FINAL

Environmental Impact Study

357-361 Elgin Road, Coburg, ON

Prepared for:

359 Elgin Inc.
10 Wanless Ave., Suite 201
Toronto, ON M4N 1V6

Attn: Mr. Aaron Gold
Vice President of Operations

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MEMBER OF
THE PINCHIN GROUP

Issued to:	**359 Elgin Inc.**
Contact:	**Aaron Gold**
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Issuing Office:	**2470 Milltower Court, Mississauga, ON L5N 7W5**
Primary Pinchin Contact:	**Rocky Yao, Project Manager, 289-971-7821**

Author: Rocky Yao, M.Sc., CISEC, EP
Project Manager, Regional Practice Lead, Environmental Science
289-971-7821
ryao@pinchin.com

Reviewer: Mario E. Buszynski, M.Sc. MCIP, RPP
Senior Project Advisor, Environmental Science
416.254.6614
mbuszynski@pinchin.com

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

Pinchin Ltd. (Pinchin) was retained by 359 Elgin Inc. to conduct an Environmental Impact Study (EIS) for the subject properties located at 357-361 Elgin Road, Cobourg, Ontario (Site). The location of the Site with the surrounding Study Area is shown on Figure 1 in **Appendix A**. The EIS is requested by the Town of Cobourg and the Ganaraska Region Conservation Authority (GRCA) in support of a Draft Plan of Subdivision Application for the proposed residential development. The proposed development consists of 14 bungalow townhomes, a five-storey apartment building and associated parking spaces.

Currently the Site consists of two parcels of land that are naturalized and bounded by Elgin Road to the north, commercial lands to the east, a wetland and watercourse to the south, and Cobourg Conservation Area to the west. The Study Area can be seen on Figure 2 in **Appendix A**. The Site consists of six different vegetation communities. The northern edge of the Site consists of upland forest dominated by Manitoba Maple (*Acer negundo*), transitioning into lowland forest with similar species composition. South of this forest lies a White Cedar (*Thuja occidentalis*) dominated swamp with a patch of meadow marsh near the southern boundary of the lowland forest. On the southeastern edge of the Site, a recreational trail crosses the Site consisting of maintained grass, transitioning into the continuation of the White Cedar swamp. A detailed description of the vegetation communities can be found in Section 4.0 of this EIS.

The Cobourg Northwest Wetland Complex is located to the north across Elgin Road from the Site, approximately 50 m away. The Cobourg Brook is also located to the South of the Site, providing fish habitat for species in the area. Both of these natural features are located outside of the Study Area.

This EIS report was prepared to: identify natural heritage features present on or immediately adjacent to the Site and characterize their ecological functions; evaluate the environmental effects of the development proposal that might reasonably be expected to have an impact on the natural features; and provide recommendations of mitigation measures to avoid or minimize the potential impacts. The EIS follow the policies and guidelines for an EIS set out in the Ganaraska Region Conservation Authority (GRCA) EIS guidelines, Town of Cobourg Official Plan 2018 and Northumberland County Official Plan 2016.

2.0 NATURAL HERITAGE AND REGULATORY CONSIDERATIONS

The following provincial, regional and municipal legislation and policies were reviewed prior to an evaluation of the natural heritage features and functions of the Site and adjacent area was undertaken:

- Provincial Policy Statement (2020);
- Town of Cobourg Official Plan (2018 Consolidation);
- Northumberland County Official Plan (2016);
- Ontario Regulation 168/06 (2013).

2.1 Provincial Policy Statement

The Provincial Policy Statement (2020) sets a policy foundation for regulating development and land use. It sets out guidelines for development while protecting resources of interest to the province, public health and safety and the quality of the natural environment. The PPS does support development and improved land use for planning, management and growth, but it does so in ways to enhance communities through efficient land use and environmental management and protection.

2.2 Town of Cobourg Official Plan

The Study Area is subject to the policies and designations in the Town of Cobourg Official Plan (2018). Currently, the Town has zoned the Site as both a "Mixed Use Corridor Area" and "Environmental Constraint Area" as shown on Schedule A of Land use Plan mapping (Town of Cobourg, 2018). Development is permitted in "Environmental Constraint Area's" given they follow the appropriate bylaws. This Official Plan also identifies the Site as a part of the "Greenland's System" as shown on Schedule B-Greenland System and Gateway Areas (Town of Cobourg, 2018). Development is also permitted in these areas as long it follows the conditions of development outlined in section 4.2.4 in the Official Plan (Town of Cobourg, 2018).

2.3 Northumberland County Official Plan

The Northumberland County Official Plan classifies the Study Area as "Urban" as seen in Schedule A of Land Use Map (Northumberland County, 2016). The County recognizes non-provincially significant wetlands as components of the natural heritage system. This Official Plan does not permit development in significant wetlands or coastal wetlands of any kind. Section D 1.9.1 states that an EIS shall be prepared in accordance with the requirements of this section of the Plan in order to understand the boundaries and attributes of natural heritage features and their functions (Northumberland County, 2016).

2.4 Ontario Regulation 168/06

Pursuant to the *Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*, any development in or on areas defined in the regulation area (e.g. river or stream valleys, hazardous land, wetlands) requires permission from the GRCA under Ontario Regulation 168/06 (GRCA, 2013). GRCA may grant permission for development in or on these areas if the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development. The Regulation also states that it is prohibited to straighten, change, divert or interfere in any way the existing channel of a river, creek, stream or watercourse or change or interfere in any way with the wetland without the permission from the GRCA.

3.0 STUDY METHODOLOGY

3.1 Background Review and Agency Consultation

A desktop background review of available information sources relating to the Study Area was conducted prior to a site reconnaissance. Included in the review were natural heritage features present on the Site and in the surrounding area, historical species occurrences available from the Natural Heritage Information Centre (NHIC), existing wildlife data records, Species of Conservation Concern lists and other relevant information. Additionally, information and documents available from the Client including site history and Site were also reviewed for this Site. Applicable policies and guidelines including the Town of Cobourg Official Plan (Town of Cobourg, 2018). This document references the MNRF Natural Heritage Reference Manual (Ministry of Natural Resources, 2010) and the Provincial Policy Statement 2014 (Ministry of Housing and Municipal Affairs, 2014) which were reviewed for this report.

A scoping exercise was conducted through a Terms of Reference (TOR) for the EIS prior to this report to the GRCA for establishing the scope of the EIS. Additionally, consultations were conducted by the Client and the Arborist with respect to the trees and woodlot present on the Site outside of the scoping exercise. Several meetings and a Site staking have been attended by the Town, the GRCA, the Client and Pinchin. A record of the agency consultation is included in **Appendix B** for reference. Although no comments on the TOR were received from the Town at the time of this EIS completed, acceptance to the TOR was provided by the GRCA. This EIS report was completed based on the TOR accepted by the GRCA.

Natural heritage resources with the potential to be present on the Study Area were identified through the following information sources:

- An assessment of habitat through aerial photographs and online mapping:
  - Land Information Ontario (MNRF, 2019a); and
  - Google Earth.
- A review of historical occurrence records for Species of Conservation Concern within or adjacent to the Study Area:
  - Natural Heritage Information Centre (MNRF, 2019b);
  - Atlas of the Breeding Birds of Ontario (BSC, 2019);
  - Atlas of the Mammals of Ontario (Dobbyn, 1994);
  - Ontario Reptile and Amphibian Atlas (ON, 2019);
  - Ontario Butterfly Atlas (TEA, 2019);
  - Ontario Regulation 230/08 Species at Risk in Ontario List (COSSARO, 2019a); and

- Provincial and federal assessments, recovery strategies, and management plans.

3.2 Field Assessment

Pinchin conducted three field studies to characterize the natural heritage features present on the Site and in the surrounding landscape. A summary of methodologies for the field work completed by Pinchin is provided below for reference.

3.2.1 Vegetation Assessment

Vegetation communities within the Study Area were assessed and described using the provincial Ecological Land Classification system. The *Ecological Land Classification for Southern Ontario: First Approximation and its Application* (Lee et al., 1998) was referenced to classify the habitats to ecosite. Ecosites classified within the Study Area were then applied to polygons mapped using aerial imagery.

The vegetation communities were sampled for their structure, species composition and habitat characteristics. This information was supplemented by floristic surveys at the time of each visit. Species names generally follow the nomenclature of Flora Ontario (Newmaster and Ragupathy, 2012) and the NHIC.

3.2.2 Wetland Assessment

Wetlands are defined as lands that are seasonally or permanently covered by shallow water as well as lands where the water table is close to the surface causing the formation of hydric soils and favouring the dominance of hydrophytic or water tolerant plants.

Assessment of the wetlands within the Study Area followed the criteria outlined in the Ontario Wetland Evaluation System (OWES) 3rd Edition (MNRF, 2013). Although the area in question on the Site is too small to be fully assessed using the OWES framework, the evaluation criteria therein provide an appropriate benchmark to work from. In soil classification, the “50% rule” and the presence of wetland species and wetland indicator species form a useful basis for evaluation of the upland-wetland transition on the Site. According to OWES, the “50% rule” is defined as that of 50% or more of the relative vegetation cover in a given area consists of wetland plants (including wetland tolerant species and wetland indicator species), then the area should be considered a “wetland”. Wetland indicator species are plant species that cannot live in upland areas, as compared with wetland species which include wetland indicator species and plant species that can tolerate both wetland and upland habitats. Additionally, the Coefficient of Wetness (CW) was used in our assessment as an indicator varying from -5 (obligate wetland) to 5 (obligate upland) for the tolerances to wetness of an individual plant species.

