is on a tributary to any of the above-specified water bodies and lies, either wholly or in part, downstream of a line located 2 kilometres upstream of the 1:100-year floodline (plus wave run-up of the large water body to which the tributary is connected.”

All of the wetlands within the subject property are located adjacent to Georgian Bay. Intermittent drainage swales currently flow along the western and eastern portion of the property discharging into Georgian Bay.

There are wetlands present throughout the subject property, consisting of Green Ash Mineral Deciduous Swamp Type (SWDM2-2), White Cedar-Hardwood Mineral Mixed Swamp Type (SWMM1-1) and Graminoid Coastal Meadow Marsh Type (MAMM4-1) – (**Figure 5**). The MAMM4-1 is considered to be Provincially Imperilled (S2) by the NHIC (**Figure 4**). Of these three vegetation communities only the MAMM4-1 vegetation community has a species composition that contains some typical (albeit in low number) Great Lakes Coastal Wetland plant species with some diversity, and includes the following:

1. Small-flowered Purple False Foxglove (*Agalinis paupercula*);
2. Bearberry (*Arctostaphylos uva-ursi*);
3. Woolly Sedge (*Carex pellita*);
4. Baltic Rush (*Juncus balticus*);

-
5. Starflower False Solomon's Seal (*Maianthemum stellatum*);
 6. Eastern Ninebark (*Physocarpus opulifolius*);
 7. Sand Cherry (*Prunus pumila*);
 8. Three-square Bulrush (*Scirpus pungens*);
 9. Hooded Skullcap (*Scutellaria galericulata*);
 10. Balsam Ragweed (*Senecio pauperculus*);
 11. Canada Buffalo-berry (*Shepherdia canadensis*); and,
 12. Ohio Goldenrod (*Solidago ohioensis*)

All the species listed are common and are secure in Ontario. Many of these coastal wetland species exist outside of the MAMM4-1 polygons in the adjacent on-site vegetation communities as well, but these adjacent features are dominated by other plant species that are removed from Georgian Bay, including a variety of tree and shrub species. In the past, the local geographic area (pre-development) contained a mosaic of natural features which were connected to Georgian Bay. In recent years as-built residential developments along the waterfront and further inland have resulted in the removal of natural features and their ecological functions and separated the remaining natural features from the Georgian Bay shoreline. Shore Lane situated to the north of the subject property has acted as a berm that impounds water conveyance through the two culverts to the south (**Figures 3 and 5**). As the water level rises some of the trees and shrubs in the swamp communities are dying or are dead and some of the swamp areas are transitioning into marsh vegetation communities, specifically the SWDM2-2/MAMM4-1 vegetation community.

The natural areas within The Plan remain somewhat connected hydrologically to Georgian Bay during flooding events, although there is no floodplain on the subject property. Coastal wetland plant seeds are typically deposited onto lands during these flooding events. Wind also contributes seed dispersal from other coastal wetland areas. Birds and other wildlife may contribute to the movement and dispersal of some of the coastal wetland plant species and seeds into area.

5.2.2.1 *Importance to the Development Proposal*

The **PPS, 2020** provides some protection for coastal wetlands that are not classified as Provincially Significant. The MAMM4-1 is a coastal wetland vegetation community according to the Ecological Land Classification for Southern Ontario (Lee *et al.* 1998, Lee, 2008) and it is considered to be Provincially Imperilled (S2) by the NHIC (**Figure 4**). The MAMM4-1 vegetation community has a species composition that is somewhat but not entirely dominated by Great Lakes Coastal Wetland plant species. However, as found during the 2020 site visits, parts of MAMM4-1 along the subject property frontage onto Beachwood Road are drying out, compared to past years, and also there is a noticeable on-going encroachment by wetland/upland and upland plant species (e.g., wild carrot as evidenced on **Photograph 15**).

The current design of The Plan will remove the MAMM4-1 vegetation community polygons (**Figures 4 and 5**). The OP designation is Residential and the current zoning is R1 and R1H – Residential 1, and the

intended removal of the majority of the wetland and woodland features on-site is required in order to implement the Draft Plan.

5.2.3 *Woodland*

The **PPS, 2020** defines Woodlands as “*treed areas that provide environmental and economic benefits to both the private landowner and the general public, such as erosion prevention, hydrological and nutrient cycling, provision of clean air and the long-term storage of carbon, provision of wildlife habitat, outdoor recreational opportunities, and the sustainable harvest of a wide range of woodland products.*”

Significant Woodland (SW) is defined in the **PPS, 2020** as: “*an area which is ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history*”.

5.2.3.1 *Importance to the Development Proposal*

The woodlands on and adjacent to the Proposed Draft Plan of Vacant Land Condominium area cover approximately 9.35 ha and are one of few intact mosaics of woodland features remaining in the Settlement Area on the north side of Beachwood Rd and Mosley St. At present, the on-site woodland features provide ecological functions such as wildlife habitat and a natural filter for surface water runoff before continuing into Georgian Bay, however it does not fulfil the Significant Woodland (SW) criteria defined in the MNRF Natural Heritage Reference Manual (MNRF 2010). The Town has not identified and mapped Significant Woodland on the subject property in the Official Plan.

5.2.4 *Significant Wildlife Habitat*

5.2.4.1 *Species of Conservation Concern - Confirmed*

According to Section 9.3.1 of the Natural Heritage Reference Manual (MNRF, 2010) Significant Wildlife Habitat (SWH) includes:

“Habitat of Species of Conservation Concern: includes the habitat of species that are rare or substantially declining or have a high percentage of their global population in Ontario”.

The MAMM4-1 vegetation community on the south side of the Proposed Draft Plan of Vacant Land Condominium area may possibly be considered part of Candidate Significant Wildlife Habitat under the **PPS, 2020**. A Common Nighthawk, listed as Special Concern (SC) by COSARO and designated as Threatened by COSEWIC, was heard within this wetland feature. However, no evidence of breeding was noticed within this wetland feature, the one observation was incidental.

The northern polygon of MAMM4-1 may possibly be considered part of Candidate Significant Wildlife Habitat (SWH) because this area has coastal wetland affinities, and it is considered to be Provincially Imperilled (S2) by NHIC (2020). However, it should be duly noted that neither the Town or the MNRF have designated the coastal wetland features (south and north unit) as described by Sage Environmental as coastal wetland features, or part of SWH, or as an Environmental Protection (EP) area, Open Space (OS) area, or some other designation that would preclude development. The entire property is zoned R1 and R1H – Residential 1.

5.2.4.1.1 *Importance to the Development Proposal*

Candidate Significant Wildlife Habitat (SWH) possibly exists within the Proposed Draft Plan of Vacant Land Condominium area, specifically in the Graminoid Coastal Meadow Marsh Type (MAMM4-1). Special Concern (SC) bird species Common Nighthawk was heard within the southern polygon MAMM4-1 during the breeding season. The MAMM4-1 is also considered to be Provincially Imperilled (S2) by the NHIC. However, no breeding evidence for this bird species was noted.

5.2.4.2 *Seeps and Springs - Candidate*

A number of ground water indicator plant species are present within the Green Ash Mineral Deciduous Swamp Type (SWDM2-2), White Cedar-Hardwood Mineral Mixed Swamp Type (SWMM1-1) and Graminoid Coastal Meadow Marsh Type (MAMM4-1):

1. Rough Sedge (*Carex scabrata*);
2. Spotted Jewel-weed (*Impatiens capensis*);
3. True Watercress (*Nasturtium officinale*);
4. Sweet Coltsfoot (*Petasites frigidus*);
5. Swamp Buttercup (*Ranunculus hispidus var. caricetorum*); and,
6. Brook Pimpernell (*Veronica anagallis-aquatica*).

5.2.4.2.1 *Importance to the Development Proposal*

The location and number of seeps was not examined during the 2018 field season. This would have to be assessed in the future to determine where the seeps are located and in what quantity. There needs to be a minimum of 2 or more seeps/springs in order for an area to be considered confirmed Significant Wildlife Habitat. No active springs that would maintain surface flow were observed or documented in the hydrogeological study. Ground water at surface within the wetland areas is believed to sustain the aforementioned species. In our opinion the site would not be a candidate ground water discharge area.

5.3 Growth Plan for the Greater Golden Horseshoe (2020)

The ***Growth Plan for the Greater Golden Horseshoe, 2020*** - Ontario Regulation 416/05 (Ministry of Municipal Affairs and Housing 2020b) is directed by the ***Provincial Policy Statement, 2020***, to work in accordance with the Greenbelt Plan, Oak Ridges Moraine Conservation Plan, and the Niagara Escarpment Plan to protect and enhance the area's natural heritage and hydrological features and functions. Sections 4.2.1, 4.2.2, 4.2.3, and 4.2.4 pertain to the protection of hydrologic resources and natural heritage systems.

Lands within a settlement area as of 2020 will be directed to the policies of the ***PPS, 2020*** and be subject to the natural heritage policies of the Growth Plan. **Section 4.2.2** provides the following policy for settlement areas:

“Beyond the Natural Heritage System, including within settlement areas, the municipality:

- a) will continue to protect any other natural heritage features in a manner that is consistent with the PPS; and*
- b) may continue to protect any other natural heritage system or identify new systems in a manner that is consistent with the PPS.”*

5.3.1 Importance to the Development Proposal

The legal parcels are located within the settlement area in Simcoe County. They are situated greater than 120 metres from any key natural heritage feature or key hydrologic features within the Natural Heritage System. Thus, the policies of the Growth Plan for the Greater Golden Horseshoe, 2017 are inapplicable.

5.4 Simcoe County Official Plan (2016)

Schedule 5.1 - Land Use Designations: The legal parcels are within the “Settlements” designation. The Town of Wasaga Beach must have regard for the policies of the County in their Official Plan and their approval will be required for the Official Plan Amendment.

5.4.1 Importance to the Development Proposal

The Plan will be required to have regard for the natural heritage policies of the County OP.

5.5 Town of Wasaga Beach Official Plan (2016)

Schedule A-1 - Land Use: The entire property is designated “*Residential*”.

Schedule D - Natural Heritage System: This schedule shows two areas within the property that are designated as “*Natural Heritage System Category 2 Lands*”.

Schedule H – Community Improvement Project Areas: The entire Proposed Draft Plan of Vacant Land Condominium area is part of the West End Community Improvement Project Study Area.

5.5.1 *Importance to the Development Proposal*

The majority of the Proposed Draft Plan of Vacant Land Condominium area is designated as Residential with small pockets of Natural Heritage System Category 2 lands contained therein.

5.5.1.1 *Residential Designation*

The Proposed Draft Plan of Vacant Land Condominium is consistent with the following objectives of the residential designation:

“5.1.1 To provide distinct residential areas which have a harmonious integration of housing types;

5.1.2 To encourage and provide for a Town wide structure of residential communities separated from industrial and tourism areas;

5.1.3 To encourage a high standard of community design through creation and implementation of urban design guidelines, for both existing and new development such that the overall image of the Town is upgraded. The standards of community design should have regard for the urban, semi- rural and recreational aspects of the Town, and have consideration for existing residential neighbourhoods;

5.1.5 To control residential growth such that the existing level of commercial to residential assessment does not further decrease, and to endeavour to further reduce the dependence on residential assessment;

5.1.6 To encourage the provision of a wide range of housing types and styles on a range of lot sizes;

5.1.7 To support housing affordability and create rental housing opportunities by permitting accessory dwelling units within residential dwellings, where appropriate.

5.1.8 To allow limited infill development outside that area of the Town serviced by a municipal sanitary sewer and water system, while ensuring that the majority of approved residential development occurs within the serviced areas;”

5.1.9 To maintain and encourage evenly spaced natural buffering zones which provide drainage, encourage and protect wildlife and their habitat and assist with controlling air and noise pollution.”

5.5.1.2 *Natural Heritage System Category 2 Lands*

The OP describes the Category 2 lands in Section 13.2.3 as including Significant Wildlife Habitat (SWH). Section 13.4.1 states the following:

“It is intended that natural heritage system features and areas and their adjacent lands are to be conserved, maintained, and enhanced and not subject to the impact of incompatible and inappropriate

land uses and development. In order to protect and conserve significant environmental features two categories of natural heritage features and areas have been established; areas where development and site alteration will not be permitted (Category 1); and areas where development and site alteration are only permitted when an environmental impact study (EIS) has demonstrated that there will be no negative impact on the natural features or functions of areas (Category 2)."

The Town has designated limited portions of the property as Category 2 which permits development subject to the findings of an EIS. The Town has completed two natural heritage studies of the area and has not designated all or parts of the subject property as SWH, nor do the findings of the EIS support designation of the lands as SWH given the species observed and features present.

It is the professional opinion of CEA that the marginal Coastal Wetland features do not contain sufficient numbers and diversity of coastal wetland plant species and other wetland affinities required to designate it of significance. Due to the current drier soil moisture conditions, the encroachment of upland species and the potential that this feature type will continue to dry-out over time due to on-site surface water drainage diversion due to the construction of the Town's Work Yard Municipal Drain, that the marginal coastal wetland features would continue to change over time, regardless of the proposed residential development. It should also be noted, that by definition the on-site marginal coastal wetland features lie within 2.0 km of Georgian Bay, but that there will be no defined surface water connection (e.g., surface watercourse, which is also part of a coastal wetland definition) to the bay once the Municipal Drain is constructed. Also, given the low diversity and relative low abundance of coastal wetland indicator plant species in the MAMM4-1 features, this wetland type would not qualify as Significant Coastal Wetland features and have not been evaluated and designated as such by the MNRF and/or the Town. The **PPS, 2020** Policy 2.1.5 f) also states, "*development is permitted within coastal wetlands in Ecoregions 5E, 6E and 7E1, that are not subject to policy 2.1.4 (b) Significant Coastal Wetlands, unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.*"

The Draft Plan of Vacant Land Condominium proposes a total of 215 units with a parkland block of (0.35 ha) and the municipal drain block (0.07 ha) which are described now as "*Other lands owned by the applicant, to be conveyed to the Town.*"

5.6 Town of Wasaga Beach Zoning By-law 2003-60

Schedule B of the Zoning By-law shows that the subject property is zoned R1 and R1H – Residential 1.

5.6.1 Importance to the Development Proposal

This zoning issued for the Proposed Draft Plan of Vacant Land Condominium area allows residential development. A zoning by-law amendment is being undertaken for compliance with the zoning requirements for The Plan.

5.7 Conservation Authorities Act (1990 with 2020 amendments)

The **Conservation Authorities Act, 1990** (Province of Ontario 1990 with 2020 amendments) empowers Conservation Authorities (CA) to regulate development activities in or adjacent to watercourses and wetlands, which may interfere with their functions. The Plan falls under the jurisdiction of the Nottawasaga Valley Conservation Authority (NVCA) and is subject to Ontario Regulation 172/06.

5.7.1 *Ontario Regulation 172/06: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*

Three natural heritage features are regulated by Ontario Regulation 172/06 within the subject property, specifically the wetlands. Sage Earth field verified the boundaries of the wetland. The wetland is composed of Green Ash Mineral Deciduous Swamp Type (SWDM2-2), White Cedar – Hardwood Mineral Mixed Swamp Type (SWMM1-1) and Graminoid Coastal Meadow Marsh Type (MAMM4-1) as shown on **Figure 5**.

5.7.1.1 **Importance to the Development Proposal**

A permit under Ontario Regulation 172/06 will be required before site alteration and development can occur on the subject property.

5.8 Migratory Birds Convention Act (1994)

According to the **Migratory Birds Convention Act, 1990** (MBCA) (Environment and Climate Change Canada 2020), the act is intended to: “*implement a Convention for the protection and conservation of migratory birds in Canada and the United States*” ... “*The purpose of this Act is to implement the Convention by protecting and conserving migratory birds — as populations and individual birds — and their nests*” A “*migratory bird means a migratory bird referred to in the Convention, and includes the sperm, eggs, embryos, tissue cultures and parts of the bird.*”

According to the Regulations in Subsection 12 (1)(h): 12(1) “*The Governor in Council may make any regulations that the Governor in Council considers necessary to carry out the purposes and provisions of this Act and the Convention, including regulations*” ... “*(h) for prohibiting the killing, capturing, injuring, taking or disturbing of migratory birds or the damaging, destroying, removing or disturbing of nests.*” Environment and Climate Change Canada (2020) administers the requirements and regulations under the MBCA. As such, dates and protocol have been recommended below to ensure vegetation removal is undertaken outside of the breeding bird season.

5.8.1 *Importance to the Development Proposal*

Any future residential development will require tree and shrub clearing. No tree or shrub clearing will be allowed during the breeding bird window. If trees or shrubs are to be cleared prior to construction, clearing

should not take place between April 1 and the end of August in order to avoid destruction of active bird nests protected by the MBCA. Alternatively, a nest search should be conducted by a qualified ornithologist in the area designated for clearing and any active nests found will not be disturbed by work activity until the young have fledged. Vegetation clearing will take place no later than three days after the nest search; otherwise, the nest search will be repeated.

