



Scoped Environmental Impact Study

100 Stokes Trail
Town of Milton (Campbellville)
Amended February 2024



RIVERSTONE

ENVIRONMENTAL SOLUTIONS INC.

February 24, 2024
RS#2021-323

Claudio Brutto
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Via email: cbrutto@bruttoconsulting.ca

SUBJECT: Environmental Impact Study-Screening, Stokes Trail, Milton, ON

Dear Mr. Brutto,

RiverStone Environmental Solutions Inc. is pleased to provide you with the attached report.

Please contact us if there are any questions regarding the report, or if further information is required.

Best regards,

RiverStone Environmental Solutions Inc.

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Senior Ecologist / Principal

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1 BACKGROUND

RiverStone Environmental Solutions Inc. (hereafter, “RiverStone”) was retained to complete a scoped Environmental Impact Study (EIS) as part of an application to allow an existing recreational amenity feature (concrete sport pad) on a property described as 100 Stokes Trail, Town of Milton (hereafter, “subject property”; **Figure 1**). The subject property measures approximately 0.35 ha and contains an existing dwelling structure and associated amenities, including a pool, storage areas, gardens, general manicured space (*i.e.*, grass lawn), and the aforementioned sport pad. It is our understanding that the owner of the subject property (the ‘proponent’) is seeking permission to allow for retention of the sports pad in its existing location.

The subject property is located within the planning area of the Greenbelt Plan, with applicable designations including the Protected Countryside and Natural Heritage System (NHS). Interactive mapping for the Town’s Comprehensive Zoning By-law 144-2003 (consolidated to 2019) shows that zoning on the subject property is a combination of Village Residential (RV) and Greenlands ‘B’ (GB). The GB zone appears to have been delineated to reflect the limit of the Greenbelt NHS designation discussed above (see **Figure 1**). As per Schedule A to the Town of Milton Official Plan (OP; 2018), the subject property is located within the Hamlet designation associated with the settlement area of Campbellville. Portions of the Campbellville settlement area contain areas identified as Natural Heritage System (NHS), while Schedule M further identifies the subject property and/or adjacent lands as containing ‘NHS Key Features’. The subject property is also located within the watershed-based regulatory jurisdiction of the Halton Region Conservation Authority (HRCA); however, it is not contained within an area regulated under Ontario Regulation 162/06 of the *Conservation Authorities Act*.

As noted, the subject of this EIS is the sport pad that was previously constructed within the amenity space associated with the backyard of the subject property. The location in which the feature was constructed is within the area of the property that is zoned GB, and contained within the Greenbelt NHS. It is our understanding that the feature was constructed without necessary approvals from the Town. It is our further understanding that the proponent is seeking a Zoning Bylaw Amendment to permit retention of the feature in its existing built location. This EIS has been prepared to inform the Town’s review of the application, with consideration for potential impacts to specific natural heritage features and the broader NHS. Given the context of the application, some aspects of our impact assessment are retroactive in nature, providing an assessment of ecological impacts that may have occurred or may be expected to occur as a result of constructing and retaining the sports pad. Where relevant, and based on our review of potential ecological impacts, RiverStone provides recommendations for mitigation to support the goals of both the applicant and the Town.

2 APPROACH AND METHODS

The approach and methods used to carry out this study are detailed in this section and include the following:

1. Gathering background biophysical information for the subject property to become familiar with existing natural heritage feature mapping and records of features and species of conservation interest prior to the site investigation.

2. Conducting an on-site investigation to field-verify the presence or absence of natural heritage features (as feasible) identified during background information gathering, and to identify any additional significant features (if present).
3. Determining whether the development plan has resulted in adverse impacts to natural heritage features, and to identify ways in which such impacts can be mitigated via avoidance, minimization, and/or compensation measures.
4. Providing an assessment of consistency and conformity of the proposed development plan with applicable municipal, provincial, and federal environmental policies.

2.1 Background Information Review

Background biophysical information pertaining to the study area was collected from a variety of sources. These include:

- **Halton Region Official Plan (2022 Consolidation)**
- **Town of Milton Official Plan (2018)**
- **Greenbelt Plan (2017) & Technical Guidance Documents**
- **Ministry of Natural Resources and Forestry (MNR) Natural Heritage Areas and Natural Heritage Information Centre (NHIC)** database regarding information on occurrences of SAR and provincially tracked species (squares: 17NJ8114, 17NJ8115); accessed Jan 17, 2022, at:
http://www.gisoeapp.lrc.gov.on.ca/Mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US.
- **Species at Risk (SAR) range maps** (accessed Jan 2022 at: <http://www.ontario.ca/environment-and-energy/species-risk-ontario-list>).
- **Ontario Breeding Bird Atlas (OBBA) database and the Atlas of the Breeding Birds of Ontario, 2001–2005** (Cadman et al. 2007) (accessed at: <http://www.birdsontario.org/atlas/squareinfo.jsp>).
- **Ontario Reptile and Amphibian Atlas** (accessed at: http://www.ontarioinsects.org/herpatlas/herp_online.html).
- **Atlas of the Mammals of Ontario** (Dobbyn 1994).
- **Current and historical aerial photographs.**

2.2 Site Investigation

The results of the background review outlined in **Section 2.1** informed the scoping of a single on-site investigation carried out by a RiverStone Ecologist (Jan 12, 2022). The site investigation was focused on characterizing and delineating natural heritage features that are considered relevant under the policy context, including significant woodlands, significant wildlife habitat, and potential habitat for threatened or endangered species. Overall, the on-site data collection effort was considered appropriate given the location and scale of the proposed development plan. In general, discrete feature boundaries were delineated with a high-accuracy GPS receiver capable of 2 m accuracy, and all relevant features were photographed and catalogued for inclusion in this report (**Appendix 1**). Existing conditions, as characterized through our on-site assessment, are described in **Section 3**.

2.2.1 *Habitat-based Wildlife Assessment*

RiverStone's primary approach to site assessment is habitat-based. We first focus on evaluating the potential for significant features and species within an area of interest, prior to undertaking any targeted assessments or surveys. An area is considered potential habitat if it satisfies several criteria, usually specific to a species, but occasionally characteristic of a broader group (*e.g.*, several species of turtles use sandy shorelines for nesting, several species of bats use cavity trees as day roosts and maternity sites, etc.).

Physical attributes of a site that can be used to assess habitat function include structural characteristics (*e.g.*, age and composition of forest canopy, water depth), ecological community (*e.g.*, meadow marsh, rock barren, coldwater stream), and structural connectivity to other habitat features required by a species of interest or indicator species. Species-specific habitat preferences and/or affinities are determined from status reports produced by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), Cadman et al. (2007), unpublished documents, and direct experience.

Where appropriate, RiverStone explores further species-specific assessments in accordance with applicable standard methods and protocols. Targeted survey efforts may be undertaken due to one or more triggers, such as a specific request from an approval authority, an existing record for a species of interest, or a limitation to a habitat-based assessment. In consideration of the scale and context of this development application, targeted survey methodologies were not considered necessary to appropriately characterize habitat features on and adjacent to the subject property.

2.2.2 *Topography, Surficial Geology, & Drainage*

The geophysical setting of the subject property was determined using topographic mapping, soils mapping, aerial photography, and descriptions gathered through on-site investigations. Drainage features (where present) are identified through the review of background mapping resources and/or delineated in the field.

2.2.3 *Vegetation Communities*

Vegetation communities on the subject property were delineated according to Ecological Land Classification (ELC) community tables (Lee et al. 1998). Vegetation communities were delineated via aerial photo interpretation and subsequently confirmed and refined in the field. Wetland boundaries (where present) were delineated in accordance with the "50% wetland vegetation rule" as directed by the Ontario Wetland Evaluation System (OWES).

2.3 Key Natural Heritage Feature Assessment

Provincial and local planning policies employ varying terms for natural heritage features and designations that have recognized 'statuses' within the relevant planning jurisdiction. Being within the planning area for Ontario's Greenbelt Plan, the terminology used in this report is consistent with the Greenbelt Plan, including reference to relevant features as 'key natural heritage features' (KNHF) and 'key hydrologic features' (KHF). RiverStone conducted a review of the background information sources identified in **Section 2.1** to determine if KNHF/KHF have been identified in association with the subject property by the province and/or local planning authority. KNHF/KHF recognized under the Greenbelt include the following:

- Permanent & intermittent streams

- Lakes (and their littoral zones)
- Seepage areas and springs
- Wetlands (including provincially significant wetlands)
- Fish habitat
- Sand barrens, savannahs, tallgrass prairies, and alvars.
- Areas of natural and scientific interest (life science)
- Significant valleylands
- Significant woodlands
- Habitat of endangered and threatened species
- Significant wildlife habitat (includes habitat for rare and special concern species)

RiverStone assesses the potential presence of each of the above KNHF/KHF in accordance with applicable technical guidance documents, including the following:

- *Halton Region Official Plan (2022 Consolidation)*
- *Greenbelt Technical Paper 1 – Technical Definitions and Criteria for Key Natural Heritage Features in the Natural Heritage System of the Protected Countryside (2005; updated by NDMNRF as of 2012)*
- *Natural Heritage Reference Manual (NHRM) for the Natural Heritage Policies of the Provincial Policy Statement (NDMNRF 2010)*
- *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (NDMNRF 2015).*

The potential presence/absence of relevant species of conservation interest, such as endangered and threatened species, are assessed using a combination of the background information review outlined in **Section 2.1** and the habitat-based approach outlined in **Section 2.2.1**. Our assessment of KNHF/KHF is provided in **Section 4** of this report.

2.4 Impact and Mitigation Assessment

To carry out a defensible assessment of potential development impacts, RiverStone employs the following approach:

1. *Predict* impacts to identified natural heritage features within the study area based on the proposed development plan (from construction to post-completion), including both direct (*e.g.*, vegetation clearance) and indirect (*e.g.*, light pollution, encroachment post-development) impacts.
2. *Evaluate the significance* of predicted impacts to identified natural heritage features based on their spatial extent, magnitude, timing, frequency, and duration.
3. *Assess the probability or likelihood* that the predicted impacts will occur at the level of significance expected (*e.g.*, high, medium, low probability).

In instances where the potential for negative impacts to natural heritage features exists, mitigation measures are offered to avoid, minimize, and/or compensate for such impacts. RiverStone’s natural heritage impact assessment and recommended mitigation measures are provided in **Section 5**.

2.5 Assessment of Conformance with Applicable Environmental Policies

There are several environmental policies (*e.g.*, statutes, regulations, plans, guidance documents, etc.) that may apply to the study area and proposed development, which are listed below. A general assessment of the proposed development’s consistency and conformity with these environmental policies is offered in **Section 6**.

- Halton Region Official Plan (2022)
- Town of Milton Official Plan (2018)
- Greenbelt Plan (2017)
- Provincial Policy Statement, 2020, pursuant to the *Planning Act*, R.S.O. 1990, c. P.13
- Provincial *Endangered Species Act*, S.O. 2007, c. 6
- Federal *Migratory Birds Convention Act*, S.C. 1994, c. 22

3 EXISTING CONDITIONS

3.1 General Site Conditions and Land-uses

The subject property is part of a collection of ‘estate’ lots located within a typical residential subdivision in the settlement area of Campbellville. The property contains an existing dwelling, accessed by a private driveway fronting onto Stokes Trail. Surrounding the dwelling is a typical mix of amenity space, including low landscaping trees, grassed lawn, a pool/patio, and chain-link fencing along the sides and rear of the lot. Natural vegetation cover is absent within the subject property; however, a woodland community is present immediately adjacent to the rear lot boundary. Representative photos of existing site conditions are contained in **Appendix 1**.

3.2 Topography, Physiography, & Drainage

Being proximate to the Niagara Escarpment corridor, the broader landscape contains substantial variation in topography; however, the subject property contains no major slopes, valleys, or landform features. On the contrary, topography across the subject property is relatively flat, being located on a small plateau within the local landscape. The Ontario Soil Survey classifies soils within the area of the subject property as a loam, part of the Burford series. Burford loams are described as deep and well draining and are prevalent on the local landscape. No surface drainage features were identified on the subject property through our background review or on-site investigation.

3.3 Vegetation Communities

Existing vegetation cover within and adjacent to the subject property was assessed during the on-site investigation. A desktop exercise was undertaken to map vegetation community boundaries using background information sources and current aerial photographs; the mapped vegetation communities were then ground-truthed to a high level and refined where necessary during the site investigation. Vegetation community mapping in accordance with Lee et al (1998) is provided on **Figure 2**. The entirety of the subject property is described as Anthropogenic (ANTH), being composed of

manicured/landscaped (anthropogenic) areas and features only. A single vegetation community was identified on adjacent lands, described below.

3.3.1 FOD5-1: Dry – Fresh Sugar Maple Deciduous Forest Type

This community occurs immediately adjacent to the rear lot line of the subject property. The canopy is composed almost entirely of Sugar Maple (*Acer saccharum*), with minor noted associates of Eastern Hop-hornbeam (*Ostrya virginiana*) and Bitternut Hickory (*Carya cordiformis*). Sugar Maple remains dominant in lower strata as well, with Eastern Hop-hornbeam and American Beech (*Fagus grandifolia*) being common associates. A thorough groundcover assessment was not feasible due to seasonal limitations at the time of survey (*i.e.*, snow cover). No prominent cavity trees were observed through our scoped survey (undertaken from the property line) that may indicate the presence of associated significant wildlife habitat functions. Similarly, the floor of the woodland appeared to contain minimal deadfall or depressions that may support unique microhabitats, such as salamander cover or breeding pools. It was noted that several trees within the woodland are equipped with a network of plastic tubing, presumably for the purpose of maple syrup production. Given the prevalence of Sugar Maple and the presence of this equipment, it is possible that the woodland is actively groomed to facilitate use as a ‘sugarbush. These activities typically cause disturbance to forest floor and may decrease the likelihood that rare or otherwise conservative plant species occur within the woodland.