3.2.3 Species at Risk

The likelihood of occurrence for species at risk was assessed qualitatively based on the ability of the habitat to meet one or more life requisites for each species at risk identified during the desktop assessment. If habitat suitable for species at risk was identified, additional survey effort was applied in that area. If incidental species at risk were observed, they were recorded throughout the field assessment within and adjacent to the Site.

3.2.4 Incidental Wildlife Observations

Wildlife was surveyed as part of general wildlife surveys during the three Site visits. These surveys involved general coverage recording all species observations and signs, including tracks / trails, scat, burrows, dens, and vocalizations. The wildlife surveys occurred during the coincident surveys for vegetation communities and vascular plants. Significant wildlife habitat was assessed according to the MNRF Natural Heritage Reference Manual (MNRF 2010) and the MNRF Significant Wildlife Habitat Technical Guide (MNRF 2000).

4.0 ASSESSMENT RESULTS AND ANALYSIS

Three field assessments were conducted in total on the Site for this EIs. A summer visit was conducted first on September 5, 2018 to assess the existing natural heritage features present on the Site. The weather during the Site visit was 22 degrees Celsius with no cloud cover and a light breeze. A fall visit was conducted on October 4, 2018 alongside representatives of the Client, the Town of Cobourg and the GRCA. The weather during this Site visit was mostly cloudy with a temperature of 18 degrees Celsius, with heavy rain in the morning and the prior evening. A spring visit was conducted on May 21, 2019 with more information being recorded at this time including additions to the plant species list and refinements to the ELC communities and their boundaries. The weather during the third visit was moderately cloudy with light showers, with a temperature of 20 degrees Celsius. A Site staking was also done on July 4, 2019 with representatives from Pinchin, the GRCA, the Town of Cobourg and a Site surveyor in attendance. Selected Site photographs as described below from the above site visits are provided in **Appendix C.**

4.1 Landform Features

The Site is bounded to the north by Elgin Street, to the east by a YMCA facility, to the west by a sports field and to the south by Cobourg Broke. Across Elgin Street to the north of the Site is the Cobourg Northwest Wetland Complex, a Provincially Significant Wetland (PSW).

This PSW is within 120 m of the Site; however, it is disconnected from the Site by a municipal roadway. The Site itself consists of upland forest that transitions into a lowland forest along a gentle slope. This area transitions into a wetland that is currently unevaluated by the MNRF.

The wetland runs to the edge of the southern boundary with a recreational trail running through a portion of the Site on the southeastern edge. Outside of the Study Area to the south is the Cobourg Brook, draining into Lake Ontario.

4.2 Vegetation Surveys

The Site consists of six distinct vegetation communities that were assessed and described using the provincial Ecological Land Classification (ELC) system. The *Ecological Land Classification for Southern Ontario: First Approximation and its Application* (Lee et al., 1998) was referenced to classify the habitats to ecosite. ELC polygons for the Site including the surrounding area are shown on Figure 3 in **Appendix A.** A total of 90 plant species were identified on the Site from the three combined vegetation surveys. A full inventory of vascular plant species as observed on the Site is catalogued in **Appendix D.**

4.2.1 Vegetation Communities

Dry–Fresh Manitoba Maple Deciduous Forest (FODM4-5): This forest community begins at Elgin road and continues until approximately halfway through the Site, where the community becomes wetter and contains far more shrub species. It is a relatively young deciduous forest as the species composition and size class of the tress observed suggest an overall age of approximately 30 years. Many of the species in this community are non-native and/or early colonizers in a deciduous forest. The canopy layer is dominated by Manitoba Maple (*Acer negundo*) and Black Walnut (*Juglans nigra*) with occasional Norway Maples (*Acer plantanoides*). The sparse sub-canopy is similar in composition, with European Buckthorn (*Rhamnus cathartica),* Manitoba Maple, and Black Locust (*Robinia pseudoacacia*). The ground layer was dominated by Garlic Mustard (*Alliaria petiolata*) and Dog-strangling Vine (*Vincetoxicum rossicum*), suggesting the presence of common invasive species on the Site. It is noteworthy that this forest has been historically disturbed and naturalized as the footing of old buildings were observed in the middle of the forest.

Fresh–Moist Manitoba Maple Lowland Deciduous Forest (FODM7-7): This forest community begins at the southern edge of the Manitoba Maple Forest described above and ends at the northern edge of the cedar swamp described below. It is also a relatively young deciduous forest, as the species composition and size class of the tress observed suggest an overall age of approximately 30 years. Many of the species in this community are the same non-native and/or early colonizers that are found in the community described above, with scattered wetland indicator species starting to show up in low abundance. The canopy layer is dominated by Manitoba Maple (*Acer negundo*) and Black Walnut (*Juglans nigra*). The sub-canopy is similar in composition, with occasional Green Ash (*Fraxinus pensylvanica*), Alternate Leaved Dogwood (*Cornus alternifolia*), and Black Locust (*Robinia pseudoacacia*).

The most common species in the understory layer is European Buckthorn (*Rhamnus cathartica*), followed by Choke Cherry (*Prunus virginiana*) and Green Ash. The ground layer was also dominated by Garlic Mustard (*Alliaria petiolata*) and Dog-strangling Vine (*Vincetoxicum rossicum*).

Forb Mineral Meadow Marsh (MAMM2): On the eastern boundary of the Site, where the deciduous forest meets the coniferous forest, there is a small patch of open meadow adjacent to the YMCA property. This community is dominated by three tall herbaceous species, including Tall Goldenrod (*Solidago altissima*), Himalayan Balsam (*Impatiens balsamifera*), and Spotted Touch-me-not. There are some shrubs present within this community such as Red-osier Dogwood (*Cornus sericea*).

White Cedar Mineral Coniferous Swamp Ecosite (SWCM1-1): This wetland community begins near the southern border of the lowland forest and continues to the southern most boundary of the Site. Like many Eastern White Cedar Swamps, it has relatively low species richness and many large bare spots observed at ground level. Observations of large fallen trees and stumps suggests that this community is slightly older than the deciduous forest to the north with an age of approximately 40-50 years old. The canopy, sub-canopy and understory layers are all dominated by Eastern White Cedar (*Thuja occidentalis*), with some European Buckthorn in the shrub layer. Where standing and fallen dead Ash trees have created some gaps in the forest canopy, allowing more light to reach the forest floor, there is Spotted Touch-me-not (*Impatiens capensis*), Sensitive Fern (*Onoclea sensibilis*), and Bulblet Fern (*Cystopteris bulbifera*).

Recreational Greenlands (CGL_4): A recreational trail runs through the southern portion of the Site, leading to the Cobourg Conservation Area. This community consists of manicured grass that is maintained, with invasive weeds such as Garlic Mustard lining the path side.

Across from the southern portion of the Site within the Study Area, there is a **Deciduous Thicket Swamp (SWT)** with a canopy and sub-canopy mainly of Willows (*Salix* spp.), Green Alder (*Alnus alnobetula*) and Grey Alder (*Alnus incana* subsp. *rugosa*). The understory is mostly Red-osier Dogwood (*Cornus sericea*). The ground layer is mostly comprised of Cinnamon Fern (*Osmundastrum cinnamomeum*), Devil's Beggarticks (*Bidens frondosa*), Giant Goldenrod (*Solidago gigantea*), and Spotted Touch-me-not. The edges of this community contain many introduced species, such as those found in all the other communities. This includes obligate wetland plant species in all layers, and saturated soil with a thick organic layer throughout the area.

Land use adjacent to the natural areas described above include **Low Density Residential (CVR_1)** in the form of two detached homes with associated driveways and yards, **Recreational (CGL_4):** a mowed soccer field and park area, and **Institutional (CVC):** a YMCA facility with associated playgrounds and parking lots.

4.3 Wetland Assessment and Staking

Following the criteria from OWES and ELC, it is unambiguous that the deciduous forest community present on the Site (**FODM7-7**) is an "upland": there are minimal wetland indicator species present; with those wetland species covering much less than 50% of the relative area. Analysis of the deciduous swamp community on the Site (**SWT**) is similarly unambiguous: seven wetland indicator species are present, covering well over 50% of the area. The coniferous forest community (**FOCM4-1**) and the Manitoba Maple community (**FODM7-7**) are between these and thus represents a transitional zone and the upland-wetland boundary should be delineated using information gathered in these communities.

Due to this lack of ground cover species to confirm wetland presence, soil core samples were used to determine if the community was upland or wetland. In total, six soil core samples were done throughout the community, with sampling sites being picked at random. All six of these cores were very similar, with no variation in the horizons present, only in the exact depth of each. The A horizon consisted of approximately 25 cm of organic soils, with the top 1-2 cm was fibric and the remaining 23-24 cm being mesic organic. The B horizon was a fine sand, which had both mottling and gley present right at the top of the layer and was quite damp to the touch. Gley occurs when the oxygen in the soil becomes depleted due to water saturation, resulting in the iron being reduced taking on a blue-grey coloration. This reduced iron is also mobile, and it can re-oxidize, producing reddish, yellow, or orange spotting, which is know as mottling. Both of these features are indicators of wetland presence due to the water table being close to the surface.