6 RECOMMENDATIONS TO AVOID AND/OR REDUCE IMPACTS

6.1 Mitigation Measures

As stated in the previous section of this EIS there will be potential environmental impacts to the on-site and abutting natural features as a result of the proposed development. Typical and specific mitigation measures are recommended below. Other mitigation measures may be identified by the resource management agencies, in particular the NVCA for procurement of **Ontario Regulation 172/06, "Nottawasaga Valley Conservation Authority: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses** (Province of Ontario 2006).

CEA recommends that the following mitigation measures be implemented to facilitate the proposed development on the subject property:

1. Consultation and dialogue be undertaken with the Town of Wasaga Beach and NVCA, regarding the proposed removal of the wetland and woodland features, as well as the removal of the intermittent drainage swales to implement The Plan area.
2. Best Management Practices (BMPs) be identified and the form of each, and implemented during site clearing, servicing and construction, and the retention of some until the entire subject property has been "greened-up."

6.2 Best Management Practices (BMPs)

Best Management Practices should be used to minimize erosion potential before, during and after construction. Examples of BMPs include the following, including any additional BMPs identified and requested by the NVCA, Town or other review agencies:

- A construction barrier fence and/or a sediment and erosion control fence should be installed between the construction site and the shore of Georgian Bay;
- Soil stock piles should be protected with sediment fence on the down gradient side of the pile;
- An erosion and sediment control plan should be reviewed by construction crews;
- The contractor should be confined to the minimum area necessary to perform the work by:
 - minimizing the width of disturbance, wherever possible;
 - limiting equipment storage areas and vehicle turning points to the existing roadway to the south as much as possible.
- All equipment, maintenance and fuel should be confined to a pre-determined fenced area on the subject property to prevent and contain any spills of petroleum products and that any spills be reported immediately to the Ontario's Spills Action Centre;
- A list of emergency contacts and phone numbers be prepared and provided to the Owner, Town,

NVCA and contractors to address any issues and incidents that may be deemed to negatively affect the on-site and abutting natural features during site preparation, servicing and construction.

**7 SUMMARIES OF OPINIONS AND RECOMMENDATIONS REGARDING
NATURAL ENVIRONMENT ISSUES**

Based on the results of the EIS data and assessments/evaluations and professional opinions, the following conclusion and recommendations are presented:

7.1 Development Proposal

As outlined in Section 1.3, the proposed land development is to build a Draft Plan of Vacant Land Condominium, comprised of a variety of residential dwellings (e.g., singles, townhomes and high density).

The subdivision statistics are as follows:

- Residential - Singles (Units 1-33, 33 units) covering 1.1 ha
- Residential – Townhouses (Units 34-81, 48 units) covering 1.07 ha
- Residential – High Density (Units 82 & 83, 134 units) covering 2.09 ha
- Stormwater Management covering 0.31 ha
- Roadway covering 0.68 ha
- Common Elements covering 0.12 ha
- County Daylighting covering 0.02 ha
- 0.3 Reserves covering 0.01 ha
- Parkland to be Conveyed covering 5.40 ha
- Municipal Drain to be Conveyed covering 0.35 ha
- Other Lands Owned by the Applicant covering 0.06 ha

The Plan as currently designed does not retain the natural features, as the entire subject property is designated Residential and zoned Residential. The field studies and associated assessment did not identify any significant natural heritage features requiring retention based on their ecological functions and the impact of the surrounding development.

7.2 Vegetation Removal

All vegetation within The Plan area is planned to be removed. The two provincially significant (S2 - Imperilled) Graminoid Coastal Meadow Marsh Type (MAMM4-1) polygons (**Figure 4**) will be removed. The rare Black Ash individuals, which are designated as Threatened by COSEWIC and are found in the northern MAMM4-1 polygon will also be removed. The MAMM4-1 community is showing signs of drying out based on existing changes to the surface and ground water regime from development. Black Ash is threatened by Emerald Ash Borer and is not listed under any SARA and ESA schedules.

The western portion of the subject property contains the better-quality vegetation communities, while the central and eastern portions are in general younger forests and younger swamps. As previously stated, the subject property is designated and zoned residential, there are no non-developable areas mapped or zoned on-site and no prohibitive development OP policies.

7.3 Fauna and Wildlife Habitat

All wildlife habitat including the confirmed Species of Conservation Concern habitat is planned to be removed as a result of the proposed development. Potential Common Nighthawk habitat will be removed in the southern MAMM4-1 polygon (**Figure 4**). This species is listed as Special Concern provincially by COSSARO and in the **ESA, 2007** and is listed as Threatened federally by the **Species at Risk Act, 2002**. The marginal coastal wetland features identified by Sage Earth (MAMM4-1) are proposed to be removed in their entirety.

7.4 Proposed Water Storage and Storm Water Management Pond

Seven alternatives for water storage, stormwater management and conveyance to Georgian Bay are being evaluated by the Town of Wasaga Beach. One of the seven alternatives (Alternative 2) is located to the south of Beachwood Road and south of the Proposed Draft Plan of Vacant Land Condominium area. If this facility is constructed the Stormwater Pond Outlets will run through both the existing culverts that run into the Proposed Draft Plan of Vacant Land Condominium area. The paths of the intermittent drainage swales may be used as potential drainage paths to Georgian Bay. Refer to **Figure 5** for the location of the culverts and the existing drainage swales that could be used as potential drainage paths. The exact drainage paths and methods of conveyance (pipe vs. ditch) have not been finalized as we understand. However, a Municipal Environmental Assessment (Municipal EA) has been completed and approved for the proposed Town Work Yard that abuts the subject property on the south side of Beachwood Road. The EA includes the proposed construction of a Municipal Drain starting at the SWM pond outlet. Therefore, most of the current subject property drainage will be diverted from the west culvert to the Municipal Drain. This will have the overall effect of further changing (reducing) the shallow ground water and surface water inputs to the wetland features MAMM4-1.

7.5 Significant Coastal Wetland

Based on CEAs knowledge (2014) of the subject property for a previous landowner, wetland feature MAMM4-1 was once inundated with standing water, as evidenced by the dead, dying and fallen eastern white cedars. Site visits in 2020 confirmed a noticeable lack of standing water, and a natural regeneration and encroachment of upland and wetland/upland species, such that in our professional opinion the identified coastal wetland polygons MAMM4-1 are drying out and will over time change to another type of wetland and/or a lowland non-wetland feature. It is to be duly noted that although the identified coastal wetland features lie within 2 km of Georgian Bay, there is no direct surface water (e.g., permanent or intermittent creek) connection to the bay. Also, as noted in the **PPS, 2020**, development is permitted in a coastal wetland, provided an EIS is undertaken that can demonstrate no negative impacts to the feature and/or its ecological functions. No site alteration of development is permitted in a Significant Coastal Wetland, but the MAMM4-1 does not meet the definition of a Significant Coastal Wetland.

7.6 Endangered Species Act, 2007

Based on Species at Risk (SAR) information gathering efforts and field investigations conducted by Sage Earth it is argued that the project is not likely to contravene the **ESA, 2007** and will have no impact on any Endangered (END) or Threatened (THR) species or their habitats.

7.6.1 Species at Risk Bat Maternity Roosting Habitat

Leaf-off snag surveys determined that the snag density results for the entire property was 8 snags/ 5.88 ha = 1.4 snags/ha confirming that the subject property contains poor quality habitat for Northern Myotis and Little Brown Myotis. It is our professional opinion and as supported by the findings in this EIS, that the proposed development will not contravene the ESA 2007 Section 9 or 10 in regards to SAR bats. A timing window for the removal of tree cover that contains or may contain bat snag roosting habitat is a standard mitigation measure, recommended by the MECP. Under this timing window, tree removal is recommended/permitted between October 15th to April 15th of any given year. Bat maternity roosting habitat may or may not remain in the forested lands to the south of the Proposed Draft Plan of Vacant Land Condominium area in the near future, given the proposed and approved developments on the south side of Beachwood Road.

7.6.2 Special Concern/Threatened Species – Common Nighthawk

One Common Nighthawk was incidentally detected vocalizing during amphibian surveys conducted on May 30, 2018 near the south boundary of the subject property (**Figure 4**). The MAMM4-1 vegetation community provides marginal habitat for Common Nighthawk foraging and breeding. Common Nighthawk were not detected during the nocturnal bird survey conducted on June 25, 2018, nor was it observed or heard on the June 18, 2018 survey. Based on the field survey the first detection was the result of an incidental occurrence and breeding was not confirmed on the subject property.

Common Nighthawk is not allotted any protection under the provincial **Endangered Species Act, 2007**, currently listed as a Special Concern (SC) species. However, this species receives protection on a federal level under the **Species at Risk Act, 2002** (SARA) as it is listed as Threatened. As a general directive, the Federal legislation only implements protection measures in place on Federal lands or development funded by Federal funds and is rarely applicable to private lands with private/public funding.

7.7 Provincial Policy Statement (2020)

7.7.1 Other Coastal Wetlands

The **PPS, 2020** provides some protection for coastal wetlands which are not classified as Provincially Significant Wetlands (PSWs). The MAMM4-1 wetland feature is in our professional opinion is a marginal coastal wetland vegetation community based on the Southern Ontario Ecological Land Classification (Lee 2008). As previously mentioned, that given the as-built and proposed development surrounding the subject

property, it appears based on our 2020 site visits that the MAMM4-1 wetland features are drying out and will continue to dry out, which will over time affect and change the wetland affinity plant species to be replaced by upland and/or upland/wetland non-coastal wetland plant species, and which will result in a change in vegetation community type. At present coastal wetlands are considered to be Provincially Imperilled based on the NHIC SRank of S2 (**Figure 4**). The MAMM4-1 vegetation community has a species composition that does contain Great Lakes Coastal Wetland Plant species, but based on the 2020 site visits, the plant species composition is changing, with the encroachment of upland species (non-facultative wetland species). The current design of The Plan area will result in the removal of both MAMM4-1 wetland features and other wetland features (SWD2-2, SWMM1-1) (**Figures 4 and 5**).

7.7.2 *Woodland*

The woodland on and adjacent to the Proposed Draft Plan of Vacant Land Condominium area is 9.35 hectares (**Figure 3**). The forest provides ecological functions such as wildlife habitat and a natural filter for runoff waters before entering into Georgian Bay. However, it does not qualify as Significant Woodland (SW) based on the criteria outlined in the Natural Heritage Reference Manual (**MNRF 2010**).

7.7.3 *Significant Wildlife Habitat*

7.7.3.1 *Species of Conservation Concern*

Candidate Significant Wildlife Habitat (SWH) may exist within the Proposed Draft Plan of Vacant Land Condominium area, specifically in the marginal Graminoid Coastal Meadow Marsh Type (MAMM4-1) features. A Special Concern (SC) bird species, the Common Nighthawk, was heard calling once within the MAMM4-1 during the breeding season, but evidence of breeding was absent. In our opinion the habitat within the MAMM4-1 is marginal and the one incidental calling of the species does not warrant designation as SWH.

7.7.3.2 *Seeps and Springs*

A variety of ground water indicator plant species are present within the Green Ash Mineral Deciduous Swamp Type (SWDM2-2), White Cedar-Hardwood Mineral Mixed Swamp Type (SWMM1-1)/Graminoid Coastal Meadow Marsh Type (MAMM4-1), and the Graminoid Coastal Meadow Marsh Type (MAMM4-1). Active ground water springs with sustained flow were not observed on the property. The hydrogeological report prepared for the proposed development did not identify any ground water discharge areas (Cambium Environmental 2020). In our opinion the property does not contain seeps/springs that would warrant consideration as Candidate Significant Wildlife Habitat (SWH).

7.8 *Growth Plan for The Greater Golden Horseshoe (2020)*

The legal parcels are located within a Settlement Area in Simcoe County. These parcels are situated greater than 120 metres from any Key Natural Heritage Feature (KNHF) or Key Hydrologic Feature within the

Natural Heritage System (NHS). It is our understanding that the policies of the ***Growth Plan for the Greater Golden Horseshoe 2020*** (Ministry of Municipal Affairs and Housing 2020) are applicable to the proposed residential development.

7.9 Simcoe County Official Plan (2016)

The Plan is within the Settlement Area designation according to the Simcoe County Official Plan (County of Simcoe 2016). County approval will be required for the Official Plan amendment for the development.

7.10 Town of Wasaga Beach Official Plan (2016)

The majority of the Proposed Draft Plan of Vacant Land Condominium area is designated as Residential with small pockets of Natural Heritage System Category 2 lands contained therein.

7.10.1 *Natural Heritage System Category 2 Lands*

The Proposed Draft Plan of Vacant Land Condominium area is consistent with the policies in Section 13.4.1 in terms of protecting Natural Heritage System Category 2 lands. The Town has designated limited portions of the property as Category 2 which permits development subject to the findings of an EIS. The Town has completed two natural heritage studies of the area and has not designated all or parts of the subject property as SWH, nor do the findings of the EIS support designation of the lands as SWH given the species and features present. The existing and proposed development on the adjacent lands will continue to dry out the wetlands on the subject property further negate its potential as Category 2 lands.

7.11 Town of Wasaga Beach Zoning By-Law 2003-60

Schedule B of the Zoning By-law shows that the property is zoned R1 and R1H – Residential 1. This type of zoning allows for residential development on the subject property but a zoning by-law amendment is required for the Proposed Draft Plan of Vacant Land Condominium area.

7.12 Nottawasaga Valley Conservation Authority - Ontario Regulation 172/06 (2006 with 2020 amendments)

Almost the entire property is within the NVCA Ontario Regulated area. Three natural heritage features are regulated by Ontario Regulation 172/06 within the legal parcels, specifically the wetlands. Sage Earth field verified the boundaries of the wetland. The wetlands are comprised of Green Ash Mineral Deciduous Swamp Type (SWDM2-2), White Cedar – Hardwood Mineral Mixed Swamp Type (SWMM1-1)/Graminoid Coastal Meadow Marsh Type (MAMM4-1) and Graminoid Coastal Meadow Marsh Type (MAMM4-1).

An Ontario Regulation 172/06 permit will be required from NVCA prior to site clearing, servicing and construction on the subject property.

7.13 Migratory Birds Convention Act (1994)

No tree or shrub clearing will be allowed during the breeding bird window. If trees or shrubs are to be cleared prior to construction, clearing should not take place between April 1 and August 31 in order to avoid destruction of active bird nests protected by the MBCA. Alternatively, a nest search should be conducted by a qualified ornithologist in the area designated for clearing and any active nests found are not to be disturbed by site clearing, servicing, and construction activity until the nesting young have fledged. Vegetation clearing will take place no later than three days after the nest search; otherwise, the nest search is required to be repeated. Documentation and mapping need to be undertaken during the nest searches and provided in advance of the vegetation overburden removal.

7.14 Recommendations and Mitigation Measures

Measures to avoid, minimize and mitigate impacts as outlined in **Section 6**, we recommend implementation of the following:

1. Best Management Practices during site preparation, servicing and construction as outlined in the technical reports listed in **Section 2.1** and/or additional BMPs as requested by the Town and/or NVCA.

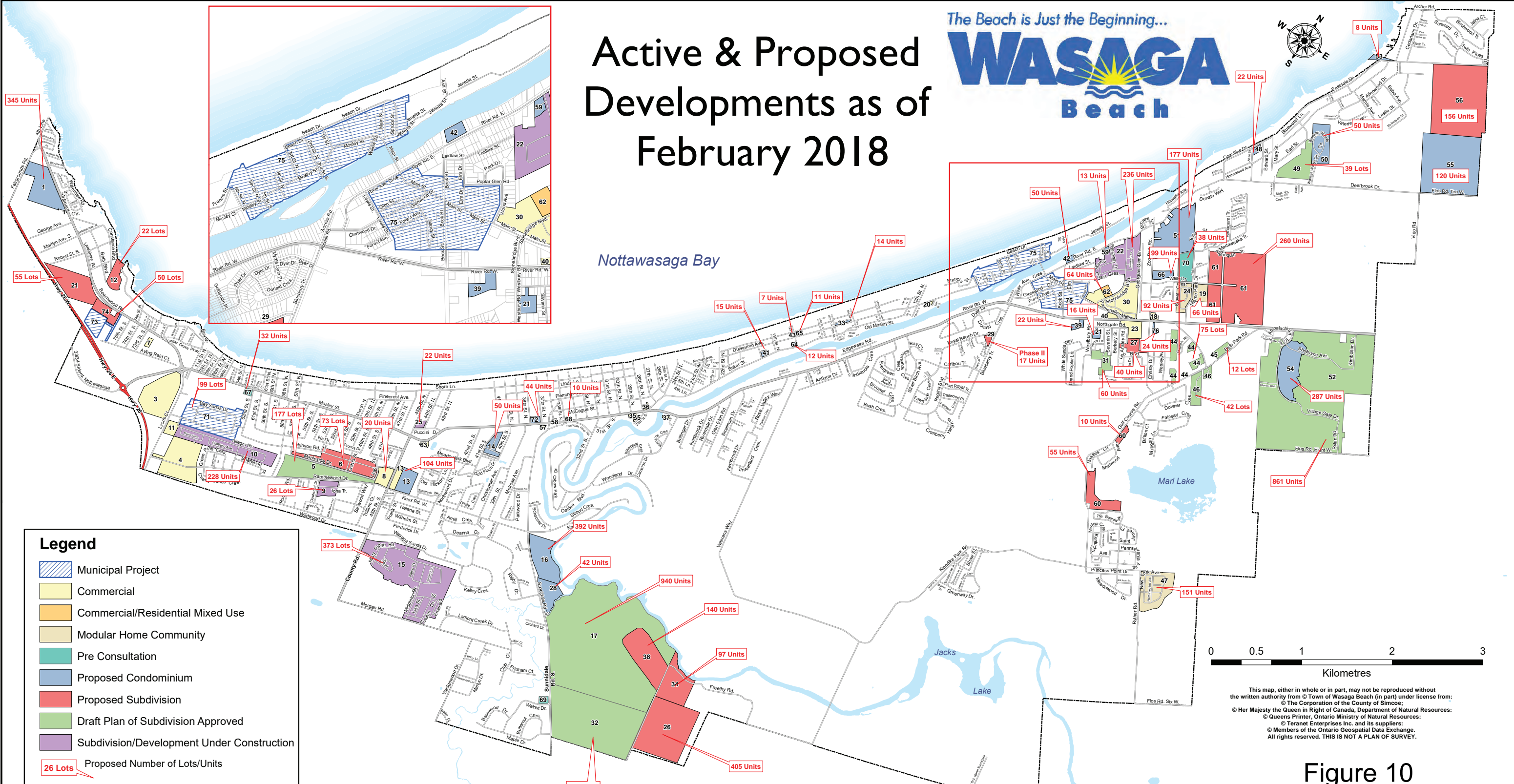
8 CONCLUDING REMARKS

The following section provides a summary of the ecological assessment undertaken for the proposed development, namely the current Proposed Draft Plan of Vacant Land Condominium, as shown on **Figure 2** (Jones Group Consulting Ltd. September 30, 2020a). It is to be recognized that a Draft Plan is an iterative process. The proposed development remains the same, in that the Draft Plan necessitates removal of all cultural, woodland and wetland features, including re-alignments of the two on-site intermittent drainage swales and the overall site drainage patterns.