4 KEY NATURAL HERITAGE/HYDROLOGIC FEATURE ASSESSMENT

Based on the biophysical information collected during background information gathering and the results of RiverStone’s on-site investigation, the following sections discuss the KNHF/KHF that are present (or potentially present) within the subject properties or adjacent lands, and which are considered applicable under the policy context. RiverStone’s rationale for identifying such features is provided accordingly. Mapping of identified feature limits is depicted on **Figure 2**.

4.1 Permanent & Intermittent Streams

No drainage features were identified on the subject property or adjacent lands during RiverStone’s on-site assessment. As per our review of background information sources, the nearest mapped drainage feature occurs >120 m from the subject property. No further assessment undertaken.

4.2 Lakes (and Littoral Zones)

No lakes were identified on the subject property or adjacent lands during RiverStone’s on-site assessment or background information review. No further assessment undertaken.

4.3 Seepage Areas and Springs

No seeps or springs were identified on the subject property or adjacent lands during RiverStone’s on-site assessment or background information review. Conditions on the subject property and immediately adjacent lands are not conducive to supporting groundwater emergence features. No further assessment undertaken.

4.4 Wetlands

No wetlands were identified on the subject property or adjacent lands during RiverStone's on-site assessment. RiverStone recognizes that the timing of the site visit would not be supportive of a proper wetland assessment; however, it is noted that tree cover and soil conditions on the subject property and directly adjacent lands are clearly not supportive of wetland conditions. According to our background review, the nearest mapped wetland occurs >180 m southwest of the subject property. No further assessment undertaken.

4.5 Fish Habitat

No features with the potential to support fish habitat were identified on the subject property or adjacent lands during RiverStone's on-site assessment or background information review. No further assessment undertaken.

4.6 Sand Barrens, Savannahs, Tallgrass Prairies, and Alvars

No vegetation communities representing sand barrens, savannahs, tallgrass prairies, or alvars were identified on the subject property or adjacent lands during RiverStone's on-site assessment or background information review. No further assessment undertaken.

4.7 Areas of Natural and Scientific Interest (Life Science)

It is the responsibility of the Ministry of Northern Development, Mines, Natural Resources, and Forestry (NDMNR) to designate and administer mapping for areas of natural and scientific interest (ANSIs). Based on available background mapping, the nearest ANSI occurs approximately 2 km north of the subject property. No further assessment undertaken.

4.8 Significant Valleylands

Significant valleylands represent valleys or other landform depressions with recognized significant attributes, such as supporting natural vegetation cover with associated ecological linkages and corridors. Valleylands are typically associated with a watercourse feature. Designation of significant valleylands is ultimately the responsibility of the relevant planning authority; however, site-specific designation of these feature can be undertaken using standardized criteria endorsed by the province and/or the planning authority. In this case, the Town OP does not appear to designate the subject property or adjacent lands as significant valleylands. RiverStone's on-site investigation identified no landform features that may be representative of significant valleylands. No further assessment undertaken.

4.9 Significant Woodlands

Significant woodlands represent areas of forested cover with recognized significant attributes, such as large contiguous blocks of woodland, woodlands with unique characteristics, and/or woodlands that support economic values, cultural values, or other ecosystem services. It is generally the responsibility of the relevant planning authority to designate significant woodland on a comprehensive basis; however, where appropriate, site-specific designation of these features can also be undertaken using standardized criteria endorsed by the province and/or the planning authority.

The following technical guidelines provide support to practitioners in the identification of significant woodland features within the jurisdiction:

- *Policy 277 of the Halton Region Official Plan (2022 Consolidation)*
- *Greenbelt Technical Paper 1 – Technical Definitions and Criteria for Key Natural Heritage Features in the Natural Heritage System of the Protected Countryside (2005; updated by NDMNRF as of 2012)*
- *Natural Heritage Reference Manual (NHRM) for the Natural Heritage Policies of the Provincial Policy Statement (NDMNRF 2010)*

Based on our review, the size of the contiguous woodland feature (~10 ha) exceeds relevant minimum area thresholds prescribed in the above-cited Greenbelt Technical Paper. Likewise, the feature is composed of native, site-appropriate vegetation and has the potential to support habitat functions for native plants and wildlife, potentially including one or more sensitive species. In reference to the criteria outlined in Policy 277 of the Regional OP, the woodland meets at least one of the criteria applied, including minimum size (10 ha) and proximity to a watercourse regulated by the Halton Region Conservation Authority. On this basis, it is assumed that the woodland feature adjacent to the subject property is representative of a significant woodland. The existing limit of this feature, as defined by the outer canopy dripline, was delineated during RiverStone’s on-site investigation (**Figure 2**).

Additional review of aerial imagery suggests that the woodland dripline may have previously extended further onto the subject property; however, aerial interpretation of driplines can be unreliable for several reasons (*e.g.*, shadows, skewed parcel mapping, natural changes in canopies). Therefore, it is unknown if construction of the sport pad involved removal of any trees from within the boundary of the subject property. In general, RiverStone’s review is based on existing conditions at the time of survey; however, our impact assessment includes regard for what impacts may have occurred if trees were previously removed from within the property boundary. Further discussion, including an assessment of potential impacts to this feature resulting from implementation of the development plan, is provided in **Section 5.1**.

4.10 Habitat of Endangered and Threatened Species

To assess the potential presence of individuals and/or habitat for endangered and threatened species within the study area, RiverStone staff conducted a review of the list of species designated as endangered and threatened in Ontario, as per Schedules 2 and 3 of Ontario Regulation 230/08 [(Species at Risk in Ontario List (SARO List)], located here: <https://www.ontario.ca/laws/regulation/080230>. In our experience, the potential presence of most provincially endangered and/or threatened species can be ruled out based on their limited geographical ranges in the province and/or a lack of specific habitat conditions which they require to carry out key life processes. RiverStone further reviews the NHIC database for existing records of element occurrences for endangered or threatened species (data squares 17NJ8114, 17NJ8115). Databases of the OBBA and ORAA are also reviewed. Background information review is followed by on-site investigation, during which vegetation conditions are characterized for further habitat-based assessment.

The species contained within the list below were either identified through our background review or otherwise identified by staff as having the potential to being present within the subject property or adjacent lands. Where the likely or confirmed presence of an individual species and/or its habitat was supported by our field assessment and background review, these species are discussed further in the impact assessment in **Section 5**.

4.10.1 Black Ash (*Fraxinus nigra*)

Black Ash is to be added to the SARO List as of January 27, 2022; however, a minimum two-year moratorium has been established before any species- or habitat-level protections are provided under Regulation 242/08 of the ESA. NHIC's database contains a record of element occurrence for Black Ash for one of the 1 km grid squares associated with the subject property. In general, this species requires wetland habitat conditions to carry out key life processes, and such conditions are absent within the subject property or adjacent lands. No further assessment undertaken.

4.10.2 Bobolink (*Dolichonyx oryzivorus*)

NHIC's database contains a record of element occurrence for Bobolink for one of the 1 km grid squares associated with the subject property. In general, this species requires open grassland-type habitat conditions to carry out key life processes, and such conditions are absent within the subject property or adjacent lands. No further assessment undertaken.

4.10.3 Butternut (*Juglans cinerea*)

Butternut is known to be widespread and frequently encountered on the local landscape, and conditions on the subject property are theoretically suitable to support this tree species. RiverStone staff conducted a review of the subject property, and closely surveyed the edge of the adjacent woodland community; no individual Butternut were documented. No further assessment undertaken.

4.10.4 Eastern Meadowlark (*Sturnella magna*)

NHIC's database contains a record of element occurrence for Eastern Meadowlark for one of the 1 km grid squares associated with the subject property. In general, this species requires open grassland-type habitat conditions to carry out key life processes, and such conditions are absent within the subject property or adjacent lands. No further assessment undertaken.

4.10.5 Endangered Bat Species (*Myotis lucifugus*, *Myotis septentrionalis*, *Perimyotis subflavus*)

These species, assessed as a species guild (related species with similar habitat characteristics), include several bat species listed as endangered in Ontario. Bats are highly mobile; however, individuals and groups of the noted bat species are also recognized as having some degree of fidelity to suitable local sites for daily and seasonal 'roosting' activities. While some species (*i.e.*, *Myotis lucifugus*) exhibit a preference for roosting in anthropogenic structures, natural roosting sites are also important. Natural roosting sites are generally associated with mature forests containing a sufficient density of large trees in various stages of decay, otherwise known as 'snags'. Snags provide features such as cavities and/or loose bark, on which bats rely for shelter and thermoregulation throughout the active season.

Current direction from MECP prescribes that targeted surveys of treed habitats/snags for endangered bat species are not necessary if a project would involve removal of only a small number of potential maternity or day roost trees in treed habitats (or none at all). This approach assumes that other appropriate mitigation measures (*i.e.*, timing windows) are employed to avoid impacts to individuals of endangered bat species (MECP 2021). Notwithstanding, during our on-site investigation, RiverStone staff conducted a general qualitative assessment of potential bat habitat. Trees within the area of woodland directly adjacent to the subject property appeared to be in generally good health, with no prominent concentrations or clusters of dead trees or trees with obvious cavity features. Regardless of this assessment, it is not possible to rule out the potential for individuals of endangered bat species (or

other bat species) to be present during the active season. Further discussion, including an assessment of potential impacts to individuals of endangered bat species resulting from implementation of the proposed development plan, is provided in **Section 5.2**

4.10.6 Unisexual *Ambystoma* (Jefferson Salamander dependent population; *Ambystoma* pop. 1)

NHIC's database contains a record of element occurrence of Unisexual *Ambystoma* for the 1 km grid squares associated with the subject property. This is a hybrid containing substantial genetic material derived from the endangered species, Jefferson Salamander (*Ambystoma jeffersonianum*). Jefferson's Salamander (and associated hybrids) are generally dependent on moist deciduous forests and wetlands with vernal pools to carry out their lifecycles. The developed and manicured conditions within the subject property and associated residential subdivision are not suitable as direct habitat for Jefferson's Salamander (or hybrids); however, the woodland feature (FOD5-1) on adjacent lands requires assessment to determine habitat suitability. RiverStone's site visit was not undertaken at a time of year when this species would not be detectable. Therefore, a habitat-based assessment is provided based on available information.

Based on RiverStone's on-site assessment, the area of FOD5-1 directly adjacent to the subject property appears to lack the micro-topographical conditions that would be required to support vernal pooling. Our review of background soil information also indicates that soils within the FOD5-1 community are well-draining and not conducive to supporting seasonal standing water. These assessments are further supported by review of spring-shot aerial photos, which show no indication or visual signatures of vernal pooling features within the forested area adjacent to the subject property. It is also noted that Stokes Trail and the associated subdivision represent a major barrier to seasonal movements and migrations of Jefferson's Salamander. Based on the above, there is no expectation that the area of FOD5-1 adjacent to the subject property is supporting functional habitat for this species. Additionally, there is no expectation that the subject property would be situated in a location where Jefferson's Salamander would undertake seasonal migrations. Jefferson's Salamander are undoubtedly present on the local landscape; however, the subject property does not represent suitable habitat and directly adjacent lands are also unlikely to support functional habitat for this species. No further assessment undertaken.

4.11 Significant Wildlife Habitat

SWH represents a range of habitat features that are recognized as providing specialized or otherwise important functions for various forms of wildlife. Designation of confirmed SWH is ultimately the responsibility of the relevant planning authority, and it is our understanding that no specific SWH designations have been applied to the subject property or adjacent lands. Notwithstanding, it is recognized that SWH features and functions are generally impractical to identify and designate on a broad scale and can require review on a site-specific basis. Therefore, RiverStone has reviewed applicable technical guidance on the identification of specific SWH features and functions as contained in the SWH Criteria Schedules for Ecoregion 6E (MNRF 2015). A preliminary assessment of the criteria schedules is provided in **Appendix 2**, and SWH features that have been confirmed or have the potential to occur within the subject property were identified as follows:

4.11.1 *Raptor Wintering Area*

As outlined in the SWH Criteria Schedules for Ecoregion 6E (MNRF 2015), raptor wintering areas depend on the following characteristics:

- The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors.
- Raptor wintering sites (hawk/owl) need to be >20 ha with a combination of forest and upland.
- Least disturbed sites are preferred, including idle/fallow or lightly grazed field/meadows (>15ha) with adjacent woodlands.
- Field area of the habitat is to be wind swept with limited snow depth or accumulation.

The woodland feature adjacent to the subject property may contribute to a broader area that supports the above-listed characteristics. However, the key element of this habitat function is the combination/adjacency of woodlands and open areas (fields, meadows, etc.), with emphasis on the woodland edge adjacent to the open area. While it is possible that the woodland feature adjacent to the subject property contributes to this habitat function, it is expected that this is limited to the south edge of woodland which borders a field, and not the woodland edge adjacent to a residential subdivision. There is no expectation that the subject property, or the woodland edge adjacent to the subject property, is supporting this habitat function. No further assessment undertaken.

4.11.2 *Bat Maternity Colonies*

Refer to **Section 4.10.5** pertaining to endangered bat species for applicable discussion.