On July 4, 2019, the Town of Cobourg, GRCA, land surveyor and Pinchin all met on the Site in order to conduct a wetland boundary staking. The staked wetland boundary by all parties participated and agreed upon on the Site is depicted on Figure 3 in **Appendix A**. The top of bank and stable top of slope were also reviewed on the western side of the Site which are mapped and discussed in a separate Geotechnical Investigation Report (Pinchin, 2019).

4.4 Surface Water and Groundwater

Results from the background review and field assessment indicate that no watercourses or fish habitats were present within the Site. The Cobourg Brook, which drains into Lake Ontario, is located to the southeast of the Site; however, it is located approximately 52 m from the edge of the Site, and over 138 m from the edge of the construction footprint, so no impacts are anticipated as a result of the proposed residential development.

Groundwater was not studied for this report but will be included in a separate Geotechnical Investigation of soils and groundwater for foundations of the proposed building development. Seasonal variations in the water table should be expected, with higher levels occurring during wet weather conditions in the spring and fall and lower levels occurring during dry weather conditions.

4.5 Significant Wildlife Habitat

Significant Wildlife Habitats for migratory birds includes woodlands that have a variety of habitats including wetlands, forest, or grassland, which our Site provides. These areas should also be within 5 km of Lake Ontario, which this Site is. To be designated as Significant Wildlife Habitat, these areas must be >10 ha in size, which is not present on the Site.

Snakes hibernate beneath the frost line in burrows of naturalized or unnaturalized materials such as rock piles, old building foundations, or slopes. The Site contains old building foundations that could be valuable to overwintering snakes in the area. During all three site visits there were no snakes observed, and additionally there are no Species at Risk snakes listed as being present in the Study Area. With these considerations, the old building foundations in the forest as mentioned above can be ruled out as possible Significant Wildlife Habitat.

4.6 Species at Risk

A total of nine Species at Risk were identified as potentially being in the Study Area a result of the background review. They include two plants, one turtle, one butterfly, and five birds. Those species, their listing status, the last observed date, habitat requirements, observations and suitability on the Site are listed in the Species at Risk Screening Table in **Appendix E.**

Based on the background review and the Site visits, it was determined that two species had suitable habitat on the Site. These species included the Butternut (Juglans cinerea) and the Monarch Butterfly (Danaus plexippus). The Site was searched thoroughly and neither of these species were observed during any of the Site visits. This was also confirmed by the Tree Inventory and Preservation Plan for the absence of Butternut (Richardson Tree Care, 2021). In addition, no other Species at Risk or regionally rare or sensitive species were observed during any the Site visits.

4.7 Incidental Wildlife Observation

Incidental wildlife species as observed during the various Site visits include Eastern Grey Squirrels (*Sciurus carolinensis*), Eastern Cottontail (*Sylyilagus floridanus*), Red-winged Black Birds (*Agelaius phoeniceus*), Blue Jays (*Cyanocitta cristata*), American Robins (*Turdus migratorius*) and Common Eastern Bumble Bee (*Bombus impatiens*).

All these species are common and adapted to urban environments in this part of the region.

4.8 Natural Heritage System and Ecological Connectivity

The Site is in an urban area, surrounded by housing developments and urban centres. The Site is located adjacent to the Cobourg Brook, and south of the Cobourg Northwest Complex PSW, and adjacent to the Cobourg Conservation Area to the west. The Site is disconnected from the PSW by Elgin Road, more than 30 m away from our Site. It is likely that the woodland on the Site provides a stepping-stone for wildlife to travel between the two natural features, adding habitat value. However, Elgin Road provides a significant barrier to wildlife that are incapable of flight. The remaining surrounding areas consist of a recreational YMCA facility and a manicured lawn for recreation (e.g. sports fields), providing little habitat value. The Site is a part of the Greenland's System outlined in the Town of Cobourg Official Plan. It is fairly well connected, as Cobourg Brook provides a natural corridor, connecting this area south of the Site and surrounding natural areas to the rest of the Greenland's System. Cobourg Conservation Area is adjacent to the Site, and the Cobourg Brook and the naturalized lands around it are south of the Site. With this in mind, the general area is likely to maintain its ecological integrity and remain well connected to the Greenland's System with minimal impacts occurring from the proposed development.

The natural features on the Site do not appear to have a great amount of value as a public area, given the disturbances present including waste dumping, trail traffic, and noise and vibrations from the nearby road and operating facilities. Efforts at ecological restoration and enhancement including invasive species removal, planting of native species, and possibly installation of noise barriers could elevate the ecological value of the disturbed area.

5.0 PROPOSED DEVELOPMENT

5.1 Development Proposal

The Client proposes to convert the Site consisting of 2 parcels of land into 16 townhomes with backyards and driveways and a 5-storey apartment building complex with 86 units, connected by internal streets and parking lots. A Draft Plan of Subdivision for the proposed development is included in **Appendix F** for reference. A number of indirect and direct impacts have been identified below as a result of the proposed construction of these structures and associated activities.

5.2 Impact Assessment (Direct and Indirect)

5.2.1 Direct Impacts

The proposed development will be entirely contained within the existing footprint of the Site. The wetland on the south of the Site has been staked, with the 15 m and 30 m setbacks also being surveyed on the Site as shown on **Appendix F**. In order for the development to include associated parking with the buildings, development and grading will take place within the 30 m setback but generally stay outside of the 15 m setback. From an ecological perspective, the potential direct impacts from Site construction on the natural features as a result of the proposed residential development on the Site include:

- The removal of trees and shrubs on the northern portion of the Site;
- Stripping of vegetation and topsoil on the northern portion of the Site;
- The displacement of wildlife on the northern portion of the Site;

The Dry-Fresh Manitoba Maple Deciduous Forest (FODM4-5) will be mostly removed to accommodate the proposed development. The townhomes and internal roadways will be directly impacting this community. The proposed development will also impact the Fresh-Moist Manitoba Maple Lowland Deciduous Forest (FODM7-7). A portion of this forest will be preserved to act as a vegetated buffer to the staked wetland; however, development will be occurring within the 30 m setback from the wetland. The parking lot on the Site is planned to be developed within the 15 m setback, with the grading extending to approximately 10 m at the minimum and 38 m at the maximum from the staked wetland boundary, respectively.

The removal of young tree species is focused on Manitoba Maple, Black Walnut, and Norway Maple with some Black Locust and White Cedar (Richardson Tree Care, 2021). The shrub species that will be removed primarily consist of Common Buckthorn, which is an invasive species. A number of individual deciduous trees will be preserved to act as a buffer to the wetland. Following tree and shrub removals, the stripping of vegetation and topsoil will take place within these forested areas on the Site. These forests potentially provide seasonal habitat to birds and other wildlife. The impact to wildlife can be avoided by properly timing the vegetation and topsoil removal. Existing wildlife that inhabit the Site within the footprint of construction will be displaced as a result of Site alteration and construction. These wildlife are mostly common suburban species that could migrate to the adjacent areas or away from the Site to continue their life processes.

5.2.2 Indirect Impacts

The potential indirect impacts to the natural heritage features on the Site include the following:

- Effects on plants and wildlife on the Site by construction noise, dust and vibration;

- Alteration of water quality and flow regime in the adjacent hydrological and aquatic resources including wetland and drainage features from potential construction runoff; and
- Sedimentation of the remaining woodlands and wetlands on the Site by construction activities.

The impact on the forest and wetland communities and their plants and wildlife are limited to the species located within or directly adjacent to the Site, as a result of the contained development within the Site. Further, this indirect impact is not significant as construction will take place during the day and the urban species have adapted to traffic noise as well as human activities in the surrounding areas.

During the construction period, wildlife including birds and mammals that occasionally use the wetlands and parklands adjacent to the Site and wetlands and forest on the Site for foraging and breeding may be disrupted and are likely to abandon the disturbed portions due to indirect impacts of noise and vibration. The wildlife living in the forest communities on the Site will be displaced permanently and are likely to migrate either north to the Cobourg Northwest Wetland Complex, south to the wetlands on the Site, or within the Study Area next to Cobourg Brook. With the application of protective measures to the surrounding natural areas, the wetland ecosystems not directly impacted will continue to perform their landscape and ecological functions.

Stormwater runoff from the construction has potential impacts to the wetland by releasing sediment-laden water to this natural feature. The successful establishment of erosion and sediment control measures may act as a sufficient barrier to protect these adjacent features.

Hydrologic impacts on the Site will be assessed through a separate Servicing and Stormwater Management Report (nEngineering, 2021) for the surface water quantity and quality, while geotechnical/hydrogeological impacts will be evaluated for the soils and groundwater on the Site through a separate Geotechnical Investigation Report (Pinchin, 2019). It is not anticipated that significant hydrological or hydrogeological impacts will take place on the Site as a result of the proposed development.

5.3 Residual and Cumulative Effects Assessment

Residual environmental effects are any permanent, non-mitigable change in an identified valued ecosystem component. As residual environmental effects on the natural environment cannot be completely addressed through mitigation, they are likely to persist following project completion. Residual effects may result in cumulative effects through the interaction between residual effects of the project and those associated with other identified project and/or activities. Due to the short-term, local construction of the development within the Site, the residual effects from the Site construction is projected to be low significance in magnitude, geographic extent, duration and frequency.