The following points are intended to provide the rationale for acceptance of the proposed development, which is based primarily on the background information, field data from 2018 and 2020, feature and ecological function assessments/evaluations, proposed mitigation measures, recommendations and/or conclusions contained in the EIS, as well as contained in the stand-alone technical reports (e.g. hydrogeology, functional servicing, and tree inventory, etc.), as listed in **Section 2.1**, all of which are part of the planning submission and planning reviews to obtain approval and implementation of The Plan (Jones Consulting Group Ltd. September 30, 2020a).

1. Lands surrounding the property are proposed for development based on the 2018 active development map (**Figure 10**)
2. In 2010 Azimuth completed the Town of Wasaga Beach West End Natural Heritage Review which re-evaluated the land use designations on the subject and adjacent lands (Azimuth Environmental Consulting Inc. 2010). Upon review of the study the Town retained the subject lands for residential development.
3. In 2005 NVCA completed an NHS study (NVCA 2005) and recommended a portion of the subject lands be designated part (a recommended addition) of the Town's NHS (**Figure 11**). Regardless of the NHS study findings, the Town still zoned the lands for residential development, not as EP or some other non-developable designation, with the applicable zoning shown on Schedules A and B on **Figure 12** and **Figure 13**.
4. The 2017 zoning designations defined the subject property as R1 and R1H – Residential 1 and the lands to the south of Beachwood Road as Development (D) and Commercial Service (CS1 and CSH).
5. The 2016 Municipal Partnership Agreement between the Town and the NVCA included “*To define or assist with the delineation and/or definition of natural features and assess the long-term ecological function and biodiversity of the natural heritage systems*”. The 2017 zoning designations did not define any part of the subject lands as EP or any other non-developable designation.
6. The Town needs the development the lands to the south for the Town's Work Yard (a public works yard) and municipal water tower. This development that is to occur in wetland/woodland features requires a channel to discharge stormwater to Georgian Bay through a 6.0m easement (to be

Active & Proposed Developments as of February 2018



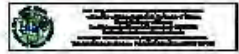
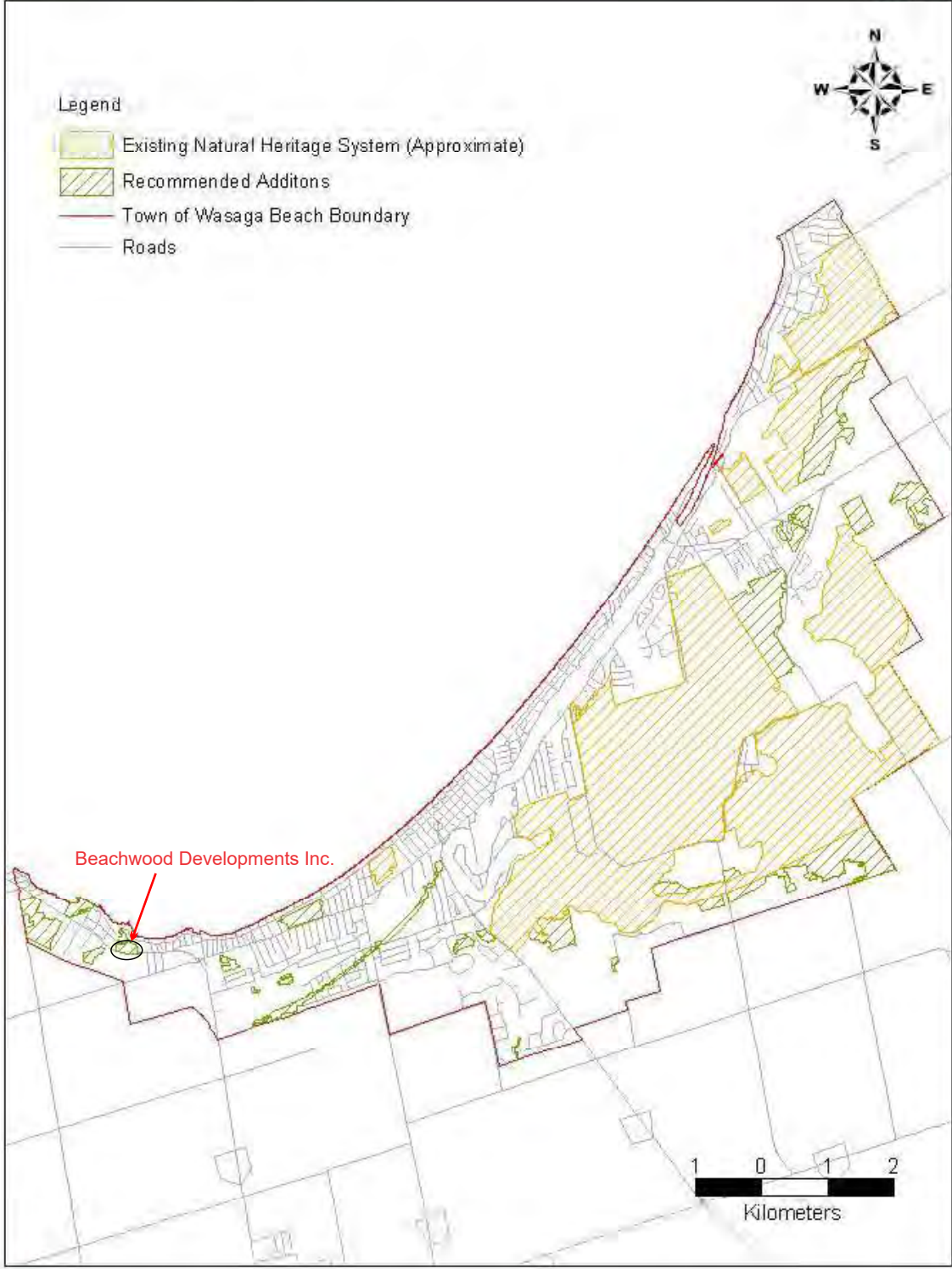
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Figure 10

- | | | | | | |
|--|--|--|---|---|---|
| 01. West Wasaga (Stirling Cook Development Properties) | 13. TY-Corp Lands | 26. Pacific Homes (Sunnidale Trails) Secondary Plan Ph.2 | 39. Wasaga Beach Village Ph 3 | 52. Elm Developments - Georgian Sands (Subdivision) | 65. Tru Star Mollala Developments -11 Units |
| 02. Sabitini Subdivision | 14. Pine Valley Estates Subdivision (Phase IV) Formerly J.Dick | 27. Ansley Grove Subdivision - Pine Valley Developments | 40. Esso Redevelopment - Petro Gold | 53. Eastdale Residential | 66. Simcoe County Affordable Housing |
| 03. DAS Developments | 15. Baycliffe Homes - Morgan Road Development | 28. Arnill Pitt - Marocco - Proposed Condominium Townhouses | 41. Bremont Homes - Beach20 Townhomes | 54. Elm Developments Georgian Sands Phase 1 (Subdivision) | 67. 2308524 Ontario Inc |
| 04. Business Park (Zancor) | 16. Marocco Knox Road East High Density Development | 29. Blueberry Village Townhomes (Phase 2) | 42. Dreamwood Development Inc | 55. Deerbrook Drive - 2355573 Ont Inc | 68. 1240940 Ontario Holdings |
| 05. Zancor Homes (Wasaga) Ltd | 17. Rivers Edge Phase 1 (Sunnidale Trails) Secondary Plan Area | 30. Hamount Commercial (Phase 3) | 43. Perciball - Townhomes | 56. Eastdale Drive - 2355573 Ont Inc. | 69. Cavalry Road Baptist Church |
| 06. Robinson Road Area Servicing/Development | 18. York Contracting - Royal Bank Plaza Ph.2 | 31. Sterling Subdivision (Mollala) | 44. Golfview Estates (Peter Regina) | 57. Pine Valley Commercial | 70. New World 88 |
| 07. Jell-E-Bean Campground Expansion | 19. Parkbridge Wasaga Meadows Phase 3 | 32. Pacific Homes (Sunnidale Trails) Secondary Plan Ph.1 | 45. Iantorno Residential Development | 58. DiMichelle/Dipaola Commercial | 71. Baysands Servicing |
| 08. Marocco 45th Street Commercial Development | 20. Riverdock Suites (Marcolini) | 33. Greenhill Homes | 46. Donato-Strite Subdivision | 59. Chrissies Cabins (Hamount) | 72. Mollala Condo Development |
| 09. Ramblewood Estates Subdivision (Phase II) | 21. Sergautis Townhouse Development | 34. Marocco / Freethy (Sunnidale Trails) | 47. Parkbridge - Phase 6 Park Place | 60. TPC Marlwood Inc | 73. West End Depot and Water Tower |
| 10. Zancor Trillium Forest North - Zancor | 22. Hamount Residential | 35. Castle Building Centre (formerly RONA) | 48. Skydale Condos - Coastline Drive | 61. Farsight Homes | 74. Whitehead Development |
| 11. Zancor Trillium Forest North Phase 4 - Commercial | 23. Scave Commercial Site Plan (Phases III & IV) | 36. Di Paola Commercial | 49. Optima Homes | 62. Hamount Commercial (700m2)/Residential (64 Units) | 75. Downtown Master Plan Development |
| 12. Vandermeer Homes | 24. Parkbridge Wasaga Meadows East | 37. Free Spirit Tours | 50. Beaver Run Estates Condos | 63. Superstore Commercial Pad | 76. DiPaola Holdings - Apartment Building |
| 13. Golden Sands - Commercial/Residential | 25. Donato Puccini Townhouse Development | 38. Rivers Edge Phase 2 (Sunnidale Trails) Secondary Plan Area | 51. Di Giovanni Hotel & Condominium Development | | |

Wasaga Beach Natural Heritage System

Natural Heritage System Existing and Recommended Additions

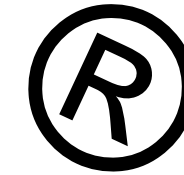


This information is provided as a public service by the Government of Ontario, Canada



Figure 11: Town of Wasaga Beach Natural Heritage System – Proposed

Town of Collingwood



NOTTAWASAGA BAY

CORPORATE LIMITS OF THE TOWN OF WASAGA BEACH

CORPORATE LIMITS OF THE TOWN OF WASAGA BEACH

Township of Clearview

LEGEND
F Zone
Refer to Section 3.11

SCHEDULE 'A'

TOWN OF WASAGA BEACH

The Beach is Just the Beginning...



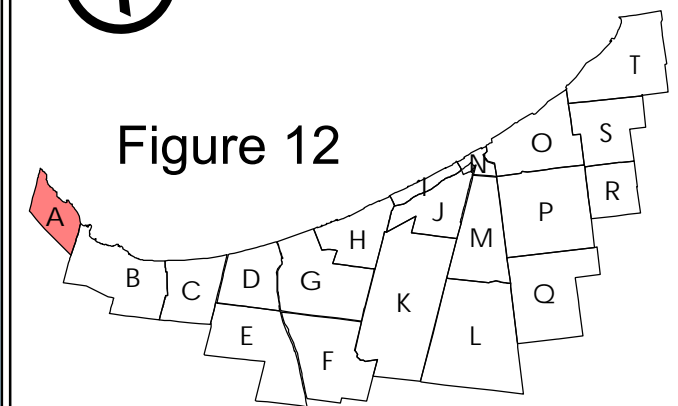
THIS IS SCHEDULE 'A' TO BY-LAW
2003-60, PASSED
THE 9th DAY OF September, 2003
SIGNATURES OF SIGNING OFFICERS

MAYOR _____

CLERK _____



Figure 12



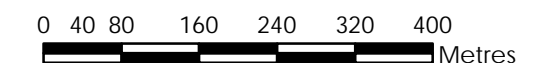
Refer to
Schedule 'B'

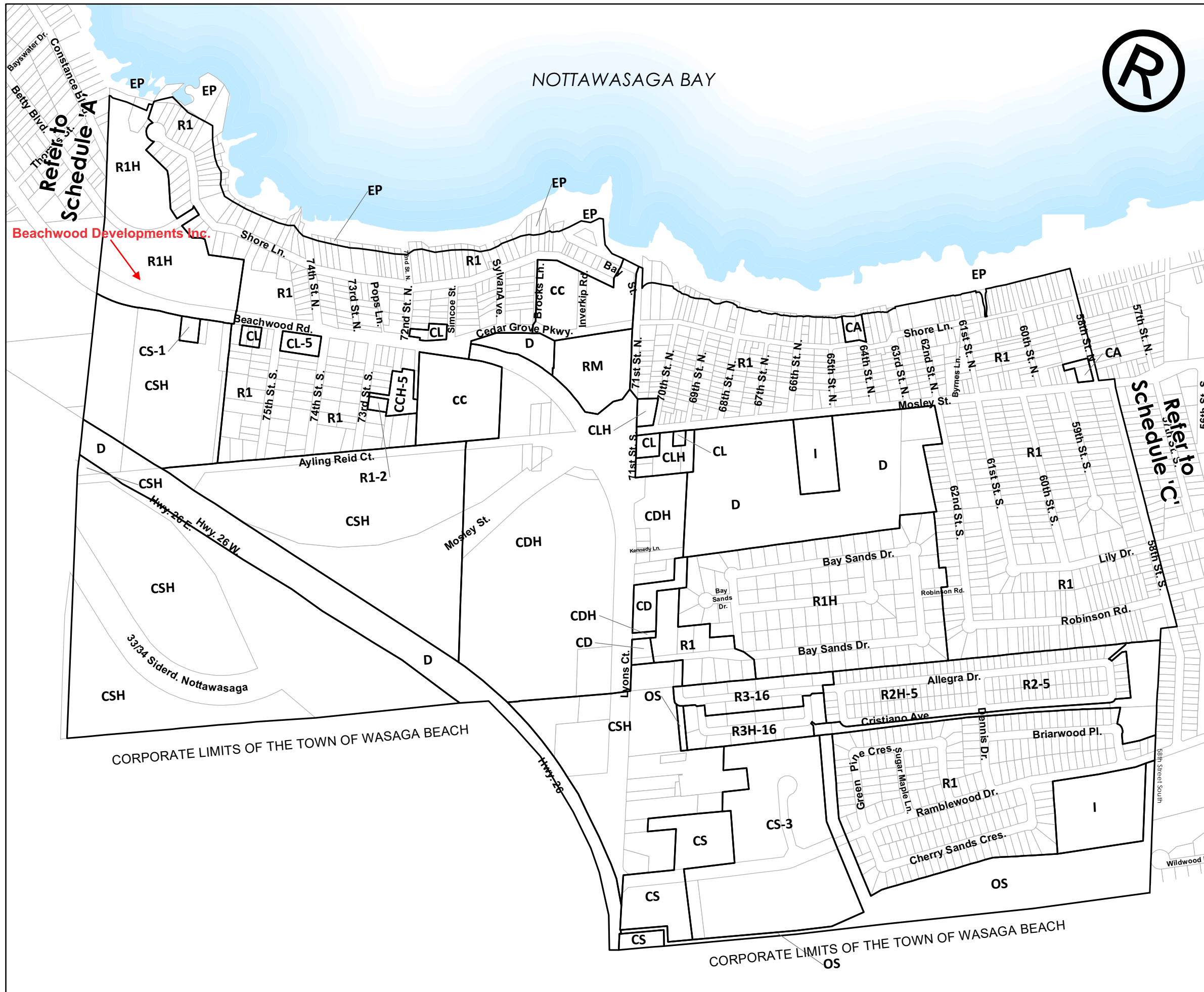
Beachwood Developments Inc.