4.11.3 *Special Concern and Rare Wildlife Species*

RiverStone staff have conducted a review of the list of species designated as special concern in Ontario, as per Schedule 4 of Ontario Regulation 230/08, located here: <https://www.ontario.ca/laws/regulation/080230>. Through a review of background and on-site information, as well as application of staff knowledge and experience, RiverStone noted the following special concern and/or rare wildlife species as being potentially present within the subject property:

4.11.3.1 Eastern Green Violet (*Hybanthus concolor*; S2)

NHIC's database contains a record of element occurrence for Eastern Green Violet for one of the 1 km grid squares that overlap the subject property (data square 17NJ8115). This species is abundant in rich deciduous forests within Halton Region, and particularly in moist, calcareous soils associated within the Niagara Escarpment corridor. The woodland feature adjacent to the subject property may support populations of Eastern Green Violet. Based on staff experience, conditions within this community are assumed to be sub-optimal for this species; however, timing of RiverStone's survey was not suitable to firmly conclude its absence. An assessment of potential impacts to this species associated with implementation of the proposed development plan (should it be present) is provided in **Section 5.3**.

4.11.3.2 Eastern Wood-pewee (*Contopus virens*; Special Concern)

Conditions within the woodland feature adjacent to the subject property offer potentially suitable habitat for this species. An assessment of potential impacts to this species associated with implementation of the proposed development plan is provided in **Section 5.3**.

4.11.3.3 Golden-winged Warbler (*Vermivora chrysoptera*; Special Concern)

NHIC's database contains a record of element occurrence for Golden-winged Warbler for one of the 1 km grid squares that overlap the subject property (data square 17NJ8115). In general, this species

prefers edge habitat or semi-open areas associated with communities such as swamp thickets, cultural thickets, or successional woodlands to carry out key life processes. Such conditions are absent within the subject property or adjacent lands. No further assessment undertaken.

4.11.3.4 Midland Painted Turtle (*Chrysemys picta marginata*; Special Concern)

NHIC's database contains a record of element occurrence for Midland Painted Turtle for one of the 1 km grid squares that overlap the subject property (data square 17NJ8115). In general, this species requires wetland or open water habitat conditions to carry out key life processes, and such conditions are absent within the subject property or adjacent lands. No further assessment undertaken.

4.11.3.5 Snapping Turtle (*Chelydra serpentina*; Special Concern)

NHIC's database contains a record of element occurrence for Snapping Turtle for the 1 km grid square which overlaps the subject property (data square 17NJ8115). In general, this species requires wetland or open water habitat conditions to carry out key life processes, and such conditions are absent within the subject property or adjacent lands. No further assessment undertaken.

4.11.3.6 West Virginia White (*Pieris virginiensis*; Special Concern)

NHIC's database contains a record of element occurrence for West Virginia White (a species of butterfly) for the 1 km grid squares that overlap the subject property. This species may occur in locations that support habitat for its host plant, Toothwort (*Cardamine spp.*). Toothwort species are generally ubiquitous in deciduous and mixed forests in a variety of settings. The woodland feature adjacent to the subject property may support populations of Toothwort and, therefore, may support West Virginia White. Timing of RiverStone's survey was not suitable to conclude presence or absence in this regard. An assessment of potential impacts to this species associated with implementation of the proposed development plan (should it be present) is provided in **Section 5.3**.

4.11.3.7 Wood Thrush (*Hylocichla mustelina*; Special Concern)

Conditions within the woodland feature adjacent to the subject property offer potentially suitable habitat for this species. An assessment of potential impacts to this species associated with implementation of the proposed development plan is provided in **Section 5.3**.

4.12 Key Natural Heritage/Hydrologic Feature Summary

Based on our review of background materials and assessment of natural heritage information collected on site, RiverStone has determined that the KNHFs listed below have the potential to be present within lands adjacent to the subject property (*i.e.*, within 120 m of proposed development):

- Candidate Significant Woodlands
- Potential Habitat of Endangered and/or Threatened Species
- Candidate Significant Wildlife Habitat

5 IMPACT ASSESSMENT & MITIGATION PLANNING

As previously discussed, the subject property contains an existing residence and mixed manicured amenity space. It also contains a sport pad and interlock stone patio that was previously constructed

within amenity space associated with the backyard. The footprint of the sports pad and a portion of the patio is, in part, within the area of the property that is zoned as GB and designated as both NHS Key Features and Greenbelt NHS. These cumulative representations of the NHS layer extend approximately 10 m into the subject property from the rear lot line, similar to adjacent properties that back onto the woodland feature discussed in the sections above.

Within the subject property and adjacent properties, the areas that encompass the GB zone and NHS designations appear to be largely composed of manicured amenity space, and not natural features. In some locations on adjacent properties, the dripline of the woodland canopy extends over the rear lot lines and onto the residential properties; however, the stems of individual trees appear to be largely limited to outside of the residential properties. In the case of the subject property, the dripline is primarily located outside of the rear lot line, with minimal overlap with the constructed sports pad, associated drainage infrastructure, or interlocking stone patio (see **Figure 2, Appendix 1, and Appendix 3**).

All KNHF discussed in **Section 4** have been identified due to the presence of the above-noted woodland feature and include the woodland itself. The impact assessment below is intended to review how construction of the sport pad/patio may have impacted (or may continue to impact) the integrity and function of identified KNHF. We provide feature-specific mitigation measures to avoid or minimize the potential for impacts where appropriate and feasible.

5.1 Significant Woodland

As discussed in **Section 4.9**, the woodland feature adjacent to the subject property would be expected to meet applicable technical criteria to be considered significant for one or more reasons, including:

- The woodland satisfies minimum area thresholds based on relevant provincial technical criteria; and,
- The woodland contains native plant species assemblages and habitat for local wildlife.

RiverStone conducted an on-site delineation of the existing woodland limit, as depicted in **Figure 2**. As previously noted, aerial imagery depicts a woodland limit that may previously have extended further into the subject property; however, interpretation of aerial imagery is not always reliable in this regard. It is unknown if any individual trees were removed from within the boundary of the subject property prior to construction of the sport pad. If this were the case, it is further unknown if tree removal/management was related to the sports pad project or if it occurred for other reasons (*e.g.*, fence construction, hazard tree removal, etc.). In any case, if trees were previously removed along the rear lot line of the subject property, it is assumed that the number of individual trees would have been minimal and would not have compromised or otherwise negatively impacted the integrity and function of the broader woodland feature.

In the absence of a site visit prior to construction of the sports pad, RiverStone provides an impact assessment that is based on existing conditions at the time of our on-site investigation. As noted, the footprint of the constructed sport pad is largely located outside of the existing woodland dripline. Along the length of the pad, RiverStone observed six individual mature Sugar Maple trees (average ~25 cm DBH) proximate to the rear lot line, *i.e.*, within 10 m. The closest of these trees, located approximately 4 m from the limit of the pad, may be susceptible to root damage from construction of the pad. It was noted on site that this tree is already in a state of decline, but it is unknown if this is related to construction of the sport pad or other factors. In general, it is possible that the sport pad will

result in or contribute to further long-term decline of this single tree; however, other proximate trees are unlikely to be negatively impacted by the location of the pad.

Notwithstanding potential impacts to individual trees, it is RiverStone's opinion that construction/retention of the sports pad will not result in a negative impact to the integrity and function of the significant woodland feature as a whole. A few key considerations are provided in this regard:

- The size and configuration of the woodland feature do not support interior habitat functions (*i.e.*, areas at least 100 m from an edge). Therefore, minor tree impacts along the woodland edge would not result in any loss of interior habitat.
- The subject property is not situated within a wildlife movement corridor. Therefore, minor tree impacts along the woodland edge will not result in any loss or disruption of local habitat linkages.
- The woodland feature is unlikely to support habitat for species protected under the ESA (see discussion in **Section 4.10**), and there is no expectation that retention of the pad will result in harm to any individuals of endangered or threatened species.
- Habitat for sensitive woodland plants (including special concern and/or rare species) is documented in the local area; however, such species are unlikely to be present along an exposed woodland edge adjacent to a residential subdivision.
- The activity would not be expected to result in the loss of available breeding territories for sensitive woodland birds (*i.e.*, Eastern Wood-pewee or Wood Thrush), or impact the functionality of such habitat (if these species are present).
- Lighting assessment by others (e-Lumen Inc. 2023) estimates approximate night-lighting illumination of 0.1-0.9 at a distance of ~3 m into the woodland edge (when pad lighting is on). By comparison, typical illumination of overcast or sunrise/sunset conditions is several hundred LUX. The measured LUX adjacent to the sporting pad is considered negligible, rapidly dissipating to 0.0-0.1 a short distance from the pad. This is not expected to result in a negative impact to nocturnal wildlife habitat functions associated with the woodland.

Based on the above assessment, it is RiverStone's opinion that there is no potential for functional impacts to the woodland feature. Instead, impacts associated with construction of the sports pad can be measured in potential impacts to one or more individual trees. This includes the potential long-term loss of a single Sugar Maple, and the potential for disturbance to the root zone of a small number (~ five) of other proximate trees. The following mitigation measures are recommended in this regard:

- **Identify a portion of the subject property for naturalization/enhancement to offset any potential impacts to individual trees along the woodland edge, as delineated in Figure 2.**
- **Implement a naturalization/enhancement plan for an area identified in Figure 3. All recommended specifications are contained in Figure 3.**
- **If any individual trees on the adjacent property show signs of decline, avoid removal as hazard trees; retain these as potential wildlife cavity trees.**

- **Ensure that any lighting associated with the sport pad is directed toward the dwelling and away from the woodland to avoid additional night-lighting stress on wildlife.**

5.2 Habitat of Endangered and Threatened Species

Areas of identified habitat for any endangered or threatened species are protected from destruction as per Section 10 of the ESA. Additionally, individuals of endangered or threatened species cannot legally be killed, harmed, or harassed as per Section 9 of the ESA. In many cases, mitigation planning is sufficient to ensure that development can occur in a manner that is consistent with the above provisions.

Based on the assessment provided in **Section 4.10**, it is RiverStone’s opinion that the area of woodland directly adjacent to the subject property is unlikely to support habitat for any threatened or endangered species. Notwithstanding, it is possible that individuals of endangered bat species may be present within any portion of a woodland during the active season. It is our understanding that no tree removals are required to accommodate retention of the sports pad, meaning that there is no potential for direct impacts to individual bats during the active season.

As noted above with respect to significant woodlands, there is potential for the sport pad to result in long-term decline of one or more trees as a result of encroachment into individual tree rooting zones. With respect to bats, this has the potential to represent a positive change in local habitat conditions, as dead or declining trees can provide critical roosting habitat for bats. In general, it is our opinion that the proposed development will not result in any harm to endangered or threatened species. While no specific mitigation measures are required, a discretionary stewardship recommendation is provided below for consideration in the applicant’s discussion with the Town.

- **Install one or more bat roosting structures (‘bat boxes’) along the edge of the woodland to support creation of roosting habitat for local bat populations.**

5.3 Significant Wildlife Habitat

Section 4.11 identified a list of SWH features that have the potential to occur within or adjacent to the subject property, based on our assessment of the SWH Criteria Schedules for Ecoregion 6E (**Appendix 2**). Our assessment concluded that conditions on the subject property are not suitable to support SWH; however, the FOD5-1 woodland community immediately adjacent to the subject property has the potential to support one or more SWH features or functions.

5.3.1 *Bat Maternity Colonies*

As discussed with respect to endangered bat species (**Section 5.2**), staff did not observe any prominent cavity trees within the portion of woodland adjacent to the subject property. If bats are actively utilizing the woodland to carry out life processes, there is no expectation that retention of the sport pad would prevent this function from continuing. Incidentally, if the sport pad has resulted in disturbance to the root zones of any mature Sugar Maple within the adjacent tree line, the impact to such trees may result in long-term creation of valuable cavity trees as the trees decline in health.

As discussed in **Section 5.2**, current guidance from MECP states that primary bat-related mitigation for small-scale tree removals is to implement timing window restrictions. It is unknown if creation of the sport pad required the removal of any trees from within the boundaries of the subject property; however, based on existing conditions, no trees require removal to accommodate retention of the sport

pad. In general, there is no expectation that construction of the sport pad resulted in any negative impacts to bat maternity habitat functions.

5.3.2 *Habitat for Special Concern and Rare Wildlife Species*

Based on our assessment of background information and on-site conditions, the following special concern and/or rare wildlife species have the potential to be present within the woodland feature adjacent to the subject property:

- Eastern Green Violet
- Eastern Wood-pewee
- West Virginia White
- Wood Thrush

The subject property itself does not represent potential habitat for any of these species, as all identified species are dependent on woodland environments. The impact assessment provided in **Section 5.1** pertaining to the significant woodland feature is considered directly relevant herein. It is unknown if creation of the sport pad required the removal of any trees from within the boundaries of the subject property; however, based on existing conditions, there is no expectation that retention of the sports pad will negatively impact the continued suitability of the woodland as habitat for these species (should they be present). Importantly, any potential for stress on local wildlife resulting from use of the sports pad would be no different than use of a typical residential backyard for recreational purposes.

5.4 General Impact Discussion

In addition to the feature-specific impact discussion provided in the above sections, discussion is provided herein with respect to potential impacts to the NHS as a whole. Based on our review, there are no natural features on the subject property not encompassed in the above discussion on KNHFs. The portion of the Greenbelt NHS that overlaps the subject property is not associated with any specific feature and may have been delineated in this location to promote a development setback to the limits of defined features (*i.e.*, woodlands). While development will encroach within the delineated Greenbelt NHS, there is no expectation that the proposal will result in a negative impact to the functions of the Greenbelt (or Regional) NHS. In our opinion, there is no potential for the proposal to alter the areal extent or disrupt existing wildlife habitat or the connectivity within or amongst areas identified as NHS.