With sufficient mitigation measures implemented prior to the construction activities, no cumulative impacts to the natural heritage features are anticipated as a result of the proposed residential development. Recommendations and mitigation and enhancement measures for the potential direct and indirect impacts are detailed in Section 6.0 below.

6.0 RECOMMENDED AVOIDANCE AND MITIGATION MEASURES

Based upon the above impact assessment, there are identified direct and indirect impacts on the natural environment, including woodlands and wetlands present on the Site, and a wetland and watercourse within the Study Area. Mitigation measures relating to the protection of setbacks and buffers during on-site works (such as fencing) must be implemented prior to the commencement of those works. Therefore, exclusion fencing to the sensitive natural features should be established and protected from the proposed residential development.

As a proactive approach to mitigating environmental impacts, the development will be setback from the wetland on the Site. Due to the nature of the development, the setback from the staked wetland will be approximately 15 m in average. Specifically, the parking lot edge is 10 m from the staked wetland boundary at the minimum and is 38 m at the maximum, with an average of over 15 m buffer to the wetland to be protected. Within the exclusion zone established for the wetland, no development activities including Site drilling, digging and installation will occur outside of the exclusion fencing (e.g. siltation fence) on the wetland side of the Site. The wetland on the Site provides a good ecological value for plants and wildlife, and protection from the proposed development is warranted to prevent soil erosion from occurring and sediment-laden water from entering this valuable natural feature during Site construction.

The following recommendations are provided for the protection of the wetlands on and off of the Site prior to construction or Site alteration. Additionally, ecological restoration and enhancement measures have been recommended for the development of the Site for encroaching on the wetland setback. Protection, restoration, and/or enhancement plans must be timely developed and effectively implemented on the Site to ensure that no negative impacts will occur to the wetlands and remaining woodlands post construction.

Tree and vegetation removal:

- The extent of potential tree and vegetation removal within the Site is restricted to the construction footprint as necessary.
- To minimize or avoid impacts to breeding and nesting birds, the removal of vegetation on the Site will be outside of the core breeding period between April 1 and August 31.

- The removal of non-native or invasive plants should be conducted by a Professional Landscaper who is familiar with the procedures of invasive plant control and removal. This specifically includes the removal of Common Buckthorns and Garlic Mustard within the construction footprint and potentially Tartarian Honeysuckle near and in the wetland area, as discussed with the GRCA.
- The movement of weed-infested soil should be limited. Construction vehicles and equipment arriving and leaving the site should be clean of invasive plants and seed.
- A separate Landscape Plan developed (Judith S Wright, 2021) to identify the location of trees removed and preserved on the Site and adjacent to the Site on road right-of-way.

Erosion and sediment control:

- An Erosion and Sediment Control (ESC) Plan with ecological protection measures will need to be developed for the construction on the Site. It is recommended that the site alteration and construction against this ESC Plan will be monitored regularly (i.e. weekly) by a qualified Environmental Monitor and overseen by a certified Inspector of Sediment and Erosion Control.
- Prior to construction and site alteration, adequate ESC measures including a sediment fencing should be established around the Site upgradient from the natural heritage features until the disturbed area is restored upon construction completion. Sufficient buffers to the adjacent natural features through protection zones will be established.
- If required, repair and maintenance of the installed ESC measures are conducted regularly with outcomes monitored by the qualified Environmental Monitor until construction completion.
- Disturbed areas should be stabilized immediately post construction to prevent site erosion and/or sedimentation.

Wildlife and Species at Risk encounter protocol:

- If wildlife are encountered during construction, work should cease immediately and allow the animal to naturally move out of the construction zone. If the animal does not leave the area for a prolonged period of time, please consult with a qualified biologist or Environmental Monitor for possible response or mitigation measures.
- If an animal is injured or deceased or if a Species at Risk is found on the Site, the Ministry of Environment, Conservation and Parks will be contacted for guidance and handling.

Restoration and enhancement measures:

- A Restoration Plan will be developed for the restoration, enhancement, and/or compensation of the woodlands and wetlands on the Site. Appropriate restoration for the replaced or removed trees and shrubs through this restoration plan is utmost important to ensure that no negative impact will occur to the woodlands or wetlands as a result of the construction.
- The wetlands preserved and protected on the Site will be restored and enhanced in its ecological functions through this restoration plan. A combination of planting of trees and shrubs and seeding of grass seeds and flowers will be detailed in zones of planting and seeding. Invasive species management will also occur as mentioned above.

Other supporting studies required:

- Servicing and Stormwater Management Report completed by nEngineering for the surface water quantity and quality on the Site.
- Geotechnical Report completed by Pinchin on soils and groundwater on the Site for the foundations of the apartment building and other residential areas.
- Tree Inventory and Preservation Plan, as well as Landscape Plan, detailing the removal and preservation of trees on private and public properties.

With the above recommendations taken into account and diligently implemented on the Site, no additional adverse negative impacts to the ecological integrity of the Site and the Study Area will result from the proposed residential development.

7.0 CLOSURE

The enclosed Environmental Impact Study report has been prepared to assess the natural heritage features including the terrestrial and aquatic conditions on the Site within the Study Area. The information contained herein as a result of the EIS regarding the proposed residential redevelopment is solely provided to the Client and approval agencies as a reference only.

In the event that clarifications or further information is required by the Client, please do not hesitate to contact the primary Pinchin contact indicated in the contact page of this document.

8.0 REFERENCES

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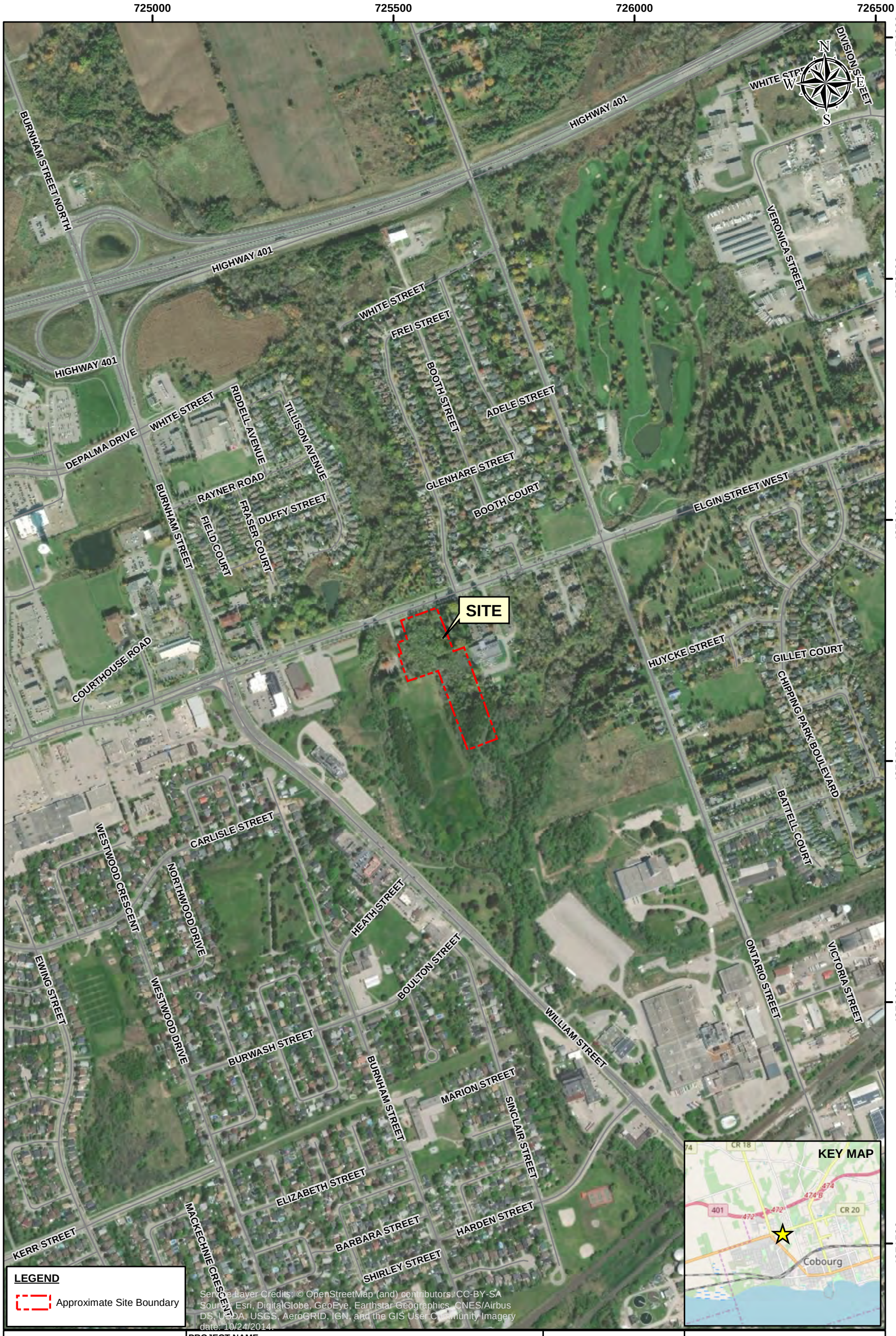
9.0 LIMITATIONS

This work was performed subject to the Terms and Limitations presented or referenced in the proposal for this project. Information provided by Pinchin is intended for Client and approval agencies use only. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law. Any use by a third party of reports or documents authored by Pinchin or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted. No other warranties are implied or expressed.