OFFICE CONSOLIDATION DECEMBER 2017

NOTE: The lot lines depicted on this map are for reference purposes only and may not reflect accurately property boundaries in all instances

1:7,767





SCHEDULE 'B'

TOWN OF WASAGA BEACH

The Beach is Just the Beginning...



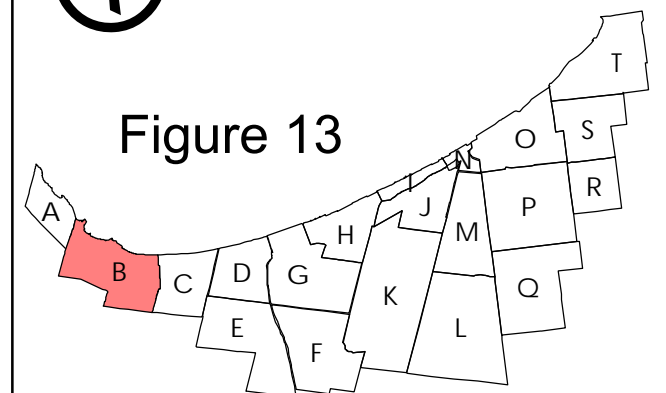
THIS IS SCHEDULE 'B' TO BY-LAW
2003-60, PASSED
THE 9th DAY OF September, 2003
SIGNATURES OF SIGNING OFFICERS

MAYOR _____

CLERK _____



Figure 13



OFFICE CONSOLIDATION
DECEMBER 2017

NOTE: The lot lines depicted on this map are for reference purposes only and may not reflect accurately property boundaries in all instances

1:9,000



conveyed to the Town) of the subject property. The facility was approved through a Class Environmental Assessment with the participation of the NVCA.

7. The aforementioned Municipal Drain (channel) will function as a drainage divide conveying shallow ground water and surface water to Georgian Bay, and will significantly alter the current soil moisture regimes (e.g., dry out) of the wetland and woodland features on the subject lands such as marginal coastal wetlands MAMM4-1 and SWDM2-2/MAMM4-1. These wetland features, which as of 2020 are exhibiting changes to their form (ELC characterization) and inherent plant species, indicate that the site and in particular these wetland features are drying out, compared to previous years, and that the drying trend will continue, given the drainage works.
8. Construction of Highway 26 changed the upgradient drainage patterns and currently conveys surface runoff to the storm water pond and existing drainage feature through the residential areas and into Georgian Bay.
9. The proposed and as-built development encompassing the subject property and the Highway 26 corridor have virtually eliminated any east-west wildlife corridor/linkage and/or its ecological functions.
10. The construction of Betty Boulevard and the pending development of the lands to the north of the boulevard (Wasaga Shores Subdivision) will further limit and isolate and affect any remaining wildlife functions on the subject property.
11. Retaining the wetland features on the subject property is not required for flood attenuation, existing and proposed municipal drainage improvements will convey storm events to Georgian Bay.
12. CEA recommends that the mitigation measures, recommendations and conclusions contained in the stand-alone technical reports as listed in Section 2.1 be implemented, and where appropriate be considered for inclusion as Draft Plan conditions of any planning approvals and permit(s) required by the Town and the NVCA Ontario Regulation 172/06 permit.

It is our professional opinion that the principle of development on the subject property has been established through the Town's Official Plan designation as Residential and further confirmed through the zoning as R1 and R1H – Residential 1. It is to be noted that the Town of Wasaga Beach has not identified, mapped, designated or zoned any portion of the subject property and its wetland, woodland and drainage swale features as Environmental Protection (EP), Significant Woodland (SW), Significant Wildlife Habitat (SWH), Open Space (OS) or some other restrictive/non-developable designation and/or zoning following natural heritage inventories and assessments as part of their planning process for the area.

It is recognized that regardless of the OP designation and zoning, most of the subject property is regulated by the NVCA and an Ontario Regulation 172/06 permit will be required.

In summary, the submission of The Plan (Jones Consulting Group Ltd. September 30, 2020a) and the required stand-alone technical reports are intended to implement the Official Plan designation (Residential) and the Town's zoning (R1H – Residential 1) which have established the principle of development as residential. The findings of the EIS support the development of the subject lands for residential purposes.

To assist in providing a comprehensive understanding of the proposed development and how it can be integrated into the existing landscape Beachwood Developments had a three-dimensional architectural rendering of the development imposed on a drone photo of the site which is shown below.



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APPENDIX A CURRICULUM VITAE

DAVID G. CUNNINGHAM, Spec. Hon. B.Sc.
Senior Ecologist/Principal

- EDUCATION**
- Honours Bachelor of Science (BSc.) Environmental Sciences (1978)
York University, Toronto, Ontario
- MEMBERSHIPS**
- Field Botanists of Ontario
 - Canadian Society of Environmental Biologists
 - Ontario Nature
 - Ontario Field Ornithologists
 - Society for Ecological Restoration (Ontario)
 - Ontario Environmental Network
 - Kawartha Field Naturalists
- CERTIFICATIONS**
- International Open Water Diver (PADI) Certification - 1980
 - Certification for Ministry of Natural Resources and Forestry Ontario Wetland Evaluation System (Southern and Northern Ontario). 1st Edition to 3rd Edition.
 - Ministry of Natural Resources & Forestry Environmental Impact Study (EIS) Training Session
 - MNRF Ecological Land Classification Certification (2009)
 - Butternut Health Assessor Certification (#177)
 - NHIC Species At Risk Data Sensitivity Training

AREAS OF PROFESSIONAL EXPERIENCE

General

Mr. Cunningham has 40 years experience in the natural environment profession, which includes 34 years as an environmental consultant. He specializes in environmental evaluations and impact assessments related primarily to natural resources, with expertise in terrestrial vegetation, wetlands and wildlife. David has managed and/or participated in a variety of projects dealing with natural heritage features and functions, including their significance and sensitivity. He has managed multi-disciplinary studies pertaining to the identification and evaluation of terrestrial, aquatic and wetland resources, from a watershed and subwatershed perspective. This has included the formulation of natural environment policies, standards and targets for natural heritage systems.

Mr. Cunningham regularly identifies and assesses the impacts of various land use development proposals on existing terrestrial and wetland resources. Development proposals have included infrastructures such as oil, gas, water and sewer pipelines, roads, sewage treatment plants, storm water facilities, and landfills. Other projects have included airports, parkland, golf courses, subdivisions, pits, quarries and mines, transportation corridors, coal-fired electric and small-head hydroelectric facilities including transmission line route selection.

David has participated in watershed, subwatershed and master drainage studies throughout Ontario. In these studies, he was responsible for the collection and review of natural environment background information, site inventories and evaluations, as well as liaising with resource management agencies and public interest groups.

He has qualified as an expert witness (biologist/ecologist) before the Ontario Municipal Board (OMB). He has prepared evidence and participated in mediation sessions before the Board and Local Planning Appeal Tribunal (LPAT), Ontario Mining & Lands Division Commissioner, Regional-Municipal and Township Councils, Federal Court (Criminal Division) and Provincial Court.

Transportation and Route Selection Studies

Transportation related projects include the GO-ALRT rapid transit system between Mississauga and Oakville; North-South Link between Highway 417 and Regional Road 30 in Cumberland Township; re-design of the internal road system in Point Pelee National Park; widening and upgrades to Highway 20 between Fonthill and Allanburg; bridge crossing from Hawkesbury to Hamilton Island on the Ottawa River; causeway/bridge crossing to Clarence Island; re-alignment, removal and rehabilitation of County Road 45 near Alexandria; widening and upgrades to

Highway 58 south of Welland; widening and upgrades of Highway 17 near Nairn Centre; widening, upgrades and the extension of Bathurst Street near Newmarket; widening and upgrades to Altona Road from Highway 2 to Finch Avenue in Pickering; widening and re-paving of County Road 28 from Minesing to Hwy 90 near Barrie; and bridge replacements across Axe Creek and Buck River near Huntsville.

Terrestrial Vegetation and Wildlife Studies

David has extensive experience in botanical evaluations including species inventories, vegetation community mapping and is certified in Ecological Land Classification (ELC) protocol. Inventories and after-construction monitoring programs have been undertaken using a variety of qualitative, and quantitative sampling techniques. Species habitat identification, utilization and Species At Risk (SAR) are a critical component of all studies. He has managed/participated in the evaluation of Environmentally Significant/Sensitive Areas (ESAs) as a part of Natural Heritage Systems (NHS), Secondary Plans, Master Drainage Plans and Master Environmental Servicing Plans.

David has also worked extensively on wildlife studies including habitat evaluations and management plans, population assessments and impact mitigation from land uses. He has managed projects dealing with the inventory and control of nuisance animals, particularly bird and mammal species in the vicinity of waterfront parks, airports and construction sites. Wildlife habitat evaluation and management projects have included mapping, as well as the identification and assessment of movement corridors and habitat linkages. These projects were conducted using small mammal trapping and tagging techniques, bird banding, and provincial breeding bird survey protocols. David was a volunteer participant in the 1981-1985 and 2001-2005 Ontario Breeding Bird Atlas (OBBA) project. He regularly utilizes the bird and amphibian survey protocols of the Ontario Marsh Monitoring Program (MMP).

Wetland Studies

Mr. Cunningham has participated in over 100 wetland evaluations throughout Ontario using the standard Canadian Federal and the Ontario Provincial Evaluation System for Wetlands - Southern Ontario and Northern Ontario (OWES). He has managed and prepared Environmental Impact Studies (EIS)/Natural Heritage Evaluations (NHE) for various land use development proposals on wetland features, attributes and functions. Developments involving wetland issues have included housing, industrial, commercial, roads, utility corridors, storm water facilities, landfills, golf courses, hydroelectric facilities and aggregate/mineral/ore extraction.

Mr. Cunningham has formulated and provided mitigation measures and recommendations, site selection and compensation criteria, and restoration/rehabilitation management plans as compensation for land use development proposals in and adjacent to wetlands and shoreline features, within the context of both the Federal and Provincial wetland policies. He has been involved in the research and testing of wetland buffers, including enhancement/restoration planting plans within buffers adjacent to various wetland features. He has worked extensively with the MNRF, Parks Canada, Conservation Authorities and the Trent-Severn Waterway (TSW) on wetland and shoreline issues and is a certified wetland evaluator under the MNRF 1st, 2nd and 3rd editions of the OWES for both Southern and Northern Ontario.

Woodland/Woodlot Studies

David has extensive experience in evaluating woodland/woodlot ecosystems in relation to other identified natural resources. These evaluations have included the integration of information on woodland ecology, soils, surface drainage, flora and fauna. Woodland assessment projects have included the use of quantitative sampling techniques (tree tagging, basal sweeps, GPS) to determine species dominance, age, height, health and community structure. All of these projects have involved due diligence pertaining to flora and fauna Species At Risk (SAR) and the ranking of wooded areas and individual trees for preservation or integration into proposed developments and natural heritage systems. This also involved appropriate buffer restoration/enhancement naturalization planting plans. He has participated in the preparation of managed forest plans using the Managed Forest Tax Incentive Program (MFTIP) guidelines in conjunction with a certified Forest Plan Approver. He has prepared reports related to tree compensation issues under Forest Conservation and Tree-Cutting By-laws. He is also an MNRF certified Butternut Health Assessor (#177).

Aquatic Studies

Mr. Cunningham has participated in studies that focus on aquatic environs, fish and fish habitat evaluations. He has assessed the potential impacts of dredged sediment disposal, hydroelectric facilities, sewage disposal and water supply facilities on fish, fish habitat and water quality. He has prepared plans and drawings, and supervised the construction of MNRF fisheries enhancement projects - FEP (riparian shoreline restoration, fencing, cattle watering

stations, spawning shoals). Most of these projects have included using an array of fish and water quality sampling equipment. Equipment has included a dissolved oxygen/temperature meter, secchi disk, Van Doren bottle, backpack electro-shocker, beach seine net, gill net, trap net, portable HACH kit, ponar, dome sampler, and depth sounder.

Federal, Provincial and Conservation Authority Acts, Statutes, Regulations, Policies & Guidelines

He has extensive knowledge of the regulations pertaining to Species At Risk (SAR) for both the Federal *Species At Risk Act (2002)* - (SARA), as well as the Province of Ontario *Endangered Species Act (2007)* and the Species At Risk in Ontario (SARO) - Ontario Regulation 230/08 list. He regularly reviews updates for both Acts and their applicability to a proposed development project. He has a working comprehension of the Ontario *Oak Ridges Moraine Act (2001)*, *Oak Ridges Moraine Conservation Plan (2002 & 2017)* - (ORMCP) having completed numerous ORM Compliance reports and Natural Heritage Evaluations (NHE). He has also addressed natural environment issues related to the Ontario *Greenbelt Plan (2005 & 2017)* and *Greenbelt Act (2005)*, *Lake Simcoe Protection Act (2008)* and *Lake Simcoe Protection Plan (2009)*, Ontario *Environmental Assessment Act (1990)*, Municipal Class Environmental Assessment (MCEA) and Conservation Authorities Ontario Regulations, planning and development policies and/or guidelines.

PROFESSIONAL HISTORY

Principal

Cunningham Environmental Associates, Lindsay, Ontario	1985 to Present
Associate Ecologist	
CF Crozier & Associates Consulting Engineers	2019 to Present
Associate Ecologist	
Hensel Design Group, Collingwood, Ontario	2009 to 2019
Associate Ecologist	
Michael Michalski Associates Limited, Bracebridge, Ontario	2007 to Present
Associate Ecologist	
Bird and Hale Limited, Toronto, Ontario	2000 to 2015
Associate Ecologist	
Michalski Nielsen Associates, Bracebridge, Ontario	1998 to 2007
Associate Ecologist	
Ecologistics Limited, Waterloo, Ontario	1995 to 1998
Associate Ecologist/Senior Ecologist	
Niblett Environmental Associates Inc., Bethany, Ontario	1987 to 1995
Biologist	
Toronto Region Conservation Authority (TRCA), Downsview, Ontario	1986
Resource Technician	
Ontario Ministry of Natural Resources, Maple District Office, Maple, Ontario	1985
Terrestrial Ecologist	
Proctor & Redfern Limited, Toronto, Ontario	1984 to 1985
Resource Technician	
Ontario Ministry of Natural Resources, Maple District Office, Maple, Ontario	1984
Biologist	
Seatech Investigation Services Limited, Halifax, Nova Scotia	1982
Authority Biologist	
Lake Simcoe Region Conservation Authority, Newmarket, Ontario	1982 to 1983
Biologist	
Metropolitan Toronto and Region Conservation Authority, Downsview, Ontario	1979 to 1982

* References available upon request



PAUL NEALS

B.Sc.Agr., P.Ag.

Senior Environmental Planner/Professional Agrologist

PROFILE

2016 to present Principal, Orion Environmental Solutions, Inc.
1995-2016 Vice-President, Azimuth Environmental Consulting, Inc.
1990-1995 Senior Environmental Planner/Agrologist, Gartner Lee Limited
1980-1990 Planner/Agrologist, Land Use and Environmental Planning Dept.,
Design and Development - Transmission Division, Ontario Hydro
1980 Resource Technician, Nottawasaga Valley Conservation Authority
1975-1979 B.Sc. Agriculture - University of Guelph

EXPERIENCE

2016 to present Principal, Orion Environmental Solutions

In 2016 Mr. Neals started Orion Environmental Solutions providing expertise to his clients in the areas of Agricultural Impact Assessment., Minimum Distance Calculations, Project Management/Approval Facilitation, Development Land Management, Environmental Due Diligence/Issue Identification, Environmental Policy Review and Development, Environmental Assessment Planning Process Implementation Full and Class EA Project Management and Public Consultation Program Management.

- Environmental Director responsible for the overall management of the natural heritage components for the Link 427 design build/operation/maintenance project involving extension of Highway 427 to Major MacKenzie Drive. Orion is providing expertise to assist in the management of the Vegetation Restoration/Ground Water/Fisheries/Wildlife/Agriculture/Waste Management and Contamination/Habitat Management/Species at Risk and liaison with the project staff from the Ministry of Transportation and Infrastructure Ontario.
- Project Management and approvals facilitation for numerous Environmental Impact Studies for development approvals in Simcoe County and Greater Toronto Area involving provincially and locally

significant wetlands, cold and warm water fisheries, designated significant natural heritage features, Species at Risk, ground /surface water protection, Areas of Natural and Scientific Interest.

- Undertook agricultural impact assessments for residential and commercial development approvals in Simcoe County, the Greater Toronto Area and throughout southern Ontario. Assessed the impact of the loss of agricultural land and the Minimum Separation Distance requirements for development based on the surrounding existing agricultural operations.