From a hydrologic perspective, a Stormwater Brief prepared by Phoenix Engineering Services (June 2023) discusses a post-development drainage solution involving installation of infiltration galleries to the north and south of the existing sports pad. These installed features are intended to support on-site infiltration of runoff from the impervious surface of the pad, conveyed to the basins through a perimeter French drain system. A topographic survey by ERTL-Hunt Surveyors (July 2023) suggests that the subject property supports minimal grade change, with a very subtle west to east slope toward the road frontage. The overall grade change from the rear of the lot to the ditch on Stokes Trail averages 0.5-1.0 m, with most of this occurring in the eastern 1/3 of the parcel. From this, we interpret that the pre-disturbance condition was likely supportive of on-site infiltration and potentially some minor runoff eastward toward Stokes Trail. As the installed infiltration galleries achieve the same end result, there is no expectation that the development results in any functional hydrologic change to adjacent areas of NHS.

6 CONFORMANCE WITH APPLICABLE ENVIRONMENTAL POLICIES

The following sections summarize the relevant federal, provincial, and municipal environmental policies that are applicable to the proposed development application.

6.1 Federal *Migratory Birds Convention Act, S.C. 1994, c. 22*

Section 6 of the Migratory Birds Regulations under the *Migratory Birds Convention Act, 1994* (MBCA) prohibits the disturbance or destruction of nests, eggs, or nest shelters of a migratory bird. The provincial *Fish and Wildlife Conservation Act, 1997* (FWCA) extends the protection of bird nests and eggs to species that are not listed under the Migratory Birds Regulations (e.g., Corvids).

To our knowledge, no tree removals are required to facilitate retention of the sports pad. If this changes, restricting clearing of vegetation for any current or future proposed development to times outside of the period of April 1 to August 31 inclusive, will prevent contravention of Section 6 of the regulations.

6.2 Provincial Policy Statement, pursuant to the *Planning Act, R.S.O. 1990, c. P. 13*

The Provincial Policy Statement (PPS) is promulgated under the *Planning Act* and provides direction to municipalities on matters of provincial interest related to land-use planning. The PPS was updated in 2020. Municipal OP's must be consistent with the PPS. Key natural heritage-related provisions of the PPS, as assessed in this report, are listed below:

2.1.4 Development and site alteration shall not be permitted in:

- a) significant wetlands in Ecoregions 5E, 6E, and 7E1; and
- b) significant coastal wetlands.

2.1.5 Development and site alteration shall not be permitted in:

- a) significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E¹;
- b) significant woodlands in Ecoregions 6E and 7E;
- c) significant valleylands in Ecoregions 6E and 7E;
- d) significant wildlife habitat;
- e) significant areas of natural and scientific interest; and
- f) coastal wetlands in Ecoregions 5E, 6E and 7E¹ that are not subject to policy 2.1.4(b)

unless it has been demonstrated that there will be *no negative impacts on the natural features or their ecological functions*.

2.1.6 Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.

2.1.7 Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.

2.1.8 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.

Based on the results of RiverStone's impact assessment, and contingent on the implementation of the recommendations outlined in **Section 5** of this report, it is RiverStone's opinion that the development as proposed is consistent with Sections 2.1.4 to 2.1.8 of the PPS.

6.3 Provincial Endangered Species Act, S.O. 2007, c. 6

The ESA protects designated endangered and threatened species in Ontario from being killed, harmed, or harassed (s. 9) or having their habitat damaged or destroyed (s. 10). **Section 4.10** identified one or more species or its habitat having the potential to occur within or adjacent to the subject property. **Section 5.2** provided a subsequent discussion of potential impacts to such species and associated habitat features, should those species be present within or adjacent to the subject property. Based on this assessment, and assuming full implementation of mitigation measures (where recommended), it is RiverStone's opinion that no endangered or threatened species or their habitat are expected to be negatively impacted by implementation of the proposed development. On this basis, there is no expectation that the proposed development will result in a contravention of the ESA. It is noted that this assessment does not represent 'clearance' with respect to ESA compliance. It remains a proponent's continued and sole responsibility to ensure that a project does not result in a contravention to the ESA.

6.4 Greenbelt Plan (2017)

The subject properties are located within the planning area of the Greenbelt Plan and further located in the Protected Countryside and NHS designations. The following interpretation of relevant Greenbelt Plan policies is provided:

- Section 3.2.2 prescribes that all development within the Natural Heritage System demonstrate no impacts to KNHF/KHF. Section 3.2.5 further prescribes that development occur outside of KNHF/KHF and a minimum vegetation protection zone of 30 m from the limits of identified KNHF/KHF.
- Section 3.2.2(4) further specifies that "*the Natural Heritage System, including the policies of section 3.2.5, does not apply within the existing boundaries of settlement areas...*". As the subject property is located within an established settlement area, it is our interpretation that Greenbelt Plan policies that preclude development in KNHF/KHF and within 30 m of KNHF/KHF are not applicable.

Based on our interpretation of Greenbelt Plan policies as they pertain to settlement areas, it is RiverStone's opinion that the proposal is consistent with natural heritage-related provisions of the Greenbelt Plan.

6.5 Town of Milton Official Plan (2018)

The subject property is located within a settlement area and contains a mix of land use designations, including Hamlet and NHS Key Features. The criteria for designation of NHS Key Features, and permitted land uses within this designation, are outlined in Section 4.9 of the Town OP. One or more relevant OP policies are interpreted as follows:

- Section 4.9.1.3 outlines the list of natural features and areas that support designation of NHS Key Features. The extent of the NHS Key Features designation as it applies to the subject property is not presently supported by existing conditions. Of the features which represent criteria for this designation, significant woodland and SWH are considered applicable; however, these features are primarily limited to lands adjacent to the subject property. On this basis, a refinement in the designation limits may be warranted.
- Section 4.9.2 outlines permitted uses within the NHS Key Features designation, including *recreation uses*. Permitted uses also include *accessory buildings or structures*, and *incidental uses*. The constructed sport pad would logically fall under any of the above categories. It is noted that the previous version of the Town's OP clearly identified recreational uses such as swimming pools or sporting pads as being included under the above-noted permitted uses. RiverStone's assessment has determined that the use represents no impact on the functions of existing natural heritages features.
- Section 4.9.3 outlines the Town's approach to implementing the Regional NHS, including development policies related to permitted uses and requirements for review and assessment. Section 4.9.3.2-4.9.3.4 discuss the various triggers and requirements related to preparation of an Environmental Impact Assessment (EIA), which this EIS is intended to satisfy. Section 4.9.3.12 discusses the determination of the boundaries of the Regional NHS and outlines the process for potential refinement, including through an EIA.
- Section 4.10 discusses the provincial Greenbelt NHS for implementation of the provincial Greenbelt Plan. A discussion of relevance and conformity with the Greenbelt Plan is provided in **Section 6.4** above.

The details contained in this EIS report, including discussion in the points above, are intended to support the approval authority in their review of general conformity and consistency with Town OP policies and zoning bylaw provisions as relevant. In general, it is our opinion that the constructed sport pad is located outside of the definable limits of any NHS Key Features. While the footprint of development is located adjacent to Key Features, there is no expectation that the functions of any Key Features will be negatively impacted.

6.6 Halton Region Official Plan (2022 Consolidation)

Map 1G to the Halton Region Official Plan delineates the various land use designations and overlays that support application of natural heritage planning policies in the Regional OP. The subject property is clearly located within the Hamlet designation (Campbellville) and occurs adjacent to areas identified as both Regional Natural Heritage System (NHS) and Key Features. However, due to the scale of the OP schedules, it is unclear if these latter designations/overlays overlap with the property. Based on our interpretation, neither the Regional NHS or Key Features overlay overlap the limits of the subject property. In acknowledgement that this interpretation may be inaccurate AND that the subject property is at a minimum located directly adjacent to the Regional NHS, the following discussion of related policies is provided. Only policies considered directly applicable to the application are discussed (i.e., not general policies, definitions, etc.).

139.3.7 It is the policy of the Region to:

(1) Prohibit development or site alteration within the Key Features of the Greenbelt Natural Heritage System, except in accordance with policies of this Plan.

Interpretation: As discussed in this report, the Greenbelt NHS overlaps the rear portion of the subject property; however, the limits of associated Key Features (e.g., significant woodland) are primarily located on adjacent lands, outside of the footprint of the development subject to this assessment (*i.e.*, sport pad, patio).

(2) Prohibit development or site alteration on lands adjacent to the Key Features of the Greenbelt Natural Heritage System unless the proponent has evaluated the ecological functions of these lands through an Environmental Impact Assessment in accordance with Section 139.3.7(4).

Interpretation: This report has evaluated and discussed the development and site alteration that occurred adjacent to confirmed Key Features, concluding that the ecological functions of such features will not be negatively impacted by the development.

(3) Notwithstanding Sections 139.3.7(1) and 139.3.7(2), permit the following uses within Key Features, subject to the applicable policies of this Plan: a) forest, fisheries and wildlife management that is carried out in a manner that maintains or, where possible, improves these features and their functions; b) conservation and flood or erosion control projects if they have been demonstrated to be necessary in the public interest and after all alternatives have been considered; c) archaeological activities; d) essential transportation and utility facilities; e) non-intensive recreation uses such as nature viewing, pedestrian trails and small-scale structures (such as boardwalks, footbridges, fences, docks, and picnic facilities), where negative impacts are minimized; f) existing uses, including existing agricultural uses; and, g) mineral aggregate resource extraction, subject to the policies of Section 110 of this Plan.

Interpretation: similar to Section 4.9.2 of the Town OP, clause (e) above implies that recreational uses (including small-scale structures) may be permitted within (and also presumably adjacent to) Key Features, where negative impacts are minimized. As discussed in this report, it is our opinion that negative impacts to functions of Key Features are not expected as a result of the development.

(4) Require the proponent of any development or site alteration, including public works, that is located wholly or partially within the Greenbelt Natural Heritage System or within 120m of a Key Feature to carry out an Environmental Impact Assessment (EIA). The EIA will identify a vegetation protection zone which: a) is of sufficient width to protect the Key Feature and its functions from the impacts of the proposed change and associated activities that may occur before, during, and after, construction, and where possible, restore or enhance the feature and/or its function; and b) is established to achieve, and be maintained as natural self-sustaining vegetation. (4.1) Notwithstanding Section 139.3.7(4) for agriculture-related development or site alteration, the requirement for an EIA is reduced to within 30m of a Key Feature.

Interpretation: This report has been submitted to satisfy requirements for an EIA. Mitigation measures are outlined in this report to provide partial enhancement of the Greenbelt NHS as it occurs within the subject property, acknowledging that vegetation protection zones are not discussed due to the nature and context of the application.

(5) Notwithstanding Section 139.3.7(4), require a minimum vegetation protection zone of 30m wide for wetlands, seepage areas and springs, fish habitat, permanent and intermittent streams, lakes, and significant woodlands, measured from the outside boundary of the Key Feature.

Interpretation: As noted above, the provision of a vegetation protection zone to identified significant woodland is not considered a practical or feasible measure in this scenario. It is noted that the existing dwelling and several existing permitted amenities (outside of the Greenbelt NHS) are located closer than 30 m from the limit of the significant woodland. Furthermore, assuming that subsection (3) discussed above is applicable to the application, it is not clear that a vegetation protection remains relevant in this scenario.

(6) Notwithstanding Sections 139.3.7(4), 139.3.7(4.1) and 139.3.7(5), permit without the requirement of an EIA the expansion of existing agricultural buildings and structures, residential dwellings, and accessory uses to both, within Key Features, subject to the following being demonstrated to the satisfaction of the Region: [i] there is no alternative and the expansion, alteration or establishment is directed away from the Key Features to the maximum extent possible; [ii] the impact of the expansion or alteration on the Key Feature and its functions is minimized to the maximum extent possible; and, [iii] sewage and water services as described in Section 101(1.3).

Interpretation: This subsection appears to be applicable to the application insofar as allowing for residential accessory uses within (and also presumably adjacent to) Key Features subject to several conditions. While we cannot speak formally to the availability of alternatives, it is clear that alternatives for an accessory use of this nature appear highly limited by the availability of space within a small suburban backyard. As discussed in this report, it is our opinion that negative impacts to functions of Key Features are not expected as a result of the development. Mitigation recommendations have been provided to demonstrate some ecological benefit on the property resulting from the application.