APPENDIX A
FIGURES

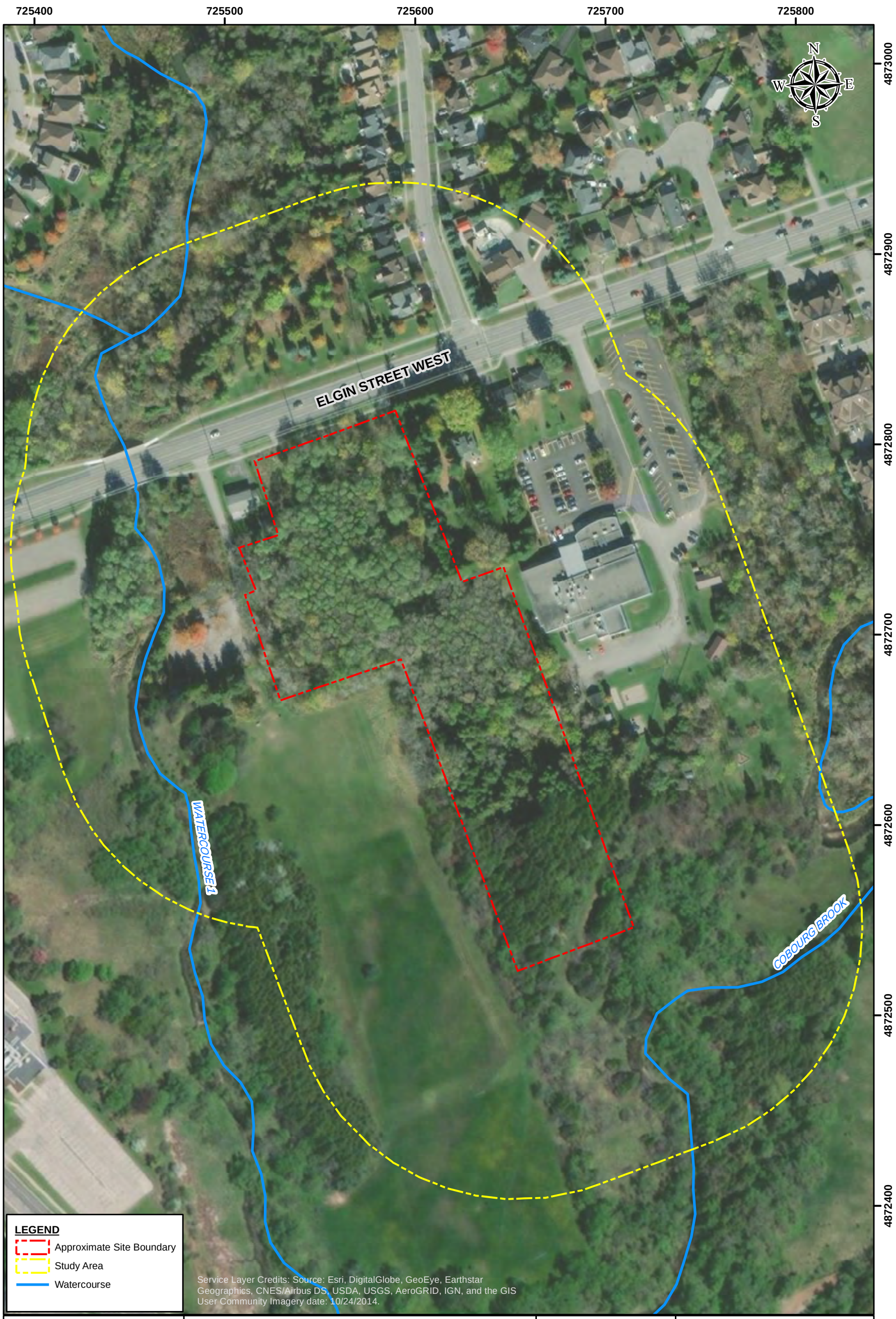


PINCHIN

PROJECT NAME:	SCOPED ENVIRONMENTAL IMPACT STUDY
CLIENT NAME:	359 ELGIN INC.
PROJECT LOCATION:	357-361 ELGIN STREET WEST, COBOURG, ON
FIGURE NAME:	SITE LOCATION
PROJECT NO.	228957.001
DATE:	NOV. 2019
SCALE:	1:2,000
FIGURE NO.	1

0 50 100 200 Metres

Cadastral data adapted from GRCA data and should be considered approximate, April 2019.
Coordinate System:
WGS 1984 UTM Zone 17N
Projection: Transverse Mercator
Datum: WGS 1984



PINCHIN

PROJECT NAME:	SCOPED ENVIRONMENTAL IMPACT STUDY
CLIENT NAME:	359 ELGIN INC.
PROJECT LOCATION:	357-361 ELGIN STREET WEST, COBOURG, ON
FIGURE NAME:	STUDY AREA
PROJECT NO.	228957.001
DATE:	NOV. 2019
SCALE:	1:2,000
FIGURE NO.	2

0 15 30 60 Metres

Cadastral data adapted from GRCA data and should be considered approximate, April 2019.
Coordinate System:
WGS 1984 UTM Zone 17N
Projection: Transverse Mercator
Datum: WGS 1984

725500 725600 725700

4872800 4872700 4872600 4872500

N W E S

ELGIN STREET WEST

FODM4-5

FODM7-7

Staked Wetland Boundary

MAMM2

SWCM1-1

CGL_4

SWT

WATERCOURSE 1

COBOURG BROOK

LEGEND

- Approximate Site Boundary
- Watercourse
- Staked Wetland Boundary

Ecological Land Classification

- Deciduous Thicket Swamp (SWT)
- Dry-Fresh Manitoba Maple Deciduous Forest Type (FODM4-5)
- Forb Mineral Meadow Marsh Ecosite (MAMM2)
- Fresh-Moist Manitoba Maple Deciduous Woodland Ecosite (FODM7-7)
- Recreational Green Lands (CGL_4)
- White Cedar Mineral Coniferous Swamp Ecosite (SWCM1-1)

PINCHIN

PROJECT NAME:	Scoped ENVIRONMENTAL IMPACT STUDY
CLIENT NAME:	359 ELGIN INC.
PROJECT LOCATION:	357-361 ELGIN STREET WEST, COBOURG, ON
FIGURE NAME:	ECOLOGICAL LAND CLASSIFICATION
PROJECT NUMBER:	228957
DATE:	NOV. 2019
SCALE:	1:1,250
FIGURE NO.	3

0 10 20 40 Metres

Cadastral data adapted from GRCA data and should be considered approximate, April 2019.
Coordinate System:
WGS 1984 UTM Zone 17N
Projection: Transverse Mercator
Datum: WGS 1984

APPENDIX B
AGENCY CONSULTATION

Rocky Yao

From: Ken Thajer <kthajer@grca.on.ca>
Sent: Thursday, December 19, 2019 9:24 AM
To: Rocky Yao
Subject: RE: EIS Terms of Reference 357-361 Elgin St W. Cobourg

Follow Up Flag: Follow up
Flag Status: Completed

Hi Rocky,

Our comment was a recommendation only, not a requirement.

With a full evaluation, it will be determined if there are any new features that are not within the PSW that is in close proximity. If the wetland shows some new features, or a special characteristic, it may be considered to add to the PSW.

Let me know if you have any questions.

Regards,

Ken Thajer, MCIP, RPP
Planning and Regulations Coordinator

Ganaraska CONSERVATION

2216 County Road 28
Port Hope, ON L1A 3V8
905.885.8173 x. 245 / 905.885.9824 fax

kthajer@grca.on.ca / www.grca.on.ca

"Clean Water Healthy Lands for Healthy Communities"

From: Rocky Yao [mailto:ryao@Pinchin.com]
Sent: December 13, 2019 6:17 PM
To: Ken Thajer <kthajer@grca.on.ca>; 'Rob Franklin' <rfranklin@cobourg.ca>
Cc: 'Aaron Gold' <agold@plazacorp.com>; Joanne May <jmay@grca.on.ca>
Subject: RE: EIS Terms of Reference 357-361 Elgin St W. Cobourg

Hi Ken,

We appreciate your acceptance of our EIS Terms of Reference for this site.

Could you elaborate a little more on what you are looking for in your recommendation below regarding the OWES evaluation of the wetland to determine the significance of the feature?

Thanks and have a nice weekend,

Rocky Yao, M.Sc, CISEC, EP
Regional Practice Lead, Biologist, Environmental Science
Pinchin Ltd. │T: 905.363.1383 │C: 289.971.7821

From: Ken Thajer <kthajer@grca.on.ca>
Sent: Wednesday, November 20, 2019 10:53 AM
To: Rocky Yao <ryao@Pinchin.com>; 'Rob Franklin' <rfranklin@cobourg.ca>
Cc: 'Aaron Gold' <agold@plazacorp.com>; Joanne May <jmay@grca.on.ca>
Subject: RE: EIS Terms of Reference 357-361 Elgin St W. Cobourg

Re: Terms of Reference for a Scoped Environmental Impact Study
357-361 Elgin Street West
Town of Cobourg

The Ganaraska Region Conservation Authority (GRCA) has reviewed the report titled "Terms of Reference for a Scoped Environmental Impact Study, 357-361 Elgin St W, Cobourg, Ontario, Pinchin File: 228957.001" by Pinchin dated November 15, 2019 and find it acceptable.