1995 – 2016 Vice-President, Azimuth Environmental Consulting, Inc.

Mr. Neals is a founding member of Azimuth Environmental Consulting, Inc. Throughout his 40-year career he has been involved with hundreds of projects utilizing his expertise in environmental assessment process, public consultation, impact analysis, natural resource inventories, land use/socioeconomic analysis and interpretation, and route/site selection.

- Environmental Manager responsible for the overall management of the natural heritage components for the Highway 407 East Phase 2 design build/operation/maintenance project involving 32km of new freeway. Azimuth is providing expertise in the Vegetation Restoration/Ground Water/Fisheries/Wildlife/Agriculture/Waste Management and Contamination/Habitat Management/Species at Risk, preparation of the Class EA for the truck layby and highway maintenance facilities, provide environmental input into the Community Value Plan and provide environmental monitoring during construction.
- Project Management and field studies for numerous Environmental Impact Studies for development approvals in Simcoe County and Greater Toronto Area involving provincially and locally significant wetlands, cold and warm water fisheries, designated significant natural heritage features, Species at Risk, ground /surface water protection, Areas of Natural and Scientific Interest.
- Project Manager for Block 40/47 environmental studies for the preparation of the Master Environmental Servicing Plan. Responsible for coordination of ecology and hydrogeological disciplines, liaison with Ministry of Natural Resources and Forestry, Toronto Region Conservation Authority and City of Vaughan. Provided expert testimony before the Ontario Municipal Board

to on the environmental matters and agriculture to obtain approval of the zoning amendments to permit the submission of draft plans.

- A working knowledge of the municipal/provincial/federal guidelines, statues and policies governing infrastructure and land development approvals in Ontario.
- Environmental Planner/Class EA process advisor on Municipal Class EA projects involving municipal roads, water supply and sewage treatment systems. Responsible for implementation of Class EA planning process, public consultation, land use/socioeconomic impact assessment, evaluation methodologies for the assessment of alternatives, government agency liaison, public liaison committee consultation and report preparation.
- Acted as municipal peer reviewer for numerous Environmental Impact Studies to provide staff with opinion on the degree of compliance with EIS requirements and the thoroughness and accuracy of the study.
- Project Manager/Environmental Planner for the numerous route selection studies for natural gas transmission pipelines. Responsible for the development and implementation of the route selection planning process, land use/agricultural/socioeconomic impact assessment, public/agency consultation, impact mitigation study on preferred route, and preparation of the Environmental Report, subject to review by the Ontario Energy Board. Presented expert testimony on the environmental issues associated with the aforementioned projects before the Ontario Energy Board. All project approved.
- Environmental Planner on Ministry of Transportation Class EA Group B and C projects encompassing route selection for new provincial 400 series highways, road maintenance construction projects, truck inspection facility and numerous highway upgrade projects. Responsible for environmental planning process, preparation of the Transportation Environmental Study Report or Screening Report, coordination of the environmental/land use/socioeconomic studies, public and agency consultation.
- Project Manager on a number of Secondary Plan studies in Central Ontario. Responsible for the coordination of the natural heritage inventory, integration of ground and surface water studies into protection of the natural heritage features for the delineation of the limits of the Environmental Protection areas and the developable lands. Undertook a lead role in

facilitating approvals through affected municipalities, conservation authorities and provincial ministries.

- Undertook agricultural impact assessments for residential and commercial development approvals in Simcoe County, the Greater Toronto Area and throughout southern Ontario for Environmental Assessment Act and Ontario Energy Act approvals for hydro transmission rights-of-way, provincial highways and natural gas pipelines. Assessed the impact of the loss of agricultural land and the Minimum Separation Distance requirements for development based on the surrounding existing agricultural operations.
- Project Manager and Environmental Planner for landfill site selection studies. Responsible for planning process development, data collection, identification and evaluation of candidate areas and candidate site, government and public consultation program, evaluation methodology and preparation of the environmental assessment report.

1990 – 1995 Senior Environmental Planner, Gartner Lee Limited

Mr. Neals was a Senior Environmental Planner with Gartner Lee Limited. Environmental assessment projects Paul has undertaken include waste management studies for landfill site selection, landfill operations, EA's for provincial highways and natural gas pipeline projects, site plans for aggregate pit expansion and management of environmental studies for private electricity generation facilities.

1980-1990 – Planner Agrologist, Land Use & Environmental Planning Dept. Design & Development Transmission Division, Ontario Hydro

Mr. Neals undertook environmental, land use and agricultural impact studies required to obtain approval under the Environmental Assessment Act for the construction of transmission facilities throughout northern and southern Ontario. Responsible for management in interdisciplinary team, route selection process, field studies and impact assessment, public and agency consultation and report preparation. Provided expert testimony before the Consolidated Hearings Board.

PROFESSIONAL AFFILIATIONS, CERTIFICATION & TRAINING

Ontario Institute of Agrologists (1982 - 1994, 2015 – 2020)

Member of Barrie Huronia Rotary Club

President, Terrestrial and Restoration Ecologist – Dan Barcza, Hon. B.Sc.

Mr. Barcza has twenty-two years of experience as a Terrestrial Ecologist, Botanist, Restoration Ecologist, Dendrologist, Horticulturalist, Wildlife Biologist, Species-at-Risk Biologist and GIS Technician. He has managed & has been a key contributor in numerous Environmental Assessments, Environmental Impact Studies, Natural Heritage Evaluations, Watershed Studies, Park Management Plans, Environmental Monitoring Programs, Aggregate Resource Assessments, Forest, Edge, Sediment & Erosion Management Plans & Environmental Restoration Plans. His contributions include management, field investigations, environmental documentation preparation, secondary source review, policy analysis & coordinator of reports. Dan completed the Ecological Land Classification for Southern Ontario Training Course in September 2005, the Ontario Wetland Evaluation Training Course in June 2006, Butternut Health Assessor Course in 2014 and Department of Fisheries and Oceans Freshwater Mussel Identification Course in 2016. Dan graduated as a certified RX-100 certified Forest Firefighter in April 2010.

GIS Technician – John Tress, B.A. Geographic Analysis, Dip. Env. Technician

Mr. Tress is a graduate of Ryerson University from the Geographic Analysis Program and holds an honors diploma from Seneca College's Environmental Technician Program. He has 5 years' experience as a GIS Technician, data analyst and researcher. His experience also includes implementation of habitat restoration projects, invasive species control, biological field data collection and renewable energy project planning. He has received training in Ecological Land Classification for Southern Ontario (ELC), the Ontario Wetland Evaluation System (OWES) and the Ontario Benthos Biomonitoring Network (OBBN). John has a strong working knowledge of environmental planning and policy in Ontario. His field skills include tree and shrub identification and the use of geomatics technology for data collection.

Environmental Technician and Planning Ecologist – Jennifer Neill, BFA, Dip. Env. Technician

Ms. Neill is an honors graduate from the Environmental Technician Sampling and Monitoring Program at Seneca College. She also holds a Bachelor of Fine Arts from the Ontario College of Art and Design (OCAD U). Jennifer is certified under the Ontario Stream Assessment Protocol (OSAP) Physical Habitat and Channel Structure Training 2014 (Version 9.0) and has completed several modules as Crew Leader. In association with the OSAP training she successfully passed Level 2 of the MNRF Ontario Fish Identification Workshop. Ms. Neill is also certified under the Ontario Benthos Biomonitoring Network (OBBN). She has demonstrated a high level of competence using the Ontario Wetland Evaluation System (OWES) and Ecological Land Classification for Southern Ontario (ELC). Her ability to analyze data using various statistical methods is an asset to her field skills. Her field skills are augmented with National Green Check GPS Certification (Level 1), outdoor skills training, St. Johns Ambulance Bear Aware and Canadian Red Cross Basic First Aid. Jennifer has been a valuable team member in numerous small and large-scale environmental projects throughout Ontario. She has composed entirely and contributed extensively to environmental documentation preparations including; Environmental Assessments, Natural Heritage Evaluations, Environmental Impact Studies, Natural Heritage Evaluations and Oak Ridges Moraine Conformity Statements. Jennifer exhibits a strong working knowledge of environmental planning and policy under various Federal and Provincial Regulations as well as Municipal Official Plans and By-Laws. Her terrestrial contributions include Species at Risk (SAR) habitat evaluation, plant propagation, botanical



inventories, identification and monitoring of SAR transplant locations and preparation/planning of restoration sites. Her aquatic contributions include macro-invertebrate benthic identification including sorting, fish identification and quantification of river samples.

Wildlife Biologist – Nicole Wajmer, Hon. B.Sc., M.Sc.

Ms. Wajmer completed the Wildlife Biology undergraduate and Integrative Biology graduate program at the University of Guelph. Her Masters research focused on the relationship between personality and migration in different ecotypes of Lake Superior Brook Trout. Ms. Wajmer has a wide range of aquatic and terrestrial experiences from her time working in various sectors of biology including industry, government, and academia. She has strong interests in conservation biology and has been involved in recovery programs for the Endangered Northern Spotted Owl and Eastern Loggerhead Shrike. She has successfully completed certifications for First Aid and CPR, Ontario Benthos Biomonitoring (OBBN), Backpack 2 Electrofishing, Ontario Stream Assessment Protocol (Crew Leader), ACUC Dive Master, Level 1 Ontario Fish Identification (MNRF), and Department of Fisheries and Oceans Freshwater Mussel Identification Course.

Terrestrial Ecologist & GIS Technician - Jessica Whyte, Hon. B.Sc.

Mrs. Jessica Whyte completed a 3 year diploma in Environmental Engineering at Humber College gaining skills such as land surveying, water and air quality monitoring, sampling techniques, environmental remediation, and environmental law. She followed this with an honors degree in Ecology at the University of Guelph. Jessica has experience with a variety of field studies that involved point-intercept vegetation surveys, invertebrate communities and diversity, soil cores and organic matter, water sampling and phosphorous analyses, invasive species, GIS mapping, and reporting. Also having worked in agriculture for many years, she brings a unique perspective of the sector to environmental consulting. Jessica has completed certifications for ADET First Responder and CPR, Environmental Compliance and Due Diligence (CANECT), and the Ontario Wetland Evaluation System (OWES). She has strong interest in terrestrial ecosystems, conservation biology, and ArcGIS.



**APPENDIX B PRE-CONSULTATION MEETING MINUTES & OTHER
CORRESPONDENCE**



THE CORPORATION OF THE TOWN OF WASAGA BEACH
PLANNING DEPARTMENT
PRE-CONSULTATION MEETING MINUTES

OFFICE USE ONLY			
MEETING DATE:	December 5, 2019	FILE NO.:	PRE-C15/19
APPLICANT:	M. Romanin Contracting Ltd.		
ADDRESS OF SUBJECT PROPERTY:	Beachwood Road and Shore Lane		
PROJECT DETAILS:	42 single family dwellings, 31 street towns, and two 6 storey apartment buildings (134 units) – total of 207 units		
TYPE OF APPLICATION:	Official Plan Amendment, Draft Plan of Subdivision, Zoning By-law Amendment		

A pre-consultation meeting was held at the Building Boardroom to review and identify planning and application requirements for the above-noted proposal and to provide the applicant with information from agencies and/or departments.

The following is a summary of comments noted during the meeting.

ATTENDEES		
	NAME	AGENCY/DEPARTMENT
1	Alan Wiebe	Town of Wasaga Beach Planning Department
2	Sheena Harrington Slade	Town of Wasaga Beach Planning Department
3	Patti Kennedy	Town of Wasaga Beach Engineering Services
4	Brandi Clement	The Jones Consulting Group
5	Kayly Robbins	The Jones Consulting Group
6	Paul Neals	Orion Environmental
7	Tony Romanin	M. Romanin Contracting Ltd.
8	Duncan Richardson	The Jones Consulting Group
9		
10		
11		
12		

CIRCULATION OF CORRESPONDENCE

Distribution of comments received by the Town

AGENCY/DEPARTMENT	DATE RECEIVED
Ministry of Transportation	December 3, 2019
County of Simcoe – Planning	November 26, 2019
Engineering Services – Town of Wasaga Beach	December 4, 2019
Nottawasaga Valley Conservation Authority	December 5, 2019

SUMMARY OF PROPOSAL

The applicant is proposing a residential subdivision consisting of 42 single family dwellings, 31 street towns, and two 6 storey apartment buildings (134 units) – total of 207 units

AGENCY/DEPARTMENT COMMENTS

Introductions and Opening Remarks

Mr. Alan Wiebe welcomed all attendees to the meeting. He indicated that the purpose of the pre consultation meetings are to circulate concepts to various departments and agencies in order to provide information and guidance to applicants and their agents on required planning applications, process, fees, costs, engineering issues, studies and other submission requirements.

Development Proposal

The applicant provided a brief overview of the project and noted that a property owner on Shore Lane has an easement over Part 7 of the subject lands. The piece of land that has the easement is currently vacant. That is why there is one single detached lot shown on Shore Lane.

The applicant has been talking to the Director of Public Works for some time now to determine the drainage easement.

The proposal they have shown here today, they feel is a great opportunity for buyers to find something more affordable than in Collingwood, but still be close to Blue Mountain. The applicant is proposing condominium tenure.

The applicant indicated that they had a meeting scheduled with the Director of Public Works to talk about the drainage easement specifically and that they are currently doing geotechnical work right now with Cambrian.

The Environmental Impact Study (EIS) is currently being completed and the field work was done last season. They are looking for some ground water information before they can complete the EIS. The estimated timeframe for completion is late spring - early summer.

Staff/Agency Comments

Planning Department Comments/Discussion:

The lands are designated “Residential” in Town of Wasaga Beach Official Plan. Schedule “D” identifies that there is Natural Heritage Category 1 and 2 pockets. The lands are zoned Residential Type 1 (R1) and Residential Type 1 (R1H) with a holding provision. A rezoning would be required for the whole site.

Planning Staff noted the following regarding the property:

- almost entirely regulated by the NVCA
- located outside of the delineated built boundary subject to the greenfield density targets.
- subject to MTO permitting the Beachwood Road is still owned by the province.
- located adjacent to local trail (Betty Blvd extension)
- contains Forested Area/ Woodlands (per County mapping)
- within the West-End Community Improvement Project Study Area. It is in an area potentially requiring a secondary plan.

Planning Staff highlighted the pros of the project as diversity of the unit types, additionally the design consideration of the higher density along Beachwood and the alignment of Joan and the developments proposed main entrance. Staff are hoping to see those design features maintained after there has been a more detailed review and mapping of the environmental constraints on site.

The applicant confirmed that the “private amenity” is for the condo and the “parkland” is supposed to be public. Staff noted that the current proposal is essentially an island of parkland that is surrounded by private condo lands. The Town is very supportive of the intention to provide for public parkland. In principle, the Town would like to see a public park that would be between Betty Blvd, the private road, and also adjacent to other natural looking areas (e.g. stormwater management areas).

Decisions regarding the parkland will be with the Director of Public Works. Staff noted that the Town currently does not have a Parks Master Plan yet that directs where we would like to see a park, but in the west there is an acute under supply. It was noted that the Town is currently working on a Master Parks Plan. Planning Staff have requested to be included in any future discussions with Public Works regarding the drainage channel and parkland.

The applicant noted their concern is that an OPA may be required for density subject to the eventual proposal.

Staff indicated that townhomes and singles would not necessarily go through Site Plan Approval, that only the apartment buildings would definitely require SPA. In some form, all development will be subject to controls including landscaping and architecture.

Planning Staff mentioned that there have been some changes internally with respect to Bill 108. Staff presented the idea of the applicant holding an Open House prior to a complete application being submitted. It was noted that if the applicant chooses to do this, the open house should be held at a Town facility and Planning Staff would assist the applicant in the circulation to ensure land owners within 120 metres are notified.

Ministry of Transportation Comments/Discussion:

Please refer to email dated December 3, 2019 for all preliminary comments from MTO. Lands are subject to MTO permitting. Planning Staff noted the 14 metre setback for the MTO may apply to the lot area not just the building setbacks for the towns, so they may want to check that since they might not meet. Applicant to confirm with MTO.

Engineering Services Comments/Discussion:

Please refer to comment memo dated December 4, 2019 for detailed comments from Engineering Services.

Staff would be looking for a site specific Traffic Impact Study prepared by the applicant, the Town will not be doing a TIS. It was noted that an acoustical report would be required. Staff further mentioned that 6 metres is undersized for the drainage easement shown on the concept plan and that currently they are seeking between 9-15 metres.

Staff stressed that at a minimum, a second access will be required for the site. Refer to Patti Kennedy's memo dated December 4, 2019 for all the detailed comments.

Discussion was had regarding the construction of Betty Blvd, as it could be done through the build out of the development to the north or potentially be discussed with the Director of Public Works to be Development Charge driven.

The applicant asked if the maintenance access road for the drainage channel could be in the park. Staff noted that we do not have anything like that right now in the Town, that would be a decision by Council.

County of Simcoe – Planning Department Comments/Discussion:

Planning Staff summarized the memo provided by the County of Simcoe Planning Department dated November 26, 2019. Please see attached.