7 **CONCLUSIONS**

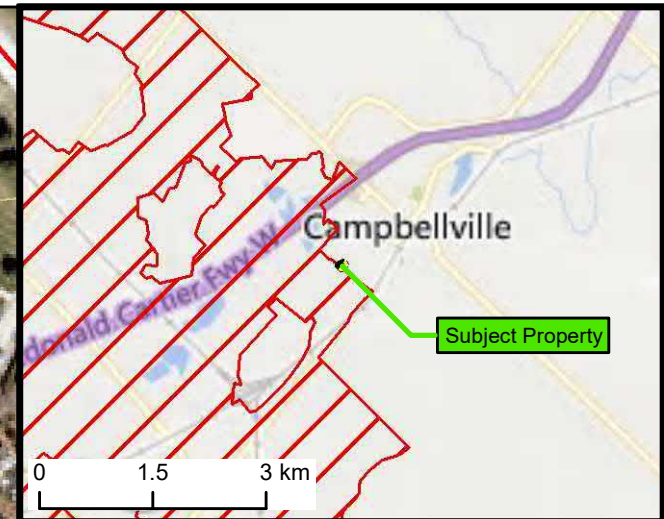
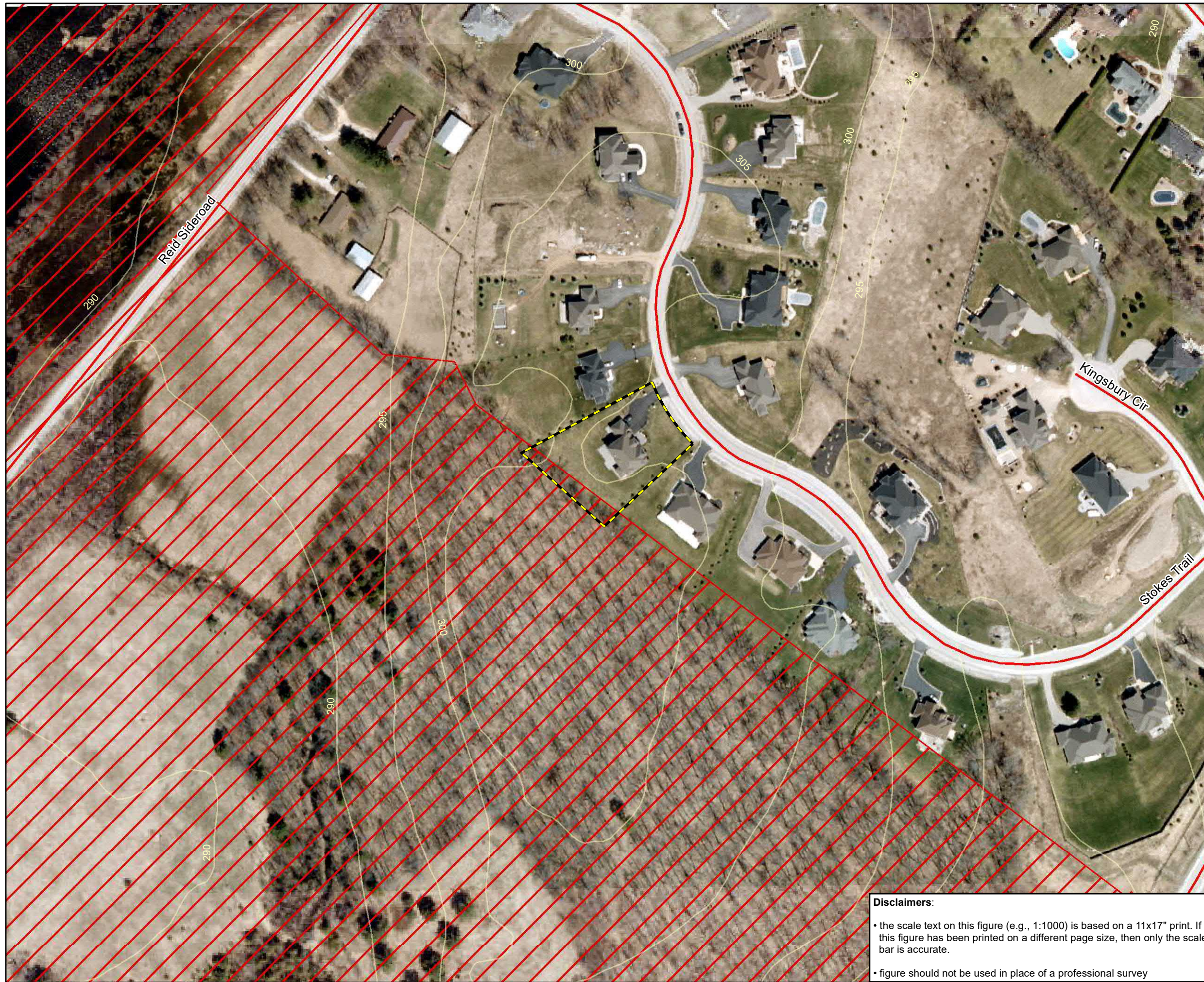
In accordance with the requirements of the Town OP, the preceding report provides the results of RiverStone's scoped EIS. This report includes details regarding existing physical and ecological conditions on the subject property, a description of the development plan, an assessment of potential impacts to identified features (if present), and a general assessment of consistency and conformity with relevant municipal, provincial, and federal environmental policies.

Based upon the findings presented in this report and contingent upon the implementation of and adherence to the recommendations made herein, it is our conclusion that proposed development can be accomplished without negative impacts to the functions of KNHF/KHF or the associated NHS. We advise that any recommended mitigation measures outlined in **Section 5** be implemented through planning and enforcement mechanisms deemed appropriate to the Town.

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Legend

Ontario Base Mapping (OBM)

- Roads
- 5 m Contours

Planning Boundaries

- Subject Property

Features with Natural Heritage Value - Identified by the Province or the Relevant Approval Authorities

Applicable Plan, Natural Heritage System

- Greenbelt Plan,

Orthorectified aerial photo - spring 2018

Scale	RS Project No.	Date Last Updated	By
1:2,000	2021-323	Jan 18, 2022	JG

0 30 60 Metres

Figure 1. Location Of Subject Property
 Lot 23 Stokes Trail, Town of Milton, Geographical Township Of Nassagaweya, Regional Municipality Of Halton

Prepared for: Claudio Brutto

Inset: General Location Of Subject Property

Disclaimers:

- the scale text on this figure (e.g., 1:1000) is based on a 11x17" print. If this figure has been printed on a different page size, then only the scale bar is accurate.
- figure should not be used in place of a professional survey



Legend

Ontario Base Mapping (OBM)
 — Roads

Planning Boundaries
 [Yellow dashed line] Subject Property

Features with Natural Heritage Value - Identified by the Province or the Relevant Approval Authorities
 [Red hatched] Applicable Plan, Natural Heritage System
 [Green hatched] Greenbelt Plan

Biophysical Features+Functions-RiverStone
Ecological Communities
 [Yellow circle] ANTH: Anthropogenic
 [Yellow circle] FOD5-1: Dry – Fresh Sugar Maple Deciduous Forest Type

Features with Natural Heritage Value - Identified by RiverStone
 [Green dashed line] Dripline (RiverStone Jan 2022)

Measures Recommended by RiverStone to Prevent and/or Reduce Impacts
 [Green solid] Naturalization Area

Orthorectified aerial photo - spring 2018

Scale	RS Project No.	Date Last Updated	By
1:300	2021-323	Sept 25, 2023	JG

0 4.5 9 Metres

Figure 2. Existing Conditions and Mitigation Recommendations
 Lot 23 Stokes Trail, Town of Milton, Geographical Township Of Nassagaweya, Regional Municipality Of Halton

Prepared for: Claudio Brutto

Disclaimers:

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STORM MANAGEMENT (AS PER ENG. SYM REPORT)
 Need STORAGE Volume=50.5 m³
 1. SOAKAWAY PH Volume=50.5 m³
 4. 5x2.5x1.57x4.5x2.5x1.57=16.8x2=33.6 m³
 FRENCH DRAIN
 3. STORMWATER STORAGE TO PRE-DEVELOPMENT WITH NOMINAL AS SUMMING 40% VOLUME REQUIREMENT REQUIRES EXCAVATION VOLUME OF 16.8 m³ EXCAVATIONS PROVIDED C3&725 STORMWATER REQUIREMENTS.

~150m²

FOD5-1

Groundcover Plantings (Examples of Suitable Species)

Common Name	Scientific Name	Volume
Ostrich Fern	<i>Matteuccia struthiopteris</i>	(2-4 plants / m ²)
Wood Fern	<i>Dryopteris sp.</i>	(2-4 plants / m ²)
Bush Honeysuckle	<i>Diervilla lonicera</i>	(2-4 plants / m ²)
Zig-Zag Goldenrod	<i>Solidago flexicaulis</i>	(2-4 plants / m ²)
Wild Ginger	<i>Asarum canadense</i>	(4-6 plants / m ²)

*Groundcover pods should measure approximately 5 m². A total of 30 groundcover plugs are recommended to be dispersed amongst two pods, using a mix of the above species or appropriate substitutes.

Low Tree/Shrub Species Plantings

Code	Common Name	Scientific Name	Amount
DS	Downy Serviceberry	<i>Amelanchier arborea</i>	5
AD	Alternate-Leaved Dogwood	<i>Cornus alternifolia</i>	5
CC	Chokecherry	<i>Prunus virginiana</i>	5

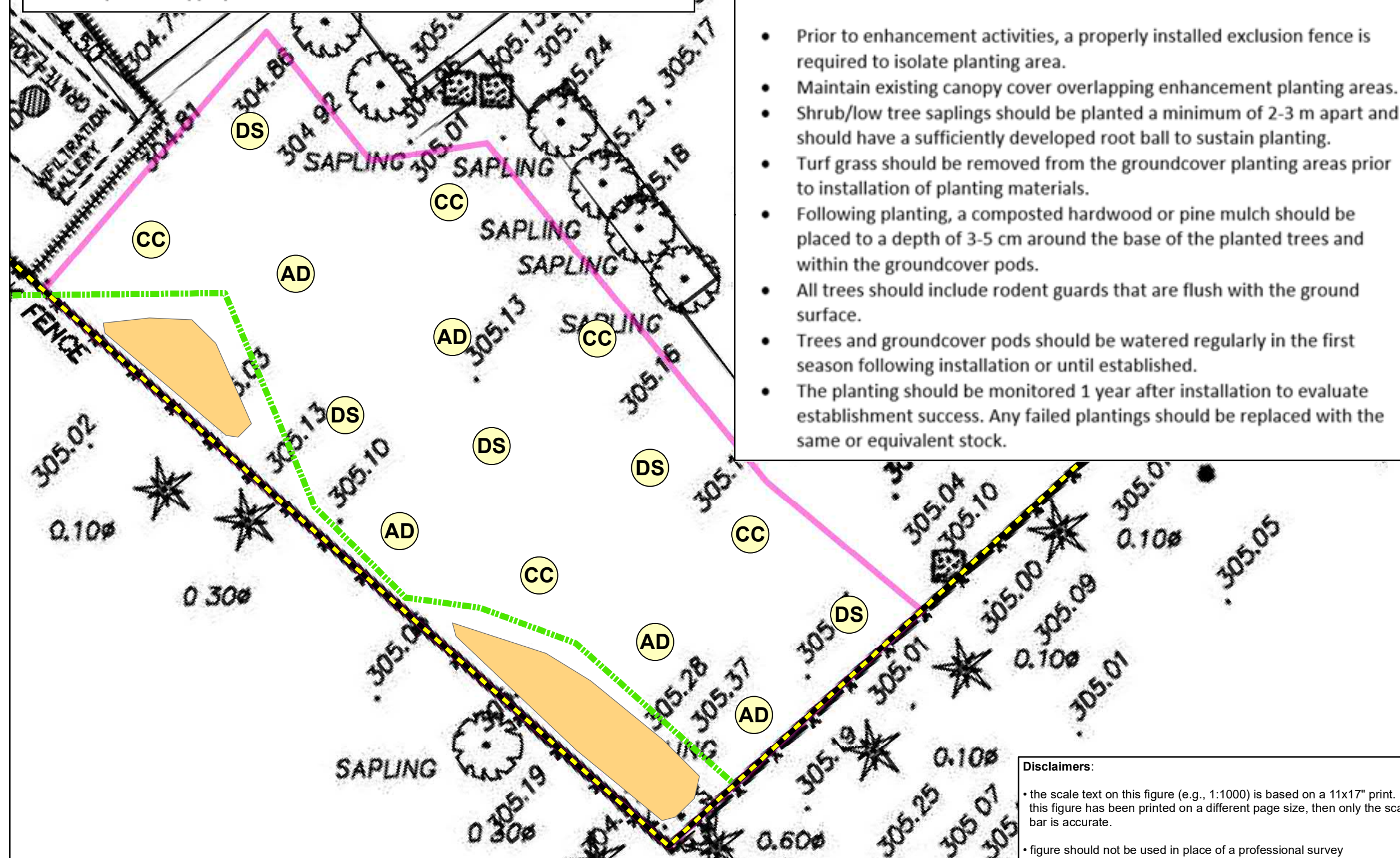
*May be substituted for appropriate native species.

Important Implementation Notes:

- Prior to enhancement activities, a properly installed exclusion fence is required to isolate planting area.
- Maintain existing canopy cover overlapping enhancement planting areas.
- Shrub/low tree saplings should be planted a minimum of 2-3 m apart and should have a sufficiently developed root ball to sustain planting.
- Turf grass should be removed from the groundcover planting areas prior to installation of planting materials.
- Following planting, a composted hardwood or pine mulch should be placed to a depth of 3-5 cm around the base of the planted trees and within the groundcover pods.
- All trees should include rodent guards that are flush with the ground surface.
- Trees and groundcover pods should be watered regularly in the first season following installation or until established.
- The planting should be monitored 1 year after installation to evaluate establishment success. Any failed plantings should be replaced with the same or equivalent stock.

Legend

- Subject Property
- Dripline (RiverStone Jan 2022)
- Naturalization Area
- Tall Shrub/Low Tree Planting Location (Approximate - to be Field Fitted)
- Groundcover Planting Pod (Approximate - to be Field Fitted)



Orthorectified aerial photo - spring 2018

Scale	RS Project No.	Date Last Updated	By
1:100	2021-323	Feb 24, 2024	RS

0 1.5 3 Metres

Figure 3. Enhancement Planting Concept.
 Lot 23 Stokes Trail, Town of Milton, Geographical Township Of Nassagaweya, Regional Municipality Of Halton

Prepared for: Claudio Brutto

Disclaimers:

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Appendix 1. Select Photos from the Site Investigation





Photo 1. Facing northwest from rear lot line. Constructed sport pad in center of frame; dwelling on adjacent property to back right of frame.



Photo 2. Facing west from rear lot line. Constructed sport pad on right, woodland feature on left.