GRCA staff recommend that an OWES evaluation of the wetland is completed to determine the significance of the feature.

Should you have any questions, please contact me.

Regards,

Ken Thajer, MCIP, RPP
Planning and Regulations Coordinator

Ganaraska CONSERVATION

2216 County Road 28
Port Hope, ON L1A 3V8
905.885.8173 x. 245 / 905.885.9824 fax

kthajer@grca.on.ca / www.grca.on.ca

"Clean Water Healthy Lands for Healthy Communities"

Rocky Yao

From: Rocky Yao
Sent: Friday, November 15, 2019 2:28 PM
To: Ken Thajer; 'Rob Franklin'
Cc: 'Aaron Gold'
Subject: EIS Terms of Reference 357-361 Elgin St W. Cobourg
Attachments: 0228957 EIS Terms of Reference, 357-361 Elgin St W. Cobourg, ON Nov 15, 2019.pdf

Good afternoon Ken and Rob,

Please find attached the EIS Terms of Reference for the site at 357-361 Elgin Street West, Cobourg for your review.

Feel free to contact me and Aaron if you have any questions or comments.

Thanks and have a nice weekend,

Rocky Yao, M.Sc, CISEC, EP
Regional Practice Lead, Biologist, Environmental Science
Pinchin Ltd. │T: 905.363.1383 │C: 289.971.7821

APPENDIX C
SELECTED SITE PHOTOGRAPHS

Selected Site Photographs

(All Photos Taken on May 23, 2019)

Photo 1 – Interior of Deciduous Forest at the north end of the Site

Photo 2 – Interior of Coniferous Swamp

Photo 3 – Floor of Coniferous Swamp showing large areas of bare soil

Photo 4 – Path between YMCA and play field through the centre of the Site

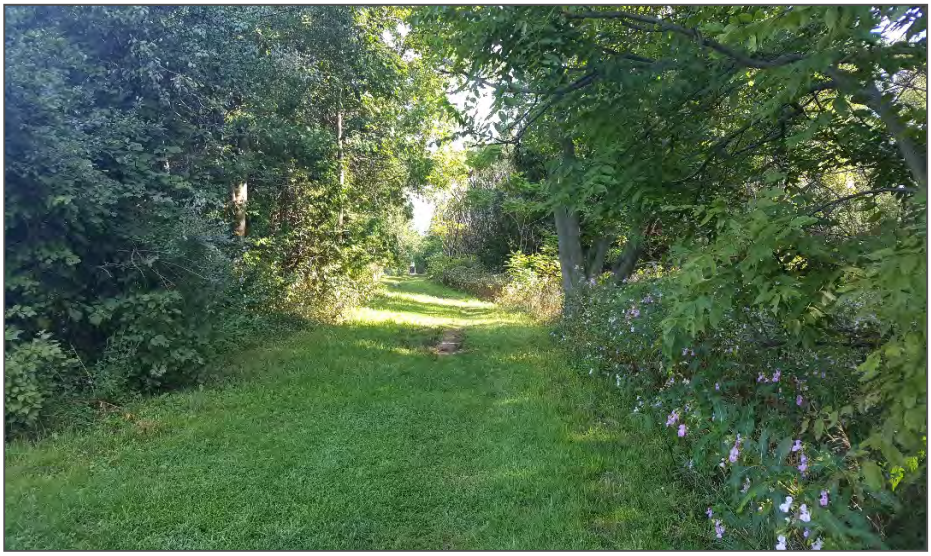


Photo 5 Large mowed path at the south end of the Site between YMCA and playfield

Photo 6 – Discarded wire fencing, an example of refuse dumping on the Site

APPENDIX D
VASCULAR PLANT LIST

Table 1: Vascular Plant List in the Study Area

Scientific Name	Common Name	S-Rank	CC	CW
Acer negundo	Manitoba Maple	S5	0	0
Acer saccharinum	Silver Maple	S5	5	-3
Acer saccharum	Sugar Maple	S5	4	3
Actaea pachypoda	White Baneberry	S5	6	5
Agrimonia gryposepala	Hooked Agrimony	S5	2	3
Allaria petiolata	Garlic Mustard	SNA		0
Alnus alnobetula	Green Alder	S5	8	0
Alnus incana ssp. rugosa	Speckled Alder	S5	6	-3
Ambrosia artemisiifolia	Common Ragweed	S5	0	3
Amphicarpaea bracteata	American Hog-peanut	S5	4	0
Arctium minus	Common Burdock	SNA		3
Arisaema triphyllum	Jack-in-the-pulpit	S5	5	-3
Asarum canadensis	Canada Wild-ginger	S5	6	5
Asclepias syriaca	Common Milkweed	S5	0	5
Athyrium filix-femina	Common Lady Fern	S5	4	0
Bidens frondosa	Devil's Beggarticks	S5	3	-3
Bromus inermis	Smooth Brome	SNA		5
Chelidonium majus	Greater Celandine	SNA		5
Chenopodium album	White Goosefoot	SNA		3
Circaea canadensis	Broad-leaved Enchanter's Nightshade	S5	2	3
Cornus alternifolia	Alternate-leaved Dogwood	S5	6	3
Cornus sericea	Red-osier Dogwood	S5	2	-3
Cystopteris bulbifera	Bulblet Fern	S5	5	-3
Daucus carota	Queen-Anne's Lace	SNA		5
Dryopteris marginalis	Marginal Wood Fern	S5	5	3
Echinocystis lobata	Wild Mock-cucumber	S5	3	-3
Erigeron annuus	Daisy Fleabane	S5	0	3
Erigeron philadelphicus	Common Fleabane	S5	1	-3
Erythronium americanum	Yellow Trout Lily	S5	5	5
Euonymus obovatus	Running Strawberry Bush	S4	6	5
Fraxinus nigra	Black Ash	S3	7	-3
Fraxinus pennsylvanica	Green Ash	S4	3	-3
Galium asprellum	Rough Bedstraw	S5	6	-5
Galium palustre	Marsh Bedstraw	S5	5	-5
Geum aleppicum	Yellow Avens	S5	2	0
Geum canadense	White Avens	S5	3	0
Geum urbanum	Wood Avens	SNA		5
Glechoma hederacea	Ground Ivy	SNA		3
Glyceria striata	Fowl Mannagrass	S5	3	-5
Hesperis matronalis	Dame's Rocket	SNA		3
Impatiens capensis	Spotted Jewelweed	S5	4	-3
Impatiens glandulifera	Purple Jewelweed	SNA		-3
Juglans nigra	Black Walnut	S4	5	3
Leonurus cardiaca	Common Motherwort	SNA		5

Lonicera tatarica	Tartarian Honeysuckle	SNA		3
Lonicera x bella	(Lonicera morrowii X Lonicera tatarica)	SNA		3
Lycopus americanus	Common Water Horehound	S5	4	-5
Lysimachia nummularia	Creeping Jennie	SNA		-3
Maianthemum canadensis	Wild Lily-of-the-valley	S5	5	3
Maianthemum racemosum	Large False Solomon's Seal	S5	4	3
Medeola virginiana	Indian Cucumber Root	S5	8	3
Medicago lupulina	Black Medick	SNA		3
Onoclea sensibilis	Sensitive Fern	S5	4	-3
Osmundastrum cinnamomeum	Cinnamon Fern	S5	7	-3
Parthenocissus quinquefolia	Virginia Creeper	S4?	6	3
Phleum pratense	Timothy	SNA		3
Plantago major	Common Plantain	SNA		3
Plantago rugelii	Rugel's Plantain	S5	1	0
Poa pratensis	Kentucky Bluegrass	S5	0	3
Prunus virginiana	Choke Cherry	S5	2	3
Ranunculus acris	Tall Buttercup	SNA		0
Rhamnus cathartica	Common Buckthorn	SNA		0
Rhus typhina	Staghorn Sumac	S5	1	3
Ribes americanum	Wild Black Currant	S5	4	-3
Robinia pseudoacacia	Black Locust	SNA		3
Rosa multiflora	Multiflora Rose	SNA		3
Rubus allegheniensis	Common Blackberry	S5	2	3
Rubus idaeus	Common Red Raspberry	S5	2	3
Rubus occidentalis	Black Raspberry	S5	2	5
Rumex crispus	Curly Dock	SNA		0
Salix alba	White Willow	SNA		-3
Salix euxina	Crack Willow	SNA		0
Sambucus racemosa	Red Elderberry	S5	5	3
Solidago altissima	Tall Goldenrod	S5	1	3
Solidago canadensis	Canada Goldenrod	S5	1	3
Solidago gigantea	Giant Goldenrod	S5	4	-3
Sorbus americana	American Mountain-ash	S5	8	0
Symphyotrichum lancelatum	Panicled Aster	S5	3	-3
Symphyotrichum puniceum	Swamp Aster	S5	6	-5
Taraxacum officionalis	Common Dandelion	SNA		3
Thuja occidentalis	Eastern White Cedar	S5	4	-3
Trifolium pratense	Red Clover	SNA		3
Trifolium repens	White Clover	SNA		3
Typha x Glauca	(Typha angustifolia X Typha latifolia)	SNA		-5
Ulmus americana	American Elm	S5	3	-3
Urtica dioica	Stinging Nettle	S5	2	0
Verbascum thapsus	Common Mullein	SNA		5
Vicia cracca	Tufted Vetch	SNA		5
Vincetoxicum rossicum	European Swallow-wort	SNA		5
Vitis riparia	River-bank Grape	S5	0	0