Nottawasaga Valley Conservation Authority Comments/Discussion:

Planning Staff read the comments from the NVCA dated December 5, 2019 which are attached to these minutes. It was noted that the constraints on the property will need to be further reviewed and mapped.

Conclusion/Next Steps

Planning Staff requested to be included in discussions between the applicant and the Public Works Department regarding the drainage easement and Parkland. When there is an agreement with respect to the easement and parkland and the environmental constraints are further

mapped, the concept plan will be able to move forward. Planning Staff are always available for future discussions as the applicant moves forward their proposal.

This summarizes the notes taken at the meeting. Please report any errors and/or omissions to Sheena Harrington Slade of Planning and Development Review by January 24, 2020.



County of Simcoe
Planning Department
1110 Highway 26,
Midhurst, Ontario L9X 1N6

Main Line (705) 726-9300
Toll Free (866) 893-9300
Fax (705) 727-4276
simcoe.ca



November 26, 2019

via e-mail to: planning@wasagabeach.com

Sheena Harrington Slade
Town of Wasaga Beach
30 Lewis Street
Wasaga Beach, ON L9Z 1A1

Dear Ms Harrington Slade,

**RE: Pre-Consultation for Official Plan Amendment, Zoning By-law Amendment, Plan of Subdivision, and Plan of Condominium
Beachwood Road/Shore Lane, Town of Wasaga Beach
Nottawasaga Concession 3 Part Lots 35 and 35; Registered Plan 51R39265 Parts 5 to 7
Applicant: M. Romanin Contracting Ltd.
County File No.: WA-PRE-19011
Town File No.: PRE-C15/19**

Thank you for circulating the pre-consultation concept plan (attached) for the above-noted future development application for a property located on Beachwood Drive west of 74th Street North and continuing through to Shore Lane.

County Planning and Solid Waste Management staff have reviewed the plan and understand that the applicant is proposing a subdivision of single family dwellings (42 units), street townhomes (31 units) and two 6-storey apartment buildings (134 units). It is proposed that access to the development will be from Beachwood Road.

Planning Comments

The subject lands are designated 'Settlements' on Schedule 5.1 of the Simcoe County Official Plan. The Settlements designation permits, among others, residential uses. Settlement Areas are the focus of population and employment growth in the County of Simcoe.

The subject lands are located outside the delineated built boundary of Wasaga Beach as mapped by the Province and would therefore be considered as 'Designated Greenfield Area' on Schedule 2 of A Place to Grow: Growth Plan for the Greater Golden Horseshoe (Growth Plan). The density target for designated Greenfield areas in the Town is 32 residents and jobs per hectare (SCOP Section 3.5.23).

Due to the presence of unevaluated wetlands and forested area, development and site alteration must be consistent with the natural heritage policies of the Provincial Policy Statement (Section 2.1) and Simcoe County Official Plan (3.3.15).

The County is supportive of establishing sidewalks/trails along municipal roads and within the proposed development to ensure pedestrian safety and a connective healthy community.

County Waste Collection Services

The County of Simcoe is responsible for providing curbside waste collection services to all residential lots and units with frontage on a publically owned and maintain road. All municipal roads must be designed to accommodate County waste collection vehicles per the County's Waste Collection Road Design Policy and Design Standards. The County is not required to provide waste collection services to residential units fronting private roads. However, the County endeavors to provide waste collection services to as many residential properties as possible throughout the County of Simcoe.

Waste collection services may also be provided in site-specific locations and the County may be able to provide waste collection services to the ground-oriented units on private roads if the development has been designed and built to comply with the County of Simcoe's Waste Collection Design Standards.

As the Town is aware, the County does not provide waste collection services for buildings comprised of six or more residential units as per the County's Multi Residential and Private Road Waste Collection policy and therefore services will not be available for the two apartment buildings (Blocks 48 & 49). In order to determine whether collection is possible for the balance of the development, please provide:

1. Clarification on the internal road width measurement. The standards require a minimum paved road width of 6 metres measured from inside paved curb to curb.
2. Clarification that all turns meet the minimum radius requirement of 11 metres.
3. A Turn Path Analysis for the stub to ensure that collection vehicles are able to reverse in, collect, and drive safely. Please note that collection vehicles have a maximum reversing distance of 20 metres (from front wheel to front wheel).

The County encourages the Applicant to design the private condominium road to meet the Design Standards so that waste collection services can be provided. Please contact Genevra Willcox in Solid Waste Management with any questions related to waste collection by phone, 705-726-9300 extension 1264, or by email genevra.willcox@simcoe.ca.

County Review Fee

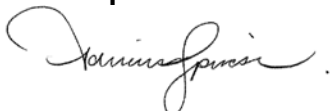
It should also be noted to the applicant that the County is the approval authority for local official plan amendments with an associated fee of \$2,000.00 (site specific) to be paid when the adoption package is submitted to the County.

Please note that future applications and development on the property will be subject to all applicable provincial, County and Town planning policies, by-laws and standards at the time of application.

Thank you for the opportunity to comment on this proposal. Please circulate the County any future notices and supplementary information regarding these applications. The County will provide waste collection conditions for subdivision approval at that time. If you have any questions, please do not hesitate to contact the undersigned at adrianna.spinosa@simcoe.ca or 705-726-9300 extension 1912.

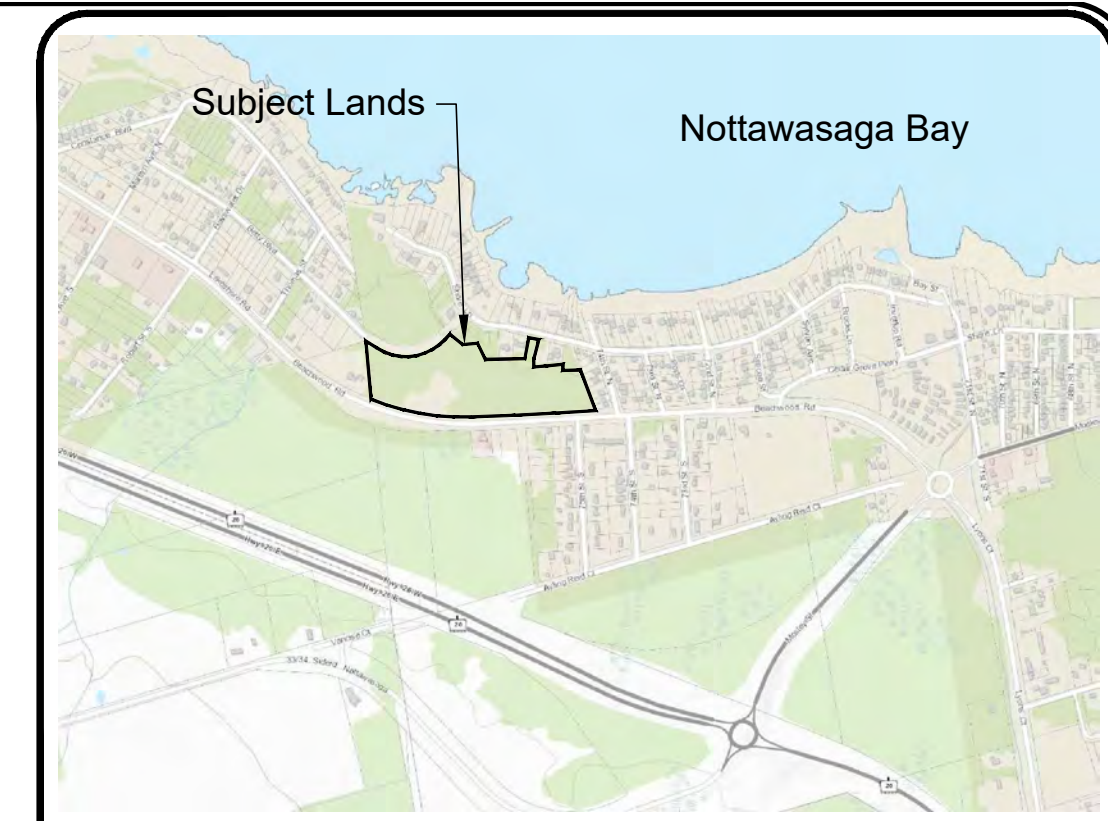
Sincerely,

The Corporation of the County of Simcoe



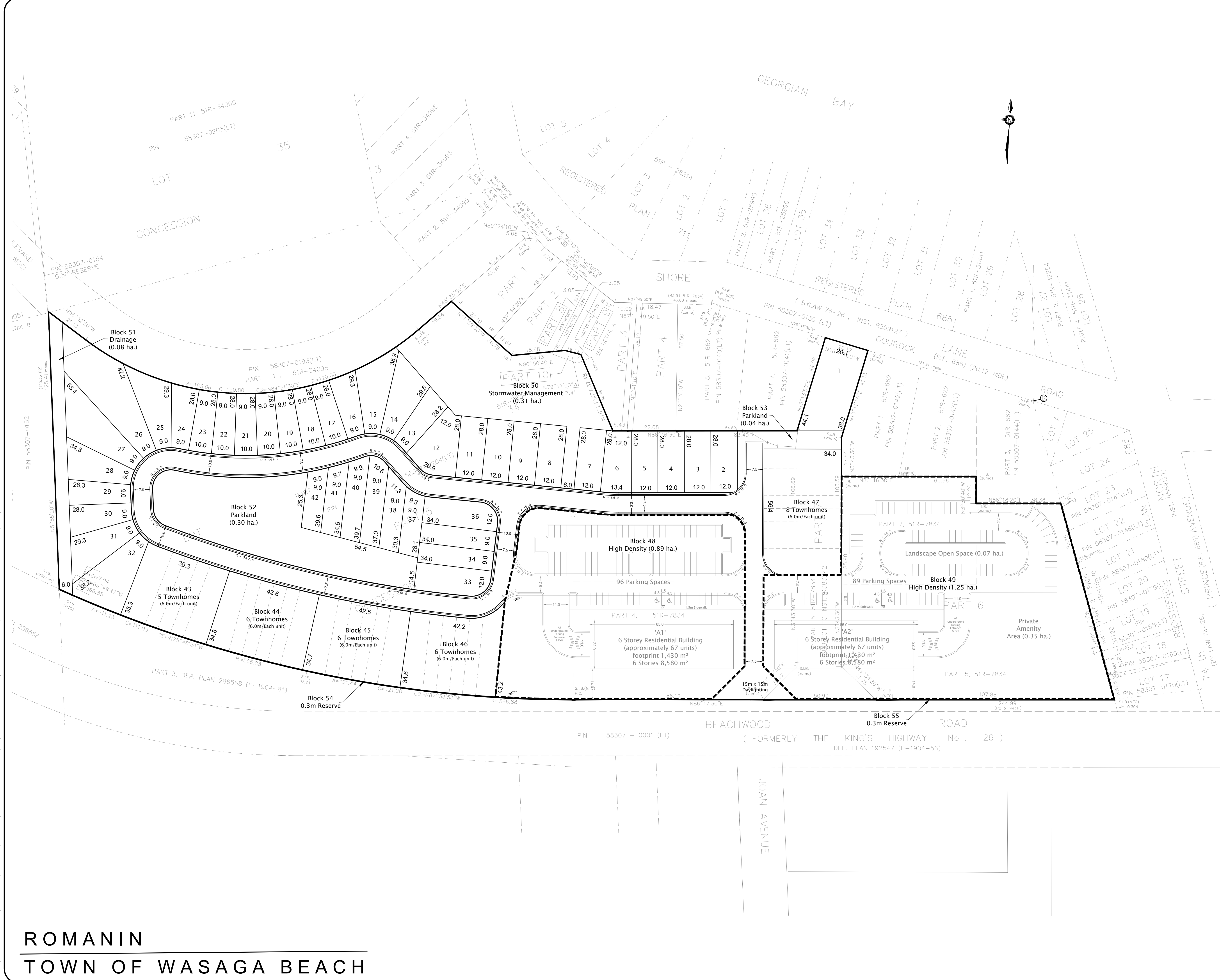
Adrianna Spinosa, MCIP, RPP
Planner III

cc Greg Marek, Manager of Planning – County of Simcoe
Genevra Willcox, Solid Waste Management – County of Simcoe

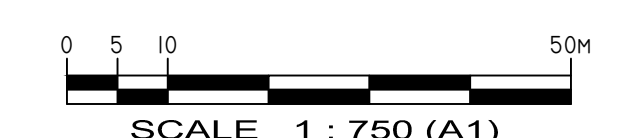


KEY PLAN SCALE NTS

Pre-Consultation Concept Plan 1a
 Part of Lot 34, Concession 3
 Town of Wasaga Beach
 County of Simcoe
 2019

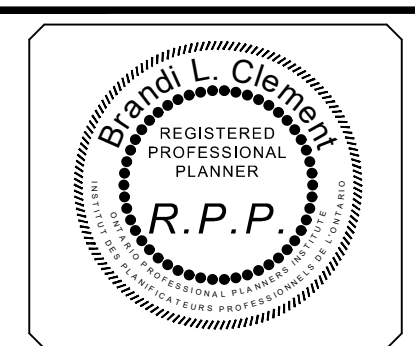


SUBDIVISION STATISTICS	AREA (ha.)	UNITS
Single Residential - 20.1m (Lot 1)	0.08 ha.	1 units
Single Residential - 12.0m (Lots 2-12)	0.39 ha.	11 units
Single Residential - 9.0m (Lots 13-42)	1.09 ha.	30 units
Street Townhomes (6.0m/each) (Blocks 43-47)	0.78 ha.	31 units
High Density (Block 48 & 49)	2.14 ha.	134 units
Stormwater Management & Drainage (Blocks 50 & 51)	0.39 ha.	
Parkland (Block 52 & 53)	0.34 ha.	
0.3m Reserves (Blocks 54 & 55)	0.01 ha.	
Roads	0.66 ha.	
TOTAL	5.88 ha.	207 units



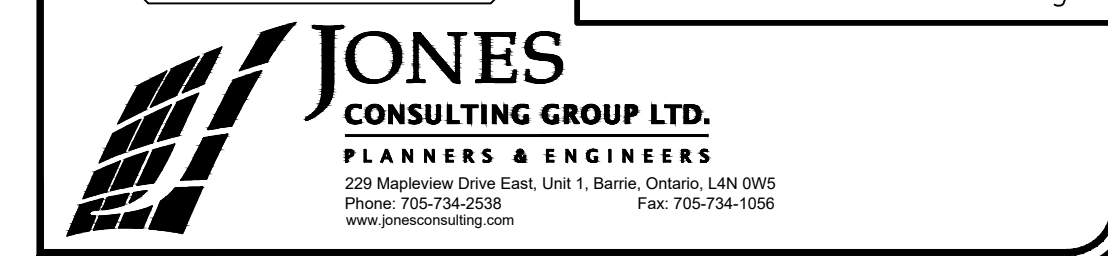
SCALE 1 : 750 (A1)

ROMANIN - WASAGA BEACH
 PRE-CONSULTATION CONCEPT PLAN 1a



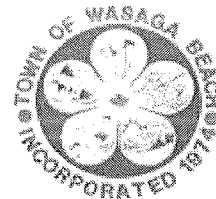
Date Issued: OCT. 30, 2019
 Checked By: BC
 Project No.: ROM-17026
 Drawn By: m.c.r.
 Drawing Name: ROM-17026-PCP-1a.dwg

ROMANIN
 TOWN OF WASAGA BEACH



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MEMORANDUM



TO: Sheena Harrington Slade, Planner

C.C.: Mike Pincivero, Manager of Engineering Services
Doug Herron, Director of Planning and Economic Initiatives

FROM: Patti Kennedy, Engineering Technologist

SUBJECT: M. Romanin Contracting Ltd.
Proposed Residential Subdivision
Beachwood Road & Shore Lane
Pre-Consultation, File PRE-C15/19
Public Works/Engineering Comments

DATE: December 4, 2019

As requested, the submitted Concept Plans for a proposed Residential Subdivision, consisting of 42 single family dwellings, 31 street townhomes and two 6 storey apartment buildings (134 units), for a total of 207 units, received from the Planning Department on November 8, 2019, have been reviewed and the following comments generated.

It is noted that two (2) separate Concept Plans have been provided with this circulation, Concept Plan 1 and Concept Plan 1a. Concept Plan 1a shows the two apartment buildings “greyed out”, with the single family dwelling and street townhome units shown as what Staff interprets as a first phase of the proposed development. Accordingly, Staff’s comments are being provided on Concept Plan 1, the overall development Plan.

General Comments

It should be noted that this site is made up of Parts 5, 6 & 7 of Registered Plan 51R-39265, dated October 8, 2013.

The site is bounded to the north by Shore Lane, residential lands and the unopened Right of Way (ROW) of Betty Boulevard, to the east and west with residential lands and to the south by Beachwood Road, formerly Highway #26. Beachwood Road is still under the jurisdiction of the Province and accordingly, MTO approvals and permits will be required for any development of this site.