Photo 3. Woodland feature adjacent to rear lot line.



Photo 4. Facing south into woodland feature.



Photo 5. Facing southeast from western edge of sport pad.



Photo 6. Facing south from northwest corner of sport pad.



Photo 7. View of dripline facing west along rear lot line.



Photo 8. View of dripline facing east along rear lot line.



Photo 9. In-season view of concrete pad.



Photo 10. In-season view of concrete pad.



Photo 11. In-season view of concrete pad.

Appendix 2. Significant Wildlife Habitat Assessment



Ecoregion 6E	Candidate Significant Wildlife Habitat	ELC Ecosites	Do site-specific attributes (e.g., ecological system and landscape configuration) assessed from available information sources and on-site assessment indicate that candidate SHW might be present?
Seasonal Concentration Areas of Animals			
Waterfowl Stopover and Staging Areas (Terrestrial)	<p>Fields with sheet water during Spring (mid March to May)</p> <p>Fields flooding during spring melt and run-off provide important invertebrate foraging habitat for migrating waterfowl.</p> <p>Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH unless they have spring sheet water available.</p>	<p>CUM1 , CUT1</p> <p>Plus evidence of annual spring flooding from melt water or run-off within these Ecosites.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Waterfowl Stopover and Staging Areas (Aquatic)	<p>Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration.</p> <p>Sewage treatment Ponds and storm water Ponds do not qualify as a SWH, however a reservoir managed as a large wetland or pond/lake does qualify.</p> <p>These habitats have an abundance food supply (mostly aquatic invertebrates and vegetation in shallow water)</p>	<p>MAS1 , MAS2, MAS3, SAS1, SAM1, SAF1 , SWD1 , SWD2, SWD3, SWD4, SWD5, SWD6, SWD7</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Shorebird Migratory Stopover Areas	<p>Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats.</p> <p>Great Lakes coastal shorelines, including groynes and other forms of armour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October.</p> <p>Sewage treatment ponds and storm water ponds do not qualify as a SWH.</p>	<p>BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1 , MAM2, MAM3, MAM4, MAM5</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Raptor Wintering Areas	<p>The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors.</p> <p>Raptor wintering sites (hawk/owl) need to be >20 ha with a combination of forest and upland.</p> <p>Least disturbed sites, idle/fallow or lightly grazed field/meadow (>15ha) with adjacent woodlands</p> <p>Field area of the habitat is to be wind swept with limited snow depth or accumulation.</p> <p>Eagle sites have open water, large trees and snags available for roosting.</p>	<p><u>Hawks/Owls:</u> Combination of ELC Community Series; need to have present one Community Series from each land class; Forest: FOD, FOM, FOC. Upland: CUM; CUT; CUS; CUW.</p> <p><u>Bald Eagle:</u> Forest community Series: FOD, FOM, FOC, SWD, SWM or SWC on shoreline areas adjacent to large rivers or adjacent to lakes with open water (hunting area).</p>	<p>Woodlands adjacent to the subject property may contribute to raptor wintering habitat functions on the local landscape. See report for further discussion.</p>
Bat Hibernacula	<p>Hibernacula may be found in caves, mine shafts, underground foundations and Karsts.</p> <p>Active mine sites are not SWH.</p> <p>The locations of bat hibernacula are relatively poorly known.</p>	<p>Bat Hibernacula may be found in these ecosites: CCR1, CCR2, CCA1, CCA2.</p> <p>(Note: buildings are not considered to be SWH).</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>

Ecoregion 6E	Candidate Significant Wildlife Habitat	ELC Ecosites	Do site-specific attributes (e.g., ecological system and landscape configuration) assessed from available information sources and on-site assessment indicate that candidate SHW might be present?
Bat Maternity Colonies	<p>Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be SWH).</p> <p>Maternity roosts are not found in caves and mines in Ontario</p> <p>Maternity colonies located in Mature (dominant trees > 80yrs old) deciduous or mixed forest stands with >10/ha large diameter (>25cm dbh) wildlife trees</p> <p>Female Bats prefer wildlife trees (snags) in early stages of decay, class 1-3 .</p> <p>Silver-haired Bats prefer older mixed or deciduous forest and form maternity colonies in tree cavities and small hollows. Older forest areas with at least 21 snags/ha are preferred.</p>	<p>Maternity colonies considered SWH are found in forested Ecosites. All ELC Ecosites in ELC Community Series: FOD, FOM, SWD, SWM.</p>	<p>Woodlands adjacent to the subject property have the potential to support bat maternity colonies. See report for further discussion.</p>
Turtle Wintering Areas	<p>For most turtles, wintering areas are in the same general area as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates.</p> <p>Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate Dissolved Oxygen</p> <p>Man-made ponds such as sewage lagoons or storm water ponds should not be considered SWH.</p>	<p>Snapping and Midland Painted Turtles; ELC Community Classes; SW, MA, OA and SA, ELC Community Series; FEO and BOO.</p> <p>Northern Map Turtle; Open Water areas such as deeper rivers or streams and lakes with current can also be used as overwintering habitat.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Reptile Hibernaculum	<p>For snakes, hibernation takes place in sites located below frost lines in burrows, rock crevices and other natural or naturalized locations. The existence of features that go below frost line; such as rock piles or slopes, old stone fences, and abandoned crumbling foundations assist in identifying candidate SWH.</p> <p>Areas of broken and fissured rock are particularly valuable since they provide access to subterranean sites below the frost line</p> <p>Wetlands can also be important over-wintering habitat in conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover.</p> <p>Five-lined skink prefer mixed forests with rock outcrop openings providing cover rock overlaying granite bedrock with fissures.</p>	<p>For all snakes, habitat may be found in any ecosite other than very wet ones. Talus, Rock Barren, Crevice and Cave, and Alvar sites may be directly related to these habitats.</p> <p>Observations or congregations of snakes on sunny warm days in the spring or fall is a good indicator.</p> <p>For Five-lined Skink, ELC Community Series of FOD and FOM and Ecosites: FOC1, FOC3.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Colonially - Nesting Bird Breeding Habitat (Bank and Cliff)	<p>Any site or areas with exposed soil banks, sandy hills, borrow pits, steep slopes, and sand piles that are undisturbed or naturally eroding that is not a licensed/permitted aggregate area.</p> <p>Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, embankments, soil or aggregate stockpiles.</p> <p>Does not include a licensed/permitted Mineral Aggregate Operation.</p>	<p>Eroding banks, sandy hills, borrow pits, steep slopes, and sand piles. Cliff faces, bridge abutments, silos, barns.</p> <p>Habitat found in the following ecosites: CUM1, CUT1, CUS1, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Colonially - Nesting Bird Breeding Habitat (Tree/Shrubs)	<p>Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used.</p> <p>Most nests in trees are 11 to 15 m from ground, near the top of the tree.</p>	<p>SWM2, SWM3, SWM5, SWM6, SWD1, SWD2, SWD3, SWD4, SWD5, SWD6, SWD7, FET1.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>

Ecoregion 6E	Candidate Significant Wildlife Habitat	ELC Ecosites	Do site-specific attributes (e.g., ecological system and landscape configuration) assessed from available information sources and on-site assessment indicate that candidate SHW might be present?
Colonially - Nesting Bird Breeding Habitat (Ground)	<p>Nesting colonies of gulls and terns are on islands or peninsulas (natural or artificial) associated with open water, marshy areas, lake or large river (two-lined on a 1:50,000 NTS map).</p> <p>Brewers Blackbird colonies are found loosely on the ground in or in low bushes in close proximity to streams and irrigation ditches within farmlands.</p>	<p>Any rocky island or peninsula (natural or artificial) within a lake or large river (two-lined on a 1:50,000 NTS map).</p> <p>Close proximity to watercourses in open fields or pastures with scattered trees or shrubs (Brewer's Blackbird) MAM1 – 6, MAS1 – 3, CUM, CUT, CUS</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Migratory Butterfly Stopover Areas	<p>A butterfly stopover area will be a minimum of 10 ha in size with a combination of field and forest habitat present, and will be located within 5 km of Lake Ontario.</p> <p>The habitat is typically a combination of field and forest, and provides the butterflies with a location to rest prior to their long migration south.</p> <p>The habitat should not be disturbed, fields/meadows with an abundance of preferred nectar plants and woodland edge providing shelter are requirements for this habitat.</p> <p>Staging areas usually provide protection from the elements and are often spits of land or areas with the shortest distance to cross the Great Lakes.</p>	<p>Combination of ELC Community Series; need to have present one Community Series from each landclass:</p> <p><u>Field:</u> CUM, CUT, CUS</p> <p><u>Forest:</u> FOC, FOD, FOM, CUP</p> <p>Anecdotally, a candidate site for butterfly stopover will have a history of butterflies being observed.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Landbird Migratory Stopover Areas	<p>Woodlots need to be > 10 ha in size and within 5 km of Lake Ontario.</p> <p>If multiple woodlands are located along the shoreline of those woodlands <2 km from Lake Ontario are more significant.</p> <p>Sites have a variety of habitats; forest, grassland and wetland complexes.</p> <p>The largest sites are more significant.</p> <p>Woodlots and forest fragments are important habitats to migrating birds, these features location along the shore and located within 5 km of Lake Ontario are Candidate SWH.</p>	<p>All Ecosites associated with these ELC Community Series; FOC, FOM, FOD, SWC, SWM, SWD.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Deer Yarding Areas	<p>Deer wintering areas or winter concentration areas (yards) are areas deer move to in response to the onset of winter snow and cold. This is a behavioural response and deer will establish traditional use areas. The yard is composed of two areas referred to as Stratum I and Stratum II. Stratum II covers the entire winter yard area and is usually a mixed or deciduous forest with plenty of browse available for food. Agricultural lands can also be included in this area. Deer move to these areas in early winter and generally, when snow depths reach 20 cm, most of the deer will have moved here. If the snow is light and fluffy, deer may continue to use this area until 30 cm snow depth. In mild winters, deer may remain in the Stratum II area the entire winter.</p> <p>The Core of a deer yard (Stratum I) is located within Stratum II and is critical for deer survival in areas where winters become severe. It is primarily composed of coniferous trees (pine, hemlock, cedar, spruce) with a canopy cover of more than 60%.</p> <p>OMNRF determines deer yards following methods outlined in "Selected Wildlife and Habitat Features: Inventory Manual".</p> <p>-Woodlots with high densities of deer due to artificial feeding are not significant.</p>	<p>Note: OMNRF to determine this habitat.</p> <p>ELC Community Series providing a thermal cover component for a deer yard would include; FOM, FOC, SWM and SWC.</p> <p>Or these ELC Ecosites; CUP2, CUP3, FOD3, CUT</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>

Ecoregion 6E	Candidate Significant Wildlife Habitat	ELC Ecosites	Do site-specific attributes (e.g., ecological system and landscape configuration) assessed from available information sources and on-site assessment indicate that candidate SHW might be present?
Deer Winter Congregation Areas	<p>Woodlots will typically be >100 ha in size. Woodlots <100 ha may be considered as significant based on MNRF studies or assessment.</p> <p>Deer movement during winter in the southern areas of Ecoregion 6E are not constrained by snow depth, however deer will annually congregate in large numbers in suitable woodlands.</p> <p>If deer are constrained by snow depth refer to the Deer Yarding Area habitat within Table 1.1 of this Schedule.</p> <p>Large woodlots > 100 ha and up to 1500 ha are known to be used annually by densities of deer that range from 0.1-1.5 deer/ha.</p> <p>Woodlots with high densities of deer due to artificial feeding are not significant.</p>	<p>All Forested Ecosites with these ELC Community Series; FOC , FOM, FOD, SWC, SWM, SWD .</p> <p>Conifer plantations much smaller than 50 ha may also be used.</p>	Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.
Rare Vegetation Communities			
Cliffs and Talus Slopes	A Cliff is vertical to near vertical bedrock >3m in height. A Talus Slope is rock rubble at the base of a cliff made up of coarse rocky debris	Any ELC Ecosite within Community Series: TAO, TAS, TAT, CLO, CLS, CLT	Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.
Sand Barren	Sand Barrens typically are exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires and erosion. They have little or no soil and the underlying rock protrudes through the surface. Usually located within other types of natural habitat such as forest or savannah. Vegetation can vary from patchy and barren to tree covered but less than 60%.	<p>ELC Ecosites: SBO1, SBS1, SBT1</p> <p>Vegetation cover varies from patchy and barren to continuous meadow (SBO1), thicket-like (SBS1), or more closed and treed (SBT1). Tree cover always < 60%.</p>	Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.
Alvar	An alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil. The hydrology of alvars may be complex, with alternating periods of inundation and drought. Vegetation cover varies from sparse lichen-moss associations to grasslands and shrublands and comprising a number of characteristic or indicator plant. Undisturbed alvars can be phyto- and zoogeographically diverse, supporting many uncommon or are relict plant and animals species. Vegetation cover varies from patchy to barren with a less than 60% tree cover.	<p>ALO1, ALS1, ALT1, FOC1, FOC2, CUM2, CUS2, CUT2-1, CUW2</p> <p>Five Alvar Indicator Species: 1) Carex crawei, 2) Panicum philadelphicum, 3) Eleocharis compressa, 4) Scutellaria parvula, 5) Trichostema brachiatum</p> <p>These indicator species are very specific to Alvars within Ecoregion 6E</p>	Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.
Old Growth Forest	Old Growth forests are characterized by exhibiting the greatest number of old-growth characteristics, such as mature forest with large trees that has been undisturbed. Heavy mortality or turnover of overstorey trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris.	Forest Community Series: FOD, FOC, FOM, SWD, SWC, SWM	Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.
Savannah	A Savannah is a tallgrass prairie habitat that has tree cover between 25–60%.	TPS1, TPS2, TPW1, TPW2, CUS2	Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.
Tallgrass Prairie	Tallgrass Prairie is an open vegetation with less than < 25% tree cover, and dominated by prairie species, including grasses.	TPO1, TPO2	Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.
Other Rare Vegetation Community	<p>ELC Ecosite codes that have the potential to be a rare ELC Vegetation Type as outlined in Appendix M.</p> <p>The OMNRF/NHIC will have up to date listing for rare vegetation communities.</p>	<p>Provincially Rare S1, S2 and S3 vegetation communities are listed in Appendix M of the SWHTG.</p> <p>Any ELC Ecosite Code that has a possible ELC Vegetation Type that is Provincially Rare is Candidate SWH.</p>	Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.