APPENDIX E
SPECIES AT RISK SCREENING TABLE

Table 1. Species at Risk Screening for the Study Area

Type	Common Name	Scientific Name	Srank	SARO Status	COSEWIC Status	Last Obs Date	Background Information Source					Notes on Preferred Habitat [1]	Confirmed observation on Site	Suitable Habitat on Site
							NHIC Grid 17LG5565	Atlas of Ontario Mammals (Dobbyn 1994)	Atlas of the Breeding Bird of Ontario (Cadman 2009)	Ontario Reptile and Amphibian Atlas (ON 2018)	Ontario Butterfly Atlas (Macnaight on 2018)			
PLANT	Eastern Prairie Fringed Orchid	*Platanthera leucophaea*	S2	END	END	1910	◆					Fens, wet meadows, marshes and prairies, roadside ditches, railroad rights-of-way	No	No. There are wetlands on Site but they are heavily wooded and do not provide the right conditions for this species.
	Butternut	*Juglans cinerea*	S2	END	END	1994-2018	◆					Rich, moist, well-drained soils found along streams. Well-drained gravel sites, especially limestone. Dry rock and sterile soils. Generally alone or in small groups in deciduous forests or in hedgerows.	No	Yes, there is potential habitat on the Site for this species due to the stream being close by. The Site was searched thoroughly and there was no indiviuals found.
TURTLE	Snapping Turtle	*Chelydra serpentina*	S3	SC	SC	2009-2017	◆		◆			Large water bodies smaller ponds. Nests on gravelly slopes in June and hatch August/September.	No	No. The wetlands on Site do not contain standing water and therefore do not provide habitat for this species.
INSECT	Monarch Butterfly	*Danaus plexippus*	S2N, S4B	SC	END	2007-2017	◆			◆		Wherever milkweed and wildflowers exist: abandoned farmland; along roadsides and other open spaces. Migrate south In late-Sept/Oct.	No	Yes, there are areas on the Site containing wildflowres and milkweed that this species could utilize. The amount of habitat on the Site is too small to be deemed significant.
BIRD	Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	2004	◆	◆				Large, open grasslands with dense groundcover; hayfields; meadows or fallow fields; marshes; requires tracts of grassland >50 ha.	No	No, there is no open grasslands on the Site that this species could use as habitat.

Type	Common Name	Scientific Name	Srank	SARO Status	COSEWIC Status	Last Obs Date	Background Information Source					Notes on Preferred Habitat [1]	Confirmed observation on Site	Suitable Habitat on Site
							NHIC Grid 17LG5565	Atlas of Ontario Mammals (Dobbyn 1994)	Atlas of the Breeding Bird of Ontario (Cadman 2009)	Ontario Reptile and Amphibian Atlas (ON 2018)	Ontario Butterfly Atlas (Macnaight on 2018)			
BIRD	Eastern Meadowlark	*Sturnella magna*	S4B	THR	THR	2004	◆	◆				Pastures, hayfields, farmland and other fields and weedy borders of croplands, roadsides, orchards or shrubby overgrown fields with adjacent grassy area >10 ha. Use small trees, shrubs or fence posts for song perches.	No	No, there is no overgrown fields or other sutiable habitat on the Site for this species.
	Northern Bobwhite	*Colinus virginanus*	S1	END	END	1855	◆	◆				Savannahs, grasslands, abondoned fields or along bushy fencerows with woody cover; cropland; pond edges.	No	No, there is no grasslands that this species could utilize on the Site.
	Least Bittern	*Ixobrychus exillis*	S4B	THR	THR	1956	◆	◆				Seep marshes, wet meadows, swamps, bogs, with dense emergent cattails, bulrushes, sedges. Nests in cattails.	No	No. There are wetlands on the Site but they are heavily treed and do not contain cattails or other emergent vegetation that this species requires.
	Loggerhead Shrike	*Lanius ludovicianus*	S2B	END	END	1977	◆	◆				Grasslands with low trees/shrubs, expecially those with long thorns (Hawthorns etc.) or barbed wire, which they use to impale their prey.	No	No, there are no grasslands or open habitats on the Site that this species could utilize.

SARO — Species at Risk Ontario (O. Reg. 230/08)
COSEWIC — Committee on the Status of Endangered Wildlife in Canada

Definitions

Endangered (END) — Species facing imminent extirpation or extinction
Threatened (THR) — Species likely to become endangered if nothing is done to reverse the factors leading to their extirpation or extinction
Special Concern (SC) — Species that may become threatened or endangered because of a combination of biolodical characteristics and identified threats
Extirpated (EXR) — Species which no longer exist in the wild in Ontario, but exist elsewhere in the world
DD — Data defficient

NHIC Srank (Subnational) Legend

S1 — Critically imperiled, at very high risk of extirpation.
S2 — Imperiled, at high risk of extirpation.
S3 — Vulnerable, at moderate risk of extirpation.
S4 — Apparently secure, at fairly low risk of extirpation.
S5 — Secure, at low or no risk of extirpation.
B — Conservation status refers to breeding population.
N — Conservation status refers to non-breeding population.

References

1 Ministry of Natural Resources (MNR). 2000. Significant Wildlife Habitat Technical Guide. Peterborough: Queen's Printer for Ontario.
2 Government of Canada. 2018. Species at Risk Act: COSEWIC Assessments and Status Reports. Accessed February 2019. https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/cosewic-assessments-status-reports.html.
3 Government of Canada. 2011. Species at Risk Public Registry: A to Z Species Index. Ottawa: Government of Canada. Accessed February 2019. http://sararegistry.gc.ca/sar/index/default_e.cfm.
4 Ministry of the Environment, Conservation and Parks. 2018. Species at Risk in Ontario. Accessed February 2019. https://www.ontario.ca/page/species-risk-ontario#section-3.
5 Butterflies of Ontario. 2019. Red-disked Alpine. Accessed February 2019. http://www.ontariobutterflies.ca/families/nymphalidae/red-disked-alpine.
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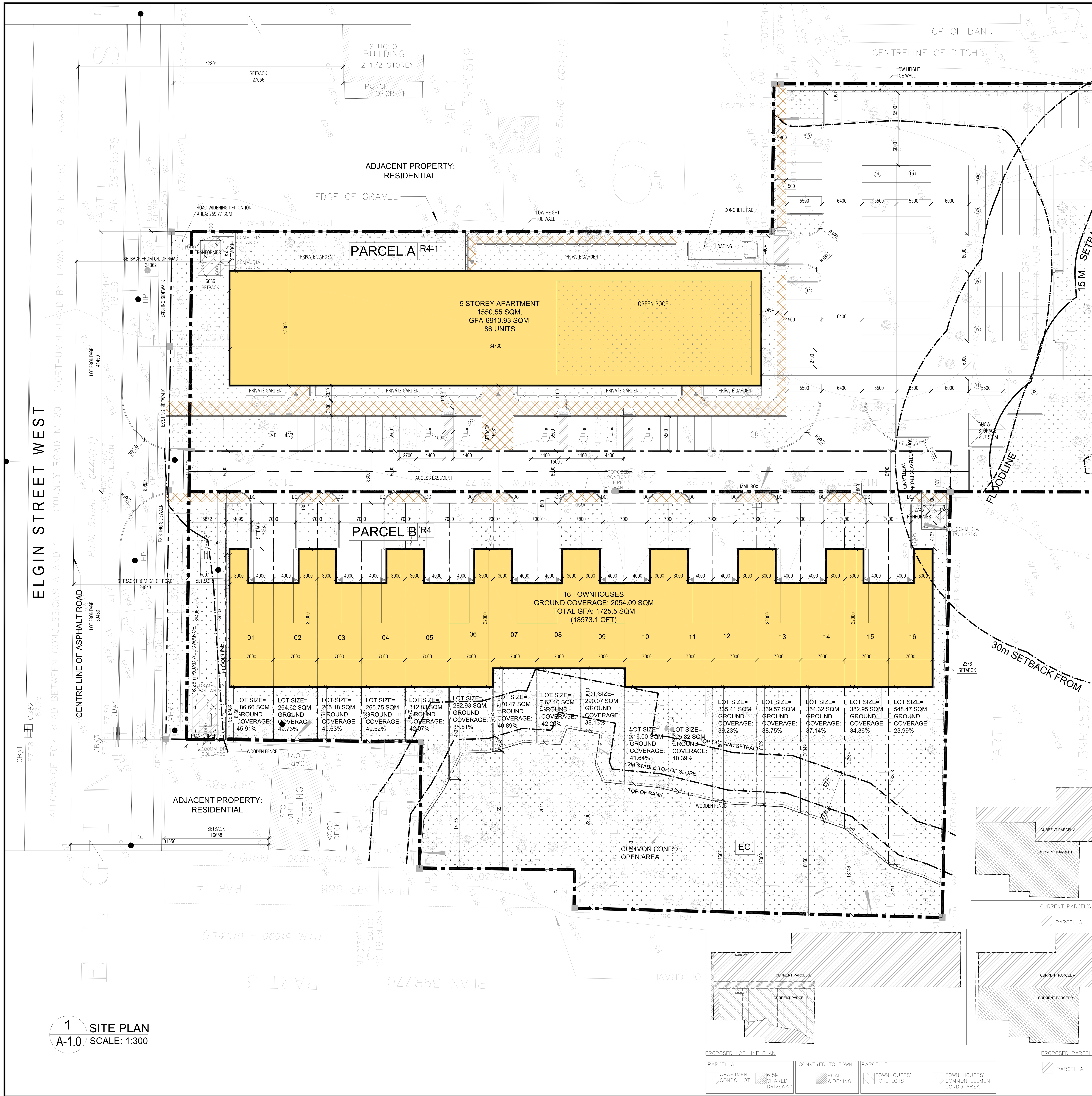
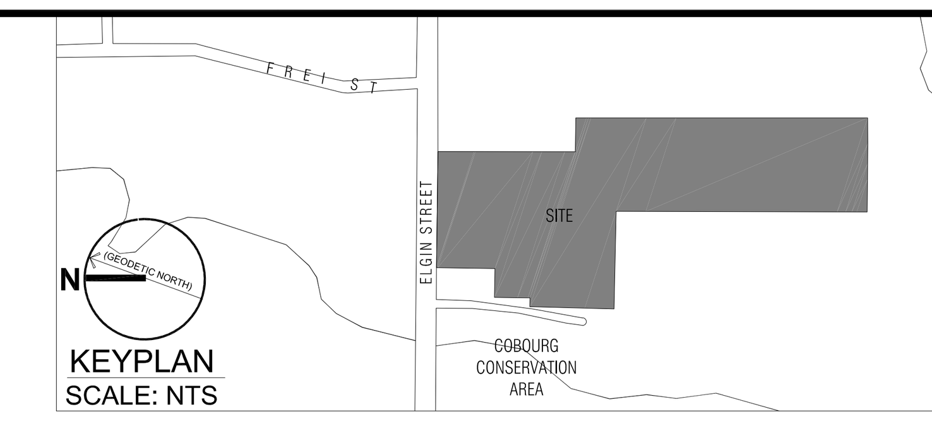
APPENDIX F
PROPOSED DRAFT PLAN OF SUBDIVISION