It is anticipated that an Acoustical Report will be a requirement of the MTO for this project should it move forward, to ensure that mitigation recommendations for noise protection from traffic are implemented. Beachwood Road is a Provincial Highway and it is anticipated that increased traffic will result over time, with resulting noise which can occur at any time during the day or night.

The westerly portion of the site (Block 51 shown on Concept Plan 1) will require a drainage easement in favour of the Town, to facilitate existing and future drainage from lands south of the development site. Particularly, the development of a new Public Works Depot and Water Tower site that is currently under design for drainage and servicing. Based on the current preliminary design, the 6.0 m width currently identified on the Concept Plan, has been confirmed by Ainley Staff on behalf of the Town, as being undersized and may require increasing to between 9 and 15 metres in width. At the current time the required width of the easement has not been finalized. Additionally, it should be noted that negotiations are currently ongoing between the Town Public Works Department and the affected Property Owners, including the Applicant, for the Depot stormwater management outlet corridor. The exact location (alignment) and width of the corridor is yet to be established through negotiations and detailed design. As such, the location, width and configuration/geometry of Block 51 is potentially subject to change.

A 0.3 m reserve would be required along the lots abutting the Betty Boulevard ROW.

Staff notes that proposed widths of the internal roadways have been provided on the drawing, identifying 7.5 m paved width and identified ROW width of 10.0 m. This appears to suggest that the Applicant is planning on utilizing the Town's "Medium Density Private Residential Development Road" cross section. This cross section requires a 3.0 m wide easement on both sides of the road to accommodate utilities, fire protection and snow storage, which will have to be shown on all applicable Drawings at the design stage.

Staff notes that there is currently only 1 access proposed for the site, shown on the Concept Plan. With a proposal 73 units (singles and towns), along with an additional 134 apartment units, a single access to this site is not supported by Staff. Typically any development with more than 40 units requires a secondary emergency access to the site and a development with over 80 units requires a second standard/permanent access. As the site has potential for connections to either Shore Lane, the unopened Betty Boulevard ROW, or a 2nd access off of Beachwood Road (subject to MTO approval), it is requested that at a minimum a second access be provided.

In anticipation of servicing this site, a 200 mm diameter sanitary sewer stub, along with a 150 mm diameter watermain stub were provided to the 20.1 meter unopened ROW, known as "Toby Trail", at Shore Lane, as part of the Town's West End Servicing Contract. As the current Concept Plan identifies this previously planned ROW as a future private lot, these stubs may require decommissioning to the satisfaction of the Town's Operations Department. Municipal Services are available from Beachwood Road, where there is an existing 250 mm diameter sanitary sewer and a 300 mm diameter watermain, both located on the south side of Beachwood Road. Connections to these mains, including crossing Beachwood Road, will be subject to MTO approval and standards. Such standards may include but not be limited to extended depth, no open trench excavation, possible requirement of steel caissons, etc.

It is noted that the site will have to be run through the Town's water distribution system hydraulic model and sanitary sewer system model, to confirm sufficient flows, pressures and capacities for the development.

Municipal Storm Sewers are not available on Beachwood Road, or Shore Lane to service the property. However, there is a drainage easement to the north of the proposed SWM Block (Block 50) that leads to existing storm sewer pipe out letting into the Shore Lane boulevard to an existing 800

mm diameter CSP culvert, which outlets to Georgian Bay by way of an easement through 2222 Shore Lane. Onsite stormwater management will be a requirement to provide “post” to “pre” quantity and “enhanced” quality controls, through the use of acceptable stormwater (SWM) facilities. A preliminary SWM Report would be required to confirm that the SWM Block identified on the Concept Plan is sufficiently sized at the Draft Plan stage.

Staff notes that the entirety of this site falls into the Nottawasaga Valley Conservation Authority’s (NVCA) Regulated Area, stormwater management will require their approvals. Staff encourages the use of Low Impact Development (LID) options for stormwater management to control onsite stormwater. LID options to consider would include but not be limited to permeable pavement for the parking areas; soak away pits for roof leaders; infiltration galleries; perforated pipe in an infiltration trench; etc.

The Plan will be required to identify that a minimum centreline turning radius of 12.0 m has been achieved through the design, to provide for emergency, as well as County waste collection vehicle access through the site. Further, Staff notes that the road termination at Block 53 (Parkland) is not desirable, as it does not provide for County waste collection or snow removal vehicles to turn around, other than utilizing a private driveway. Accordingly, it is recommended that this road stub be re-evaluated, taking into consideration the requirement for a second access to the site.

It is noted that the application site is not located within the Town’s Well Head Protection Area and accordingly does not require screening by the Town’s Risk Management Official (RMO). As such a “Notice to Proceed” will be issued by the Town RMO, should this development proceed.

It is acknowledged that the preliminary concept plans provided by the Applicant are to demonstrate the proposed concept. However, all future submissions in support of a Development Application are to be provided in metric scale, will be subject to the Town of Wasaga Beach Engineering Standards and will be required to include at a minimum the following Plans;

- Draft Plan of Subdivision;
- Site Servicing Plans;
- Plan/Profiles of Internal roadways;
- Grading Plans;
- Landscape Plans;
- Lighting/Illumination Plans (to be Dark Sky Compliant);
- Composite Utility Plans;
- Details & Notes Plan;

and shall include at a minimum the following details on those Plans;

- A legend;
- A key plan;
- Geodetic data/location of bench mark;
- Site boundary dimensions;
- Location of all existing and proposed municipal servicing both external and internal to the site;
- Dimensions and locations of proposed driveways/entrances/access; typical internal road cross-section;
- Visitor parking areas (including delineation of stalls and entire parking area);

- Sidewalk internal to the site, with connections to existing sidewalk or trail systems in the area;
- Landscaping details/information including tree preservation, tree plantings/buffering, fencing, etc.;
- Existing trees/vegetation (including along boundary lines);
- Location of underground existing and proposed utilities (Bell, Hydro, Gas, etc.);
- Required fire route, minimum of 6m wide, including confirming required turning radius (12m centre line) has been achieved;
- Overland flow route and stormwater management design;
- On-site snow storage locations, which are not to interfere with required parking, site access, amenity areas/parks, or drainage facilities;
- Location and direction of exterior lighting and parking lighting for the apartment buildings;
- Location and size of any signs;
- Garbage enclosure locations, satisfying County design geometrics for private roads and/or confirmation that the County of Simcoe will enter the site for pickup; and
- Parkland/amenity areas.

Further, all existing and proposed utility information such as hydro poles, street lights, utility pedestals, etc. are to be included and labelled on the Site Plan.

The detailed engineering design for this development shall adhere to the Town of Wasaga Beach's Engineering Standards.

The following information is typical of the reports required for detailed design submissions:

1. A detailed Functional Servicing Report (FSR), which at a minimum addresses the proposed servicing of the development. Specifically, detail with regard to water, sanitary and stormwater management (SWM) will need to be addressed with regard to the overall site. Any proposed phasing of the development should be addressed in this report, outlining timing of works and any triggers for works.
2. A Stormwater Management Report to address how stormwater from external lands, as well as the property, is to be handled on site and how/where it is to be discharged to. It is noted that the Developer and their design engineers are encouraged to consider use of Low Impact Design (LID) methods in the detailed storm water design. This report shall also address the required drainage easement, through the site, required to convey external drainage from south of the site.
3. A Traffic Impact Study (TIS) is required to address traffic generated from the site. This study shall be a standalone report, specifically dealing with the proposed access at Beachwood Road, along with the required 2nd access (wherever that ultimately might be), to address whether turning lanes will be required for the entrances and/or whether improvements will be required at the intersections. Specific comments on the proposed entrance from the site to Beachwood Road will also be required, to address whether it will be a controlled entrance/exit (i.e. signalized). It should be further acknowledged that there are potential development lands to the south of Beachwood Road, with potential access point being Joan Avenue, which should also be considered within the TIS.
4. A Site Servicing Plan which shall include, but not be limited to the locations of existing and proposed services such as sidewalks, site lighting (to be dark sky compliant - 3000k), utilities (hydro, bell, cable, gas, etc.), watermain, existing hydrants, municipal ditches and sanitary

sewers. Additional consideration should be given to the proposed servicing of the individual units to ensure that the reduced frontages can accommodate the required municipal and utility services as well as the Town's required tree plantings.

5. A Geotechnical Report, identifying at a minimum, site soil conditions, seasonal high groundwater table elevation and recommendations for pipe bedding, backfill materials, slab on grade/footings, road base design and confirmation of SWM design.
6. Landscape Plans, including existing trees/shrubs by size, type and their location. The location, size and type of new plantings, fences, and paths/walkways/sidewalks proposed and their connections to the existing sidewalks/trails in the area, should all be identified on these Plans. A Tree Inventory and Preservation Plan will be required for the site.
7. Grading Plans, showing at a minimum existing and proposed elevations at all property and individual lot/block corners, as well as centre line of roadway grades internal and adjacent to the site, in keeping with Town standard requirements. Existing and proposed contours and/or spot grades, within the development lands and adjacent properties are to be provided to indicate the drainage pattern. A topographic survey is typically necessary to provide spot grades.
8. It is noted that an Acoustic Study will be required to address acoustic mitigation methods for Beachwood Road.
9. An Operation and Maintenance Manual will be required for the development to address the regular inspection and maintenance of infrastructure, as well as addressing snow storage/removal, line painting and signage (traffic, street, etc.).

I trust the above is clear, however should you have any questions or require clarification on any of the above, please contact the undersigned.

Respectfully submitted &
Prepared by,



Patti Kennedy, C.E.T.
Engineering Technologist

Reviewed by,



Mike Pincivero, P. Eng.
Manager of Engineering Services

Sheena Harrington-Slade

From: Dorton, Peter (MTO) <Peter.Dorton@ontario.ca>
Sent: Tuesday, December 3, 2019 1:40 PM
To: Sheena Harrington-Slade
Cc: Mike Pincivero; Diczki, Tarita (MTO); Hylton, Ramon (MTO); Akhtar, Usman (MTO); Iannacito, Phil (MTO)
Subject: Romanin Draft Plan of Subdivision, Beachwood Rd. opposite Joan Ave., Wasaga Beach
Attachments: Pre-consultation meeting (PRE-C15/19)

[CAUTION: Outside email]

Sheena:

We have reviewed this pre - consultation submission, and while MTO will not be attending the pre - con meeting, we offer the following comments for your consideration.

1. Provided that the proponent can demonstrate that MTO intersection visibility requirements can be met and they satisfactorily address points 2, 3 and 4 below, we will accept in principle the proposed public road opposite Joan Ave..
2. We recommend that the Town coordinate the preparation of a traffic impact study to incorporate all proposed developments on the south and north sides of Beachwood Rd. in this area.
3. This access road should not be the sole access into the site, as shown, but rather, it should connect up to Shore Lane, and be at least 20m in width (ROW is only shown on plan to be 7.5m wide, although we note that Plan 51R-39265 included with meeting notice shows a 20m wide roadway was contemplated at one point for this site). Also, daylight triangles should not necessarily be as shown, but rather be calculated by the proponent and submitted to us for review / approval.
4. We also suggest that this development include construction of (and perhaps a subdivision connection to) the missing roadway between Shore Lane to Betty Blvd., so that there is a proper internal municipal road network in the area. It appears that the ROW for this has been accounted for in previous reference plans for the area.
5. Please also ensure that the proponent is aware that a stormwater management report is to be submitted for MTO review and approval, along with site grading / servicing / internal road construction drawings.
6. All buildings / structures and land uses considered integral to site operations (eg. loading areas, fire routes, SWM ponds, drive – thrus, etc.) must be setback a minimum of 14m from MTO's Beachwood Rd. ROW limits.
7. Prior to commencement of site construction activity, MTO Building & Land Use and Entrance permits are required, along with Sign permits and Encroachment permits for any works within MTO ROW limits.

8. Any highway (Beachwood Rd.) improvements required to accommodate developments in the area should be coordinated into a single project if possible, so that a new 4 way intersection is constructed to serve both the south and north sides of Beachwood. The intersection project will be subject to a legal agreement between the proponent and MTO.
9. Additional MTO comments including draft approval conditions will be provided when a formal application is circulated to us.

Please feel free to contact me if you have any questions.

Thanks,
Peter Dorton
Senior Project Manager
Highway Corridor Management Section – Central Region
Ministry of Transportation
159 Sir William Hearst Avenue, 7th Floor
Toronto, ON M3M 0B7
Tel. (416) 235 - 4280
E-Mail: peter.dorton@ontario.ca
Web: www.mto.gov.on.ca/english/engineering/management/corridor

APPENDIX C ESA SCREENING REQUEST

To whom it may concern:

RE: Information Request: Part of Lot 34 Concession 3, Nottawasaga – Beachwood Rd. Development, Wasaga Beach Ontario

Name: John Tress

Company Name: Sage Earth

Phone Number: (416) 899-1016

Email Address: jtress.sageearth@gmail.com

Proponent Name: Tony Romanin

Project Name: Beachwood Rd. Development

Property Location: North west corner of Lot 34, Con. 3, Nottawasaga. Refer to attached figures.

Lot & Concession: Lot 34, Con. 3, Nottawasaga

UTM Coordinates: Zone: 17N Easting: 569845.4 and Northing: 4924257.8

Brief Description of Undertaking:

Mr. Romanin is proposing to subdivide his property on Beachwood Rd. in Wasaga Beach, ON. **Figure 2** shows the location of the proposed subdivision in relation to the existing legal parcel.

According to the Ministry of Natural Resources and Forestry Make-A-Map: Natural Heritage Areas online tool, there is woodland on the property (**Figure 3**). A preliminary search of the Natural Heritage Information Centre (NHIC) database indicates previous records of the following species at risk within 1 km² of the property: Northern Map Turtle (*Graptemys geographica*) (S3) (SC).

Have you previously contacted someone at MNR for information on this site?

No.

What process does the project falls under? (e.g. Environmental Assessment, Plan of Subdivision, Municipal Drain maintenance, Landowner project, etc.);

Plan of Subdivision

See attached figures for Key Plan, Draft Plan of Subdivision and LIO Natural Heritage Map.

Request:

1. Species at Risk Element Occurrence Records, Habitat Features, Regulated and General Habitat:

If available, please send.

If you have any questions or concerns regarding the above mentioned project, please do not hesitate to contact me at (416) 899-1016.

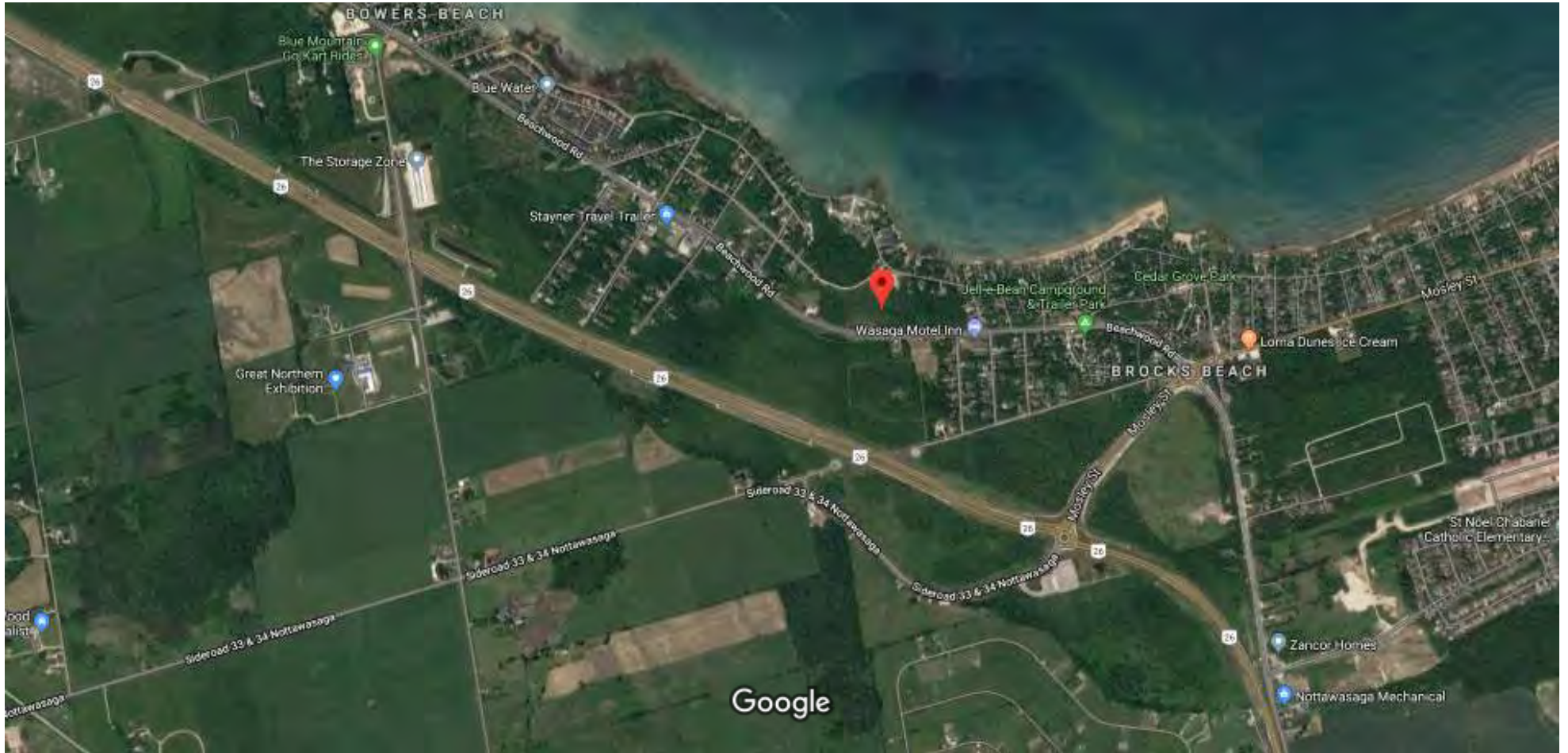
Thank You,

John Tress
Environmental Technician
Sage Earth
2978 Concession Rd. 4,
Loretto, Ontario
L0G 1L0