Ecoregion 6E	Candidate Significant Wildlife Habitat	ELC Ecosites	Do site-specific attributes (e.g., ecological system and landscape configuration) assessed from available information sources and on-site assessment indicate that candidate SHW might be present?
Specialized Habitats for Wildlife			
Waterfowl Nesting Area	<p>A waterfowl nesting area extends 120 m from a wetland (> 0.5 ha) or a cluster of 3 or more small (<0.5 ha) wetlands within 120 m of each individual wetland where waterfowl nesting is known to occur.</p> <p>Upland areas should be at least 120 m wide so that predators such as raccoons, skunks, and foxes have difficulty finding nests.</p> <p>Wood Ducks, Bufflehead, Common Goldeneye and Hooded Mergansers utilize large diameter trees (>40cm dbh) in woodlands for cavity nest sites.</p>	<p>All upland habitats located adjacent to these wetland ELC Ecosites are Candidate SWH: MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SWT1, SWT2, SWD1, SWD2, SWD3, SWD4</p> <p>Note: includes adjacency to provincially Significant Wetlands</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	<p>Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands, or on structures over water.</p> <p>Osprey nests are usually at the top a tree whereas Bald Eagle nests are typically in super canopy trees in a notch within the tree's canopy.</p> <p>Nests located on man-made objects are not to be included as SWH (e.g. telephone poles and constructed nesting platforms).</p>	<p>ELC Forest Community Series: FOD, FOM, FOC, SWD, SWM and SWC directly adjacent to riparian areas – rivers, lakes, ponds and wetlands.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Woodland Raptor Nesting Habitat	<p>All natural or conifer plantation woodland/forest stands >30ha with >10ha of interior habitat. Interior habitat determined with a 200m buffer.</p> <p>In disturbed sites, nests may be used again, or a new nest will be in close proximity to old nest.</p>	<p>May be found in all forested ELC Ecosites.</p> <p>May also be found in SWC, SWM, SWD and CUP3.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. Minimum woodland area threshold not met. No further assessment undertaken.</p>
Turtle Nesting Areas	<p>Best nesting habitat for turtles are close to water and away from roads and sites less prone to loss of eggs by predation from skunks, raccoons or other animals.</p> <p>For an area to function as a turtle nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not SWH.</p> <p>Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes, and rivers are most frequently used.</p>	<p>Exposed mineral soil (sand or gravel) areas adjacent (<100m) or within the following ELC Ecosites: MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, BOO1</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Seeps and Springs	<p>Any forested area (with <25% meadow/field/pasture) within the headwaters of a stream or river system.</p> <p>Seeps and springs are important feeding and drinking areas especially in the winter will typically support a variety of plant and animal species.</p>	<p>Seeps/Springs are areas where groundwater comes to the surface. Often they are found within headwater areas within forested habitats. Any forested Ecosite within the headwater areas of a stream could have seeps/springs.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Amphibian Breeding Habitat (Woodland)	<p>Presence of a wetland or pond >500 m² (about 25 m diameter) within or adjacent (within 120m) to a woodland (no minimum size). The wetland, lake or pond and surrounding forest, would be the Candidate SWH. Some small wetlands may not be mapped and may be important breeding pools for amphibians.</p> <p>Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat.</p>	<p>All Ecosites associated with these ELC Community Series; FOC, FOM, FOD, SWC, SWM, SWD</p> <p>Breeding pools within the woodland or the shortest distance from forest habitat are more significant because they are more likely to be used due to reduced risk to migrating amphibians.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>

Ecoregion 6E	Candidate Significant Wildlife Habitat	ELC Ecosites	Do site-specific attributes (e.g., ecological system and landscape configuration) assessed from available information sources and on-site assessment indicate that candidate SHW might be present?
Amphibian Breeding Habitat (Wetlands)	<p>Wetlands and pools (including vernal pools) >500 m² (about 25 m diameter), supporting high species diversity are significant; some small or ephemeral habitats may not be identified on MNR mapping and could be important amphibian breeding habitats.</p> <p>Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators.</p> <p>Bullfrogs require permanent water bodies with abundant emergent vegetation.</p>	<p>ELC Community Classes SW, MA, FE, BO, OA and SA.</p> <p>Typically these wetland ecosites will be isolated (>120m) from woodland ecosites, however larger wetlands containing predominantly aquatic species (e.g. Bull Frog) may be adjacent to woodlands.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Area-Sensitive Bird Breeding Habitat	<p>Habitats where interior forest breeding birds are breeding, typically large mature (>60 yrs old) forest stands or woodlots >30 ha. Interior forest habitat is at least 200 m from forest edge habitat.</p>	<p>All Ecosites associated with these ELC Community Series; FOC, FOM, FOD, SWC, SWM, SWD.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. Minimum woodland area threshold not met. No further assessment undertaken.</p>
Habitat for Species of Conservation Concern (not including Endangered or Threatened Species)			
Marsh Bird Breeding Habitat	<p>Nesting occurs in wetlands.</p> <p>All wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation present.</p> <p>For Green Heron, habitat is at the edge of water such as sluggish streams, ponds and marshes sheltered by shrubs and trees. Less frequently, it may be found in upland shrubs or forest a considerable distance from water.</p>	<p>MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SAS1, SAM1, SAF1, FEO1, BOO1.</p> <p>For Green Heron: All SW, MA and CUM1 sites.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Open Country Bird Breeding Habitat	<p>Large grassland areas (includes natural and cultural fields and meadows) >30 ha Grasslands not Class 1 or 2 agricultural lands, and not being actively used for farming (i.e., no row cropping or intensive hay or livestock pasturing in the last 5 years).</p> <p>Grassland sites considered significant should have a history of longevity, either abandoned fields, mature hayfields and pasturelands that are at least 5 years or older.</p> <p>The Indicator bird species are area sensitive requiring larger grassland areas than the common grassland species.</p>	<p>CUM1, CUM2</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Shrub/Early Successional Bird Breeding Habitat	<p>Large field areas succeeding to shrub and thicket habitats >30 ha in size.</p> <p>Shrub land or early successional fields, not class 1 or 2 agricultural lands, not being actively used for farming (i.e., no row-cropping, haying or livestock pasturing in the last 5 years).</p> <p>Shrub thicket habitats (>10 ha) are most likely to support and sustain a diversity of these species.</p> <p>Shrub and thicket habitat sites considered significant should have a history of longevity, either abandoned fields or lightly grazed pasturelands.</p>	<p>CUT1, CUT2, CUS1, CUS2, CUW1, CUW2.</p> <p>Patches of shrub ecosites can be complexed into a larger habitat for some bird species.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>

Ecoregion 6E	Candidate Significant Wildlife Habitat	ELC Ecosites	Do site-specific attributes (e.g., ecological system and landscape configuration) assessed from available information sources and on-site assessment indicate that candidate SHW might be present?
Terrestrial Crayfish	<p>Wet meadow and edges of shallow marshes (no minimum size) should be surveyed for terrestrial crayfish.</p> <p>Constructs burrows in marshes, mudflats, meadows, the ground can't be too moist. Can often be found far from water.</p> <p>Both species are a semi-terrestrial burrower which spends most of its life within burrows consisting of a network of tunnels. Usually the soil is not too moist so that the tunnel is well formed.</p>	<p>MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, MAS1, MAS2, MAS3, SWD, SWT, SWM, CUM1 with inclusions of above meadow marsh or swamp ecosites can be used by terrestrial crayfish.</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Special Concern and Rare Wildlife Species	<p>When an element occurrence is identified within a 1 or 10 km grid for a Special Concern or Provincially Rare species; linking candidate habitat on the site needs to be completed to ELC Ecosites</p>	<p>All Special Concern and Provincially Rare (S1-S3, SH) plant and animal species.</p> <p>All plant and animal element occurrences (EO) within a 1 or 10 km grid.</p> <p>Older element occurrences were recorded prior to GPS being available, therefore location information may lack accuracy</p>	<p>Areas of natural cover associated with the subject property and/or adjacent lands have the potential to support habitat for one or more special concern and rare wildlife species. See report for further discussion.</p>
Animal Movement Corridors			
Amphibian Movement Corridors	<p>Movement corridors between breeding habitat and summer habitat.</p> <p>Movement corridors must be determined when Amphibian breeding habitat is confirmed as SWH from Table 1.2.2 (Amphibian Breeding Habitat –Wetland) of this Schedule.</p>	<p>Corridors may be found in all ecosites associated with water.</p> <p>Corridors will be determined based on identifying the significant breeding habitat for these species (see above).</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>
Deer Movement Corridors	<p>Corridors may be found in all forested ecosites.</p> <p>A Project Proposal in Stratum II Deer Wintering Area has potential to contain corridors.</p>	<p>Movement corridor must be determined when Deer Wintering Habitat is confirmed as SWH (see above).</p> <p>A deer wintering habitat identified by the OMNRF as SWH will have corridors that the deer use during fall migration and spring dispersion.</p> <p>Corridors typically follow riparian areas, woodlots, areas of physical geography (ravines, or ridges).</p>	<p>Applicable criteria not met. Relevant features, biophysical parameters, and/or indicator species not identified through background review and/or site assessment. No further assessment undertaken.</p>

Appendix 3. Site Plan and Survey.





CABANA (66.6 m²)—UNDER CONSTRUCTION
 FILE NO. D13 (A2-21/007/M)
 (APPROVED MARCH 18, 2021)

Brutto Consulting

113 Miranda Avenue, Toronto, ON M6B 3W8
 Tel: (647) 274-8031 Email: fforani@bruttoconsulting.ca

DETAILED CONCEPT PLAN

PLAN OF LOT 23, REGISTERED PLAN 20M-969
 TOWN OF MILTON
 REGIONAL MUNICIPALITY OF HALTON

LIST OF SITE-SPECIFIC ZONING EXCEPTIONS:

- To permit a recreational concrete pad, lighting, and drainage infrastructure on a portion of the GB*15 Zone; whereas the only permitted use in a GB*15 Zone is naturalized vegetation.
- To permit a reduced Interior Side Yard for an Accessory Structure (Shed) of 1.07m; whereas the minimum required interior side yard setback is 3.0 m.
- To permit a reduced Rear Yard Setback between the Recreational Concrete Pad and the Rear Property Line of 0.48 m; whereas the minimum required rear yard setback is 6.0 m.
- To permit an increased total aggregate gross floor area for accessory buildings of 76.45 m²; whereas the maximum permitted is 66.6 m².

KEY MAP:



SITE STATISTICS:		PERMITTED	PROPOSED	SITE STATISTICS:		PERMITTED	PROPOSED
CABANA (UNDER CONSTRUCTION)			EXISTING PATIO + POOL + WALKWAY				
AREA	66.6 m ²	66.6 m ²	AREA	N/A	530.61 m ²		
HEIGHT	3.70 m	3.70 m	FRONT YARD	6.0 m	22.65 m		
FRONT YARD	6.0 m	44.50 m	SIDE YARD (E)	3.0 m	8.83 m		
SIDE YARD (E)	3.0 m	3.13 m	SIDE YARD (W)	3.0 m	7.89 m		
SIDE YARD (W)	3.0 m	42.93 m	REAR YARD	3.0 m	5.20 m		
REAR YARD	3.0 m	9.31 m					
EXISTING ACCESSORY SHED			EXISTING RECREATIONAL CONCRETE PAD				
AREA	66.6 m ²	9.85 m ²	AREA	N/A	324.11 m ²		
HEIGHT	3.70 m	2.68 m	FRONT YARD	6.0 m	56.80 m		
FRONT YARD	6.0 m	54.03 m	SIDE YARD (E)	3.0 m	27.15 m		
SIDE YARD (E)	3.0 m	50.43 m	SIDE YARD (W)	3.0 m	3.01 m		
SIDE YARD (W)	3.0 m	1.07 m	REAR YARD	3.0 m	0.48 m		
REAR YARD	3.0 m	22.54 m					
SCALE:		DRAWING NO.:	BRUTTO PROJECT No.:	REVISION		DATE:	
1:500		A100 21-970		01 ZONING RESUBMISSION		JAN 2024	
ORIGINAL DRAWING DATE:		ORIGINAL DRAWING DATE:					
VER-01		22/08/2022					

SITE STATISTICS:

PROPERTY AREA	3,528.16 m ² (0.35 ha)
LOT FRONTAGE	40.50 m
FRONT YARD	21.30 m
SIDE YARD (E)	11.01 m
SIDE YARD (W)	9.51 m
REAR YARD	30.77 m
DWELLING HEIGHT	2—STOREYS

- GENERAL NOTES**
1. GENERALLY, DRIVEWAY TO BE LOCATED TO MAXIMIZE SHEET FLOW DRAINAGE FROM HOUSE, DRIVEWAY, ETC.
 2. GENERALLY, DRIVEWAYS TO BE GRADED WITH 2.0% MIN. CROSS FALL.
 3. WHERE DITCHING IS REQUIRED, 9.0M MINIMUM 450MM LO-HED EQUIV. CSP'S ARE TO BE INSTALLED UNDER PROPOSED DRIVEWAYS.
 4. GENERALLY, HOUSE TO BE CONSTRUCTED UPON A 300MM, (MIN. VERTICAL) APRON WITH THE TOE OF THE APRON MEETING EXISTING GRADE OF LOT.
 5. GRADING OF THE APRON (I.E. WITHIN 2-4 M OF THE BUILDING) SHOULD BE MAINTAINED AT STANDARD GRADE OF BETWEEN 2% AND 5%. (MIN.)
 6. AREAS DISTURBED BY LOT GRADING SHALL BE LIMITED TO THOSE AREAS NECESSARY TO CONSTRUCT HOME, DRIVEWAY & SEPTIC BED.
 7. DOWNSPOUTS TO BE CONSTRUCTED TO SPLASH BLOCKS.
 8. MAINTAIN MINIMUM 1.22M COVER FOR FOOTINGS.
 9. STEP FOOTINGS WHERE REQUIRED.
 10. DRIVEWAYS TO DRAIN TO STREET.