1 / A-1.0 SITE PLAN
SCALE: 1:300

INDIVIDUAL TOWNHOUSES' POTL LOTS

	LOT AREA	LOT COVERAGE	LANDSCAPED OPEN SPACE
LOT 01=	286.66	45.91%	37.04%
LOT 02=	264.62	49.73%	31.77%
LOT 03=	265.18	49.63%	31.92%
LOT 04=	265.75	49.52%	32.07%
LOT 05=	312.83	42.07%	42.30%
LOT 06=	282.93	46.51%	36.20%
LOT 07=	270.47	40.89%	41.04%
LOT 08=	262.10	42.20%	39.18%
LOT 09=	290.17	38.13%	45.07%
LOT 10=	316.00	41.64%	42.88%
LOT 11=	325.82	40.39%	44.60%
LOT 12=	335.41	39.23%	46.19%
LOT 13=	339.57	38.75%	46.85%
LOT 14=	354.32	37.14%	49.06%
LOT 15=	382.95	34.36%	52.87%
LOT 16=	548.47	23.99%	62.23%



PROJECT STATISTICS PARCEL A (APARTMENT BUILDING)

PROJECT ADDRESS: ELGIN STREET DEVELOPMENT, 357-361 ELGIN STREET WEST COBOURG, ONTARIO

ZONE R4-1	REQUIRED	PROVIDED
TOTAL LOT(SITE) AREA (m^2)		24281.42 SQM. (6.0 ACRE)
ROAD WIDENING DEDUCTION		261.68 SQM
NET LOT(SITE) AREA (m^2)		24019.73 SQM (5.93 ACRE)
NET DENSITY	87 UNITS PER NET HECATRE	86 UNITS
ACCESS EASEMENT AREA (m^2)		788.14 SQM
PARCEL A LOT(SITE) AREA (m^2)		17100.89 SQM. (4.22 ACRE) (1.71 HA)
LOT FRONTAGE	30M MIN.	41.45 M
GROUND COVERAGE	40% MAX.	9.06% (1550.55 SQM)
TOTAL GFA		40.04% (6910.93 SQM)
HEIGHT	5 STOREY MAX.	5 STOREY (15.25M)
LANDSCAPED AREA	35% MIN.	11265.02 SQM (65.87%)
PAVED AREA		385.90 SQM (2.25%)

SETBACK	REQUIRED	PROPOSED
FRONT YARD (NORTH)	15 M	6.08 M
REAR YARD (SOUTH)	7.0 M	205 M
INTERIOR SIDE YARD (WEST)	3.65 M	16.93 M
EXTERIOR SIDE YARD (EAST)	6.0 M	6.21 M

PROJECT STATISTICS PARCEL B (TOWNHOUSES)

PROJECT ADDRESS: ELGIN STREET DEVELOPMENT, 357-361 ELGIN STREET WEST COBOURG, ONTARIO

ZONE R-4	REQUIRED	PROPOSED
TOTAL LOT(SITE) AREA (m^2)		24281.42 SQM. (6.0 ACRE)
ROAD WIDENING DEDUCTION	N/A	261.68 SQM
NET LOT(SITE) AREA (m^2)	N/A	24019.73 SQM (5.93 ACRE)
NET DENSITY	50UNITS PER NET HECATRE	16 UNITS IN .65 HC
ACCESS EASEMENT	N/A	788.14 SQM
PARCEL B LOT(SITE) AREA (m^2)	215 SQM PER UNIT	6917.41 SQM. (1.70 ACRE) (.69 HA)
LOT FRONTAGE	30M	39.4 M
GROUND COVERAGE	40% MAX.	29.69% (2054.09 SQM)
TOTAL GFA		24.94% (1725.5 SQM)
HEIGHT	3 STOREY MAX.	1 STOREY
LANDSCAPED AREA	35% MIN.	3849.28 SQM (55.64%)
PAVED AREA		84.98 SQM (1.22%)

SETBACK	REQUIRED	PROPOSED
FRONT YARD (EAST)	15 M	7.31 M
REAR YARD (WEST)	7.0 M	8.35 M
INTERIOR SIDE YARD (SOUTH)	1.5 M	2.37 M
EXTERIOR SIDE YARD (NORTH)	6.0 M	6.60 M

PARKING CALCULATION	REQUIRED	PROVIDED
TOWNHOUSES (@1.5 PER UNIT)	1.5x16=24	24
APARTMENT (@1.3 PER UNIT)	1.3x86=112	112
TOTAL PARKING (INCLUDING ACCESSIBLE PARKING)	136	136
ACCESSIBLE PARKING SPACE	6	6HC
ELECTRIC VEHICLE CHARGING STATION	–	2

LEGEND	
—·—·—	PROPERTY LINE
	NEW BUILDING
	EXISTING BUILDING
	PAINTED LINES
	LANDSCAPE
	ASPHALT
	CONC. PAVEMENT, 150MM RAISED
	ACCESSIBLE PARKING
CB	EXISTING CATCH BASIN
MH	EXISTING MAN HOLE
HP	EXISTING HYDRO POLE
	CURB RAMP
	OVERHEAD DOOR
	MAN DOOR
S	ACCESSIBLE PARKING SIGN
DC	DEPRESSED CURB
	WOODEN FENCE
	FIRE HYDRANT
EV	ELECTRIC VEHICLE CHARGING STATION

PROPOSED LIGHTING

LEGAL DESCRIPTION AND MUNICIPAL ADDRESS:
357-361 ELGIN STREET, COBOURG, ON.
TOPOGRAPHIC PLAN OF SURVEY OF PART OF LOT 19, CONCESSION A AND
PART OF LOT 20, CONCESSION A (FORMERLY IN THE TOWNSHIP OF HAMILTON)
TOWN OF COBURG
COUNTY OF NORTHUMBERLAND

APPLICANT:
n Architecture Inc
9120 LESLIE STREET, SUITE-208,RICHMOND HILL, ONTARIO, L4B 3J9
T: 416.303.4821
E: Info@narchitecture.com
www.narchitecture.com

OWNER INFO:
KING AND BROOK INC.
10 WANLESS AVENUE, SUITE 201, TORONTO, ON M4N1V6
T. 416.481.2222 x 253
F. 647.789.5189
E. agold@plazacorp.com

SURVEY INFORMATION:
ELLIOTT AND PARR LTD.
211 SHERBROOKE ST
PETERBOROUGH, ON K9J 2N2
T: (705) 745-8444
F: (705) 745-5314
E: www.jdbarnes.com

n Architecture Inc
PRINCIPAL: NITIN MALHOTRA, ARCHITECT.
9120 Leslie Street, Suite-208
Richmond Hill, Ontario. L4B 3J9
T: 416.303.4821
E: info@narchitecture.com
www.narchitecture.com

ONTARIO ASSOCIATION OF ARCHITECTS
NITIN MALHOTRA
LICENCE 6211
MAY 3, 2021

PROJECT NORTH

03RD MAY 2021
ISSUED FOR SPA 1
NOT FOR CONSTRUCTION

No.	Date	Version	Dwn.
1.	MAY 3, 2021	ISSUED FOR SPA 1	MG

PROJECT:

ELGIN STREET DEVELOPMENT 357-361 ELGIN STREET WEST COBOURG, ONTARIO

DRAWING TITLE:

SITE PLAN

DRAWN BY: MG | DATE: MAY 1 2020
CHECKED BY: NM | SCALE: AS NOTED
PROJECT NO.: 20-25 | DRAWING NO.: A-1.0