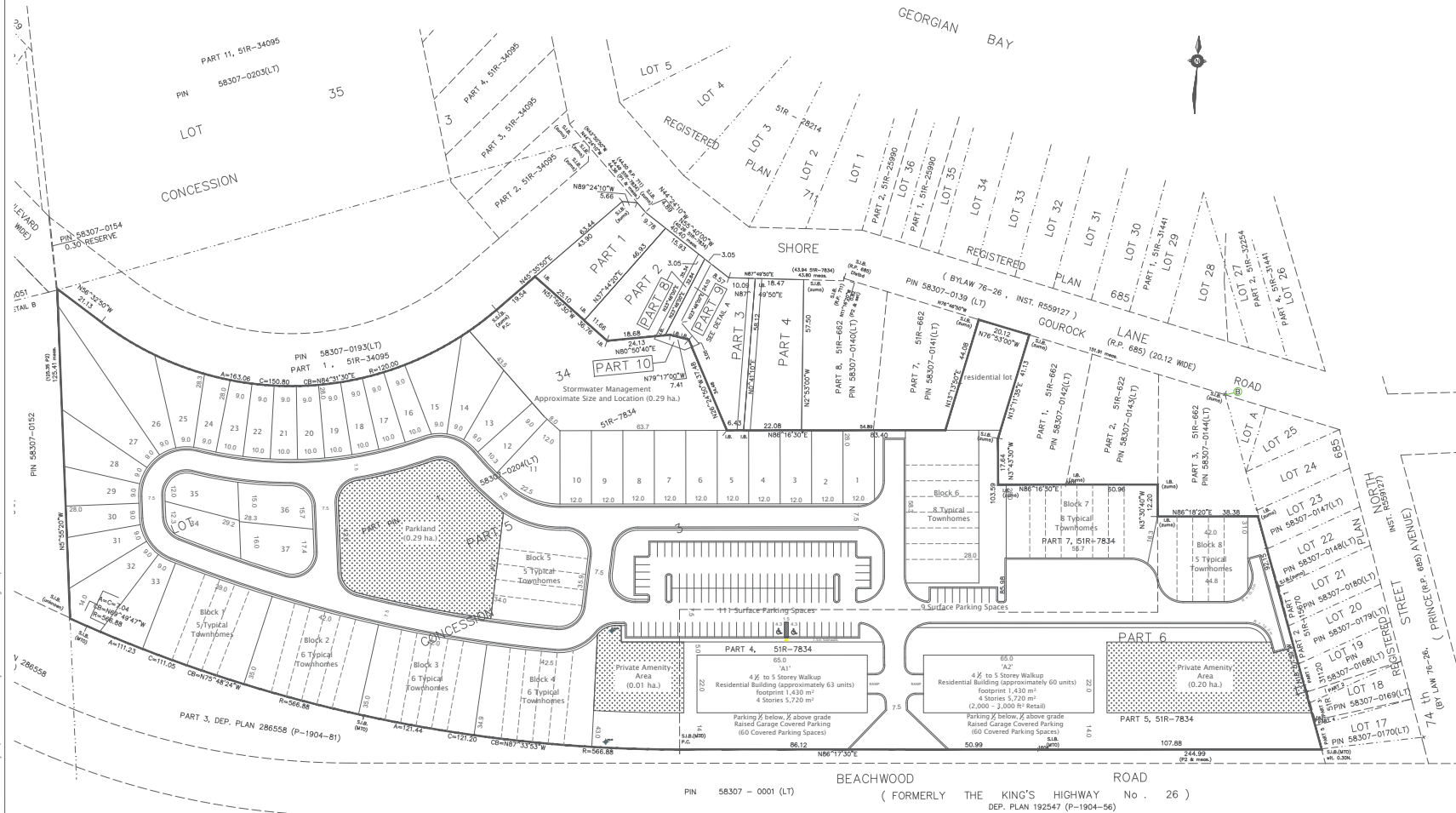
44°28'06.7"N 80°07'14.3"W

Figure 1 - Key Plan



Map data ©2018 Google 200 m

Figure 2 - Draft Plan of Subdivision



Subject Lands Nottawasaga Bay

Planning Drawings\ROM-17026\dwg\SD\KEY.

KEY PLAN SCALE NTS

Concept Plan 9
 Part of Lot 34, Concession 3
 Town of Wasaga Beach
 County of Simcoe
 2017

SUBDIVISION STATISTICS	AREA (ha.)	UNITS
SINGLE RESIDENTIAL - 9.0m (LOTS 4-6)	x.xxx ha.	22 units
SINGLE RESIDENTIAL - 12.0m (LOTS 4-6)	x.xxx ha.	15 units
SINGLE RESIDENTIAL - NEW LOT (LOT 7)	x.xxx ha.	1 unit
TYPICAL TOWNHOMES (BLOCKS 1-10)	x.xxx ha.	49 units
4 STOREY APARTMENTS (BLOCKS 1-10)	x.xxx ha.	123 units
RETAIL	x.xxx ha.	
OPEN SPACE/PRIVATE AMENITY	0.50 ha.	
STORMWATER MANAGEMENT (BLOCKS 1-10)	0.29 ha.	
ROAD (STREETS 1-10)	x.xxx ha.	
TOTAL	5.88 ha.	210 units

SCALE = 1:750 (A1)

ROMANIN - WASAGA BEACH
 CONCEPT PLAN

R.P.P.

Date Issued: SEPT. 5, 2017
 Checked By: BC
 Project No.: ROM-17026
 Drawn By: m.c.r.
 Drawing Name: ROM-17026-CP-9.dwg

SCHEDULE OF REVISIONS		
DATE	DESCRIPTION	DRAWN

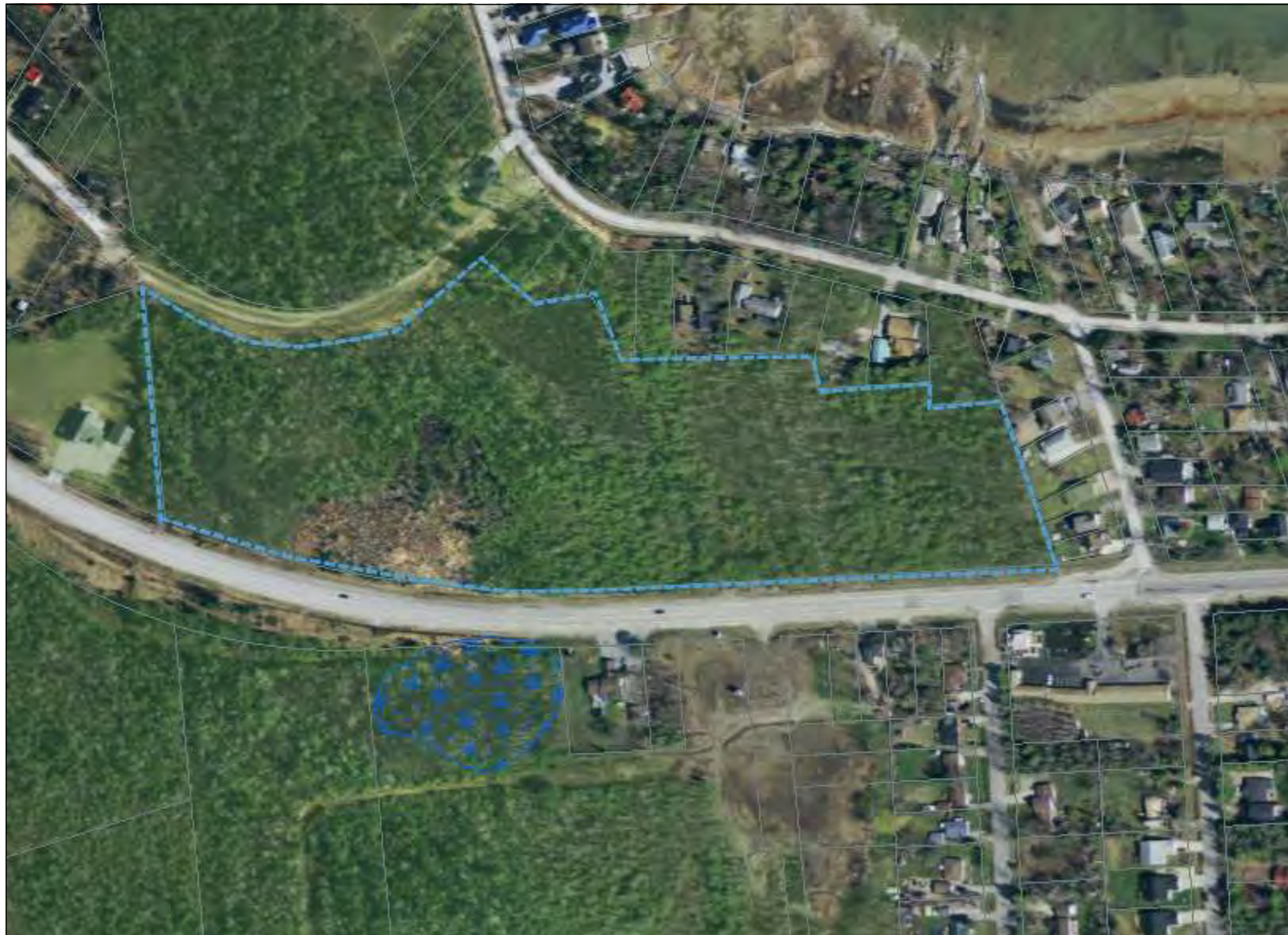
M.ROMANIN CONT.
TOWN OF WASAGA BEACH

JONES CONSULTING GROUP LTD.
 229 Progress Drive East, Unit 1, Barrie, Ontario, L4N 0Y6
 Phone: (705) 244-2333 Fax: (705) 244-0366

C:\Users\MP\appdata\local\temp\A64ubabab_5564\ROM-17026-CP-9.dwg Layout1 CP Plotted May 15, 2018 @ 10:53am by MP The Jones Consulting Group Ltd.

Figure 3 - Natural Heritage Features

Notes: Blue dotted line = legal parcel boundary



Legend

- Recreation Parcel
- Wetland
- Conservation Easine
- Riparian Zone
- Natural Heritage System
- Corridor
- Wetland**
 - Provincially Significant Wetland Evaluation
 - Provincially Significant Wetland Evaluation
 - Provincially Significant Wetland Evaluation
 - Provincially Significant Wetland Evaluation
- Area of Natural Heritage & Scientific Interest (ANH&SI)**
 - Provincially Significant Landforms (PSL)
 - Provincially Significant Earth Structures (PSES)
- Greenbelt Plan**
 - Quadrants
 - Non-Hobby Connections
- Land Use Designations**
 - Protected Countryside
 - Town and Village
 - Home
 - Urban River Corridor
 - Greenbelt Core Area
- Niagara Escarpment Plan (NEP)**
 - Boundary
 - Multi-ecotone mosaic system
- Land Use Designations**
 - Escarpment Natural Area
 - Escarpment Wetlands Area
 - Escarpment Rural Area
 - Mineral Resource Extraction Area
 - Escarpment Recreation Area
 - Urban Area
 - Major Urban Centre
- Cole's Ridges Moraine Conservation Plan (CRM)**
 - Boundary
- Land Use Designations**
 - Natural Core Area
 - Natural Linkage Area
 - Countryside Area
 - Road Right-of-Way
 - Palimpsest Features - Residential Colonies only
 - Settlement Area



Scale: 1 : 4,513

This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Natural Resources and Forestry (OMNRF) shall not be liable in any way for the use of, or reliance upon, this map or any information on this map.

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APPENDIX D ESA SCREENING RESPONSE



John Tress <jtress.sageearth@gmail.com>

Endangered Species Act Information Request - Beachwood Rd. Development

Benvenuti, Jodi (MNRF) <jodi.benvenuti@ontario.ca>
To: "jtress.sageearth@gmail.com" <jtress.sageearth@gmail.com>

31 August 2018 at 15:35

Hi John,

Thank you for the information provided.

I have no additional species at risk information for this property however I would add the following three species to your list below: Canada Warbler (Special Concern), Golden-winged Warbler (Special Concern) and Snapping Turtle (Special Concern).

Jodi Benvenuti

Management Biologist

Ministry of Natural Resources and Forestry

Midhurst District

Phone: (705)725-7513

From: John Tress [mailto:jtress.sageearth@gmail.com]

Sent: August-29-18 11:41 AM

To: Benvenuti, Jodi (MNRF)

Subject: Re: Endangered Species Act Information Request - Beachwood Rd. Development

Hi Jodi,

I have prepared a list of SAR likely to occur on this site based on the habitat available.

Common Nighthawk, Eastern Wood-Pewee, Red-headed Woodpecker, Short-eared Owl, Whip-poor-will, Wood Thrush, Monarch Butterfly, Eastern Small-footed

Bat, Little Brown Bat, Northern Long-eared Bat, Tri-coloured Bat, Butternut, Eastern Hog-nosed Snake

Any more information that you can provide would be greatly appreciated.

John

On Thu, 26 Jul 2018 at 10:57, John Tress <jtress.sageearth@gmail.com> wrote:

Thanks for the reply Jodi. I will prepare a summary of the species at risk that it is reasonable to expect could be present in the study area based on the available habitat and get back to you.

John

On 26 July 2018 at 10:39, Benvenuti, Jodi (MNRF) <jodi.benvenuti@ontario.ca> wrote:

Hello John,

Thank you for your information request.

Due to the volume of species at risk (SAR) requests we receive, it is the practise of Midhurst District that the following information be provided in advance to assist in facilitating this process:

- i) A map of the site and the nature or scope of the proposed work
- ii) A summary or preliminary records review outlining the species at risk data found in the area through consulting the online 'Make a Map' Tool
- iii) ***A summary of the species at risk that it is reasonable to expect could be present in the study area based on the available habitat.**

Once all components have been received, MNRF will confirm the information gathered is accurate and identify any additional information that may be available or additional species that should be considered. Species at risk and other natural heritage information requirements can largely be met through the use of the following data sources and reference documents:

- Make a Map: Natural Heritage Areas: http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US_ Natural Heritage Information Centre (NHIC) data is also available through this interactive map tool.
- Species at Risk in Ontario (SARO) List: <https://www.ontario.ca/environment-and-energy/species-risk-ontario-list>
 - Digital data for natural heritage features (e.g. wetland and ANSI mapping, fish community data) can be obtained through Land Information Ontario (LIO) and/or through the Make a Map: Natural Heritage Areas tool through LIO at the link: https://www.ontario.ca/page/land-information-ontario_
- Other resources to consider include: *"Atlas of the Breeding Birds of Ontario"*, *"Ontario Reptile and Amphibian Atlas"*

The SAR records we have within our provincial database, are for **known or reported observations only** and therefore do not provide a complete picture of where SAR occur on the landscape. As a result, although there may be no records or confirmation of SAR on a specific property it does not mean they are not present if appropriate habitat exists. Due diligence is therefore still required and would include an appropriate consideration of what species could be present based on available habitat on and adjacent to your study site.

Regards,

Jodi Benvenuti

Management Biologist

Ministry of Natural Resources and Forestry

Midhurst District

Phone: (705) 725-7513

From: John Tress [mailto:jtress.sageearth@gmail.com]
Sent: July-24-18 3:26 PM
To: MIDHURSTINFO (MNRF)
Subject: Re: Endangered Species Act Information Request - Beachwood Rd. Development

Hello,

I would like to inquire about this ESA screening request and ask when I could expect a response?

Thanks,

On 15 May 2018 at 11:10, John Tress <jtress.sageearth@gmail.com> wrote:

To whom it may concern at MNRF:

Attached is an Endangered Species Act Information Request/Screening for a project put forth by Mr. Tony Romanin on Lot 34, Concession 3, Nottawasaga - Beachwood Rd. Wasaga Beach

Please determine:

1. Whether MNRF has records of any Species at Risk individuals within or adjacent to the legal parcel boundaries? (In addition to what is publicly available on the NHIC online application)
2. Whether MNRF can provide information indicating if they have any Species at Risk concerns with the proposed project?

Thank you for your time and I look forward to hearing back from your representative.

Regards,

John

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John Tress
Environmental Technician
Sage Earth