UNDERSIDE OF FOOTING MAY BE LOWER THAN ELEVATION NOTED DUE TO EXISTING CONDITIONS. EXACT DEPTH OF FOOTING TO BE DETERMINED ON SITE DURING EXCAVATION FOR FOOTING

PLAN NOTES

ELEVATIONS ARE GEODETIC AND REFERRED TO THE CANADIAN GEODETIC VERTICAL DATUM (CGVD28) BY DIRECT MEASUREMENT TO A REAL TIME NETWORK. DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE METRIC AND CAN BE CONVERTED TO IMPERIAL BY DIVIDING BY 0.3048.

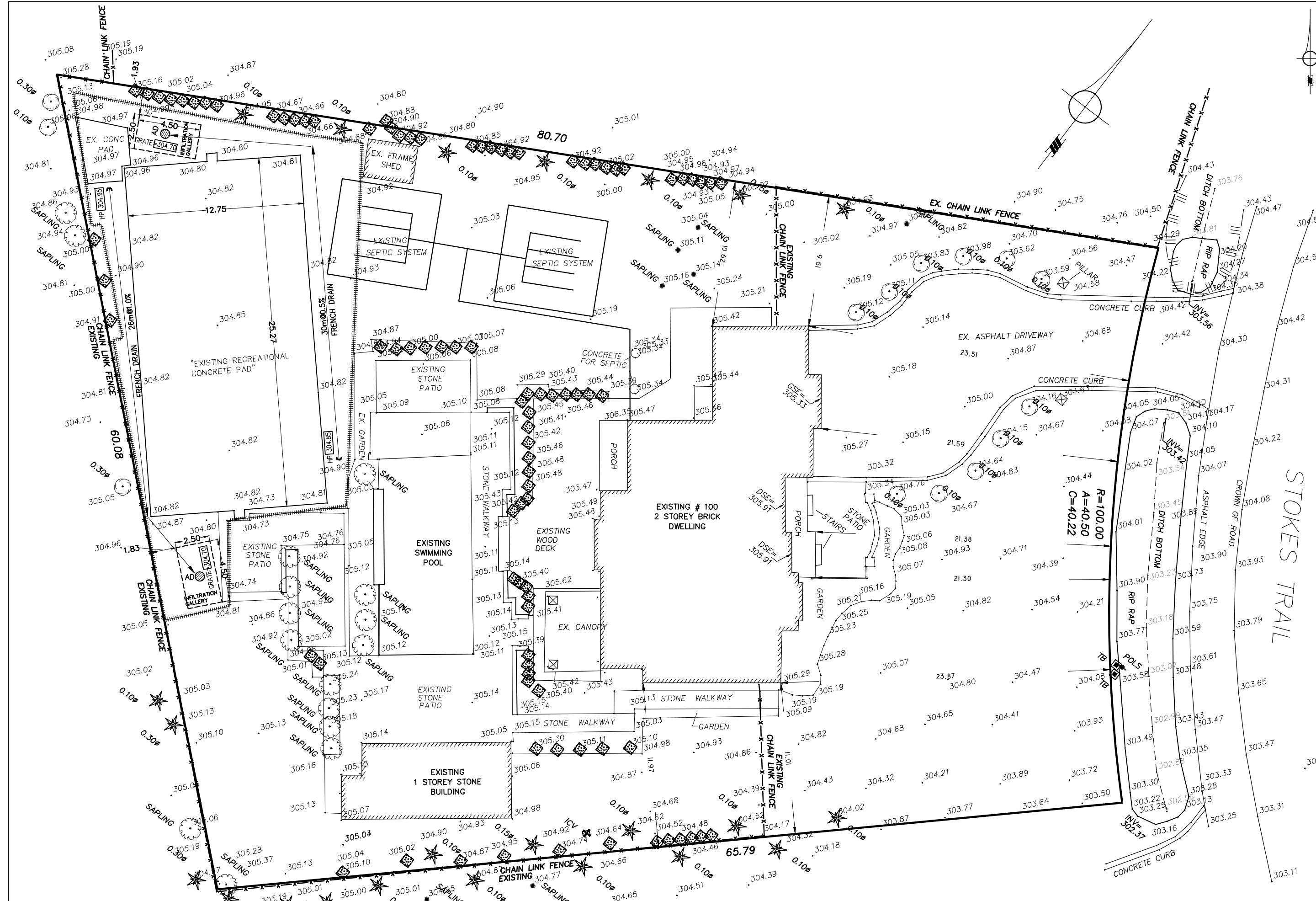
PROPERTY DIMENSIONS SHOWN HEREON ARE IN ACCORDANCE WITH IBW SURVEYORS RECORDS. (PROJECT NUMBER 39294)

REVISIONS

rev.	Date	COMMENTS
1	2023/FEB./14	ISSUED FOR REVIEW
2	2023/JULY/05	REVISED AS PER SWM REPORT
3	yyyy.mm.dd	

LEGEND

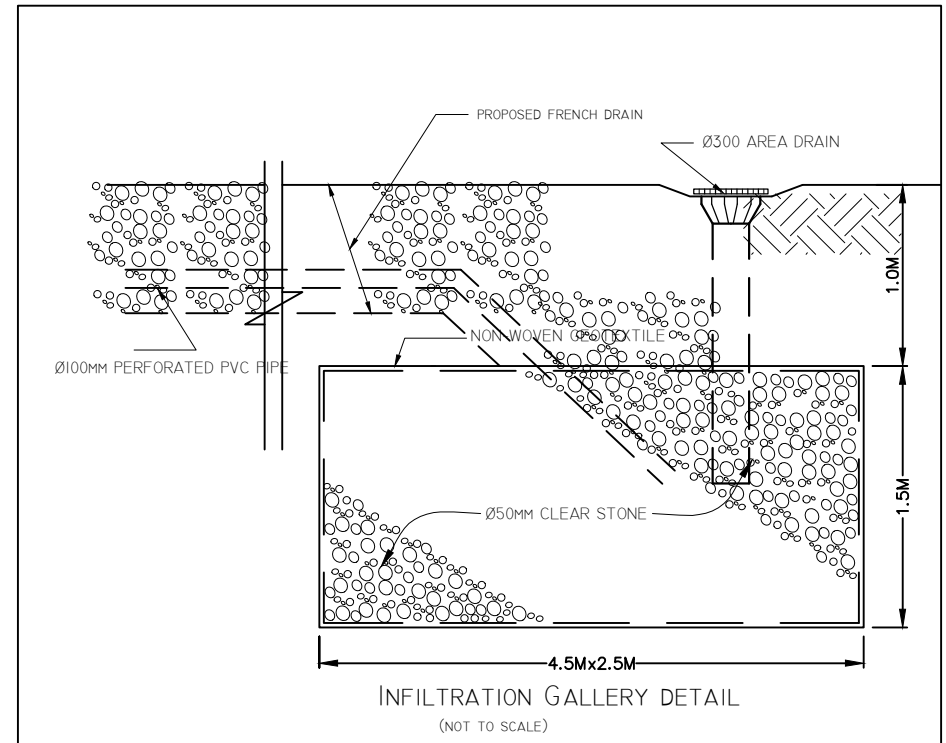
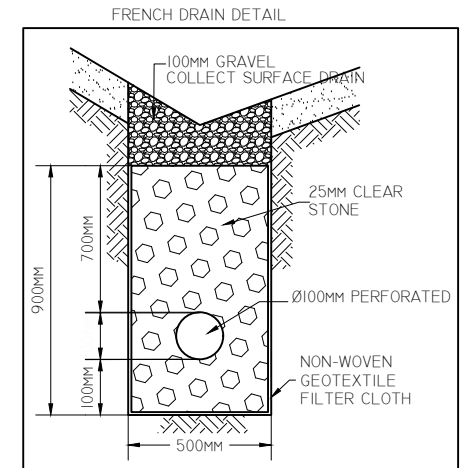
FFE	FIRST FLOOR ELEVATION	←	SWALE DRAINAGE
TFE	TOP OF FOUNDATION ELEVATION	←	SHEET DRAINAGE
BFE	BASEMENT FLOOR ELEVATION	●	ROOF LEADER
UFE	UNDERSIDE OF FOOTING ELEVATION	⊙	MH MAINTENANCE HOLE
123.45	EXISTING SPOT ELEVATION	⊙	CB CATCH BASIN
+100.00	PROPOSED ELEVATION	⊙	UP UTILITY POLE
DSE	DOOR SILL ELEVATION	⊙	WV WATER VALVE
WW	WINDOW WELL	⊙	FH FIRE HYDRANT
		⊙	AD AREA DRAIN
		⊙	DT DECIDUOUS TREE
		⊙	CT CONIFEROUS TREE
		⊙	SHRUB
		⊙	SILT FENCE



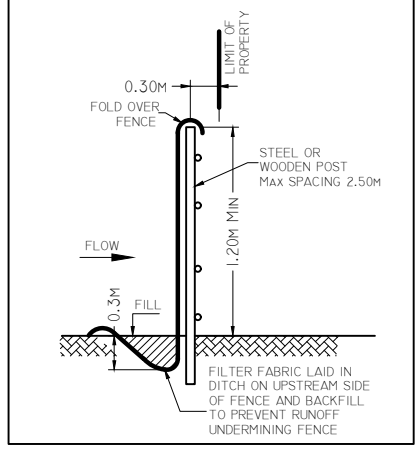
KEY PLAN - NOT TO SCALE

STORM MANAGEMENT (AS PER ENG. SWM REPORT)

Need STORAGE Volume=50.5 m³
 1. Soakaway Pit Volume (4.5x2.5x1.5)+(4.5x2.5x1.5)=16.8x2=33.6 m³
 2. FRENCH DRAIN (56mX0.5X0.9)=25.2 m³
 3. STORMWATER VOLUME REQUIREMENT TO CONTROL POST-DEVELOPMENT TO PRE-DEVELOPMENT FLOWS FOR THE RECREATIONAL PAD = 20.2 m³. ASSUMING 40% VOIDS WITH NOMINAL 50mm DIAMETER STONE BACKFILL REQUIRES EXCAVATION VOLUME OF 20.2 / 0.4 = 50.5 m³. PROPOSED EXCAVATIONS PROVIDE (33.6+25.2=58.8 m³) AND SATISFY THE STORMWATER REQUIREMENTS.

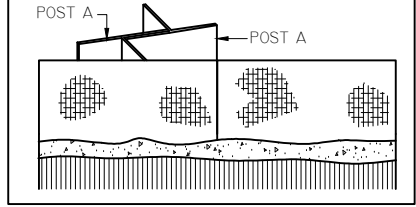


TYPICAL SEDIMENT CONTROL FENCE DETAIL (N.T.S.)



- NOTE**
1. 1.8M METAL POSTS & SNOW FENCE MUST BE USED.
 2. EXCAVATE TRENCH ALONG THE LOWER PERIMETER OF THE SITE.
 3. UNROLL FILTER FABRIC AND POSITION (ACCORDING TO DIAGRAM ABOVE) WITH THE POST ON THE DOWNSTREAM SIDE OF THE TRENCH.
 4. DRIVE POST INTO GROUND UNTIL FILTER FABRIC REACHES TRENCH BOTTOM. CURB FABRIC TOWARDS CENTER OF TRENCH AND DRIVE POST FURTHER IF NEEDED.
 5. BACKFILL AND COMPACT SOIL AGAINST THE FENCE. DO NOT TRENCH COMPLETELY.
 6. FENCE TO BE PLACED 0.60M INSIDE PROPERTY LINE.
 7. FILTER FABRIC TO BE SECURED TO SNOW FENCE WITH WIRE TIES.
 8. T-BAR POST SPACING - 5.0M.
 9. FILTER FABRIC TO BE HAVE A NON-WOVEN DENSITY OF 270G OR EQUIVALENT.

INSTALLATION OF A SEDIMENT CONTROL FENCE



CAUTION
 THIS IS NOT A LEGAL LAND SURVEY AND SHALL NOT BE USED EXCEPT FOR THE PURPOSE INDICATED IN THE TITLE BLOCK. THE WORK AND DRAWINGS HEREIN WERE COMPLETED FOR THE EXCLUSIVE USE OF OUR CLIENT AND NO LIABILITY IS ASSUMED TO ANY THIRD PARTIES OR SUBSEQUENT OWNERS.

NOTE
 WELL RECORD DATA INDICATES DEPTH TO BEDROCK = 22m AND DEPTH TO GROUNDWATER = 28m BELOW GROUND SURFACE.

