

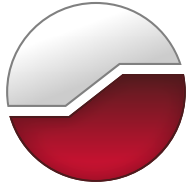


GEMTEC

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**Species at Risk Screening Assessment
Proposed Kennel Expansion
3904 March Road
Ottawa, Ontario**





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Submitted to:

Dog World
3904 March Road
Ottawa, Ontario
K0A 1L0

**Species at Risk Screening Assessment
Proposed Kennel Expansion
3904 March Road
Ottawa, Ontario**

May 29, 2020
Project: 60215.35

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1.0 INTRODUCTION

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Dogworld to carry out a Species at Risk screening assessment for the property located at 3904 March Road, in the City of Ottawa, Ontario, hereafter referred to as the “subject property”.

1.1 Purpose

Dog World is proposing an expansion of their current kennel operations, for the property located at 3904 March Road in the City of Ottawa, Ontario. The project involves the construction of two new buildings, a new septic and laneway with parking. All existing dwellings on-site are to be retained. In preparation for Site Plan Approval, a Species at Risk Screening Assessment is required for the property.

The general project area is illustrated on Figure A.1 in Appendix A, while a detailed site layout and the proposed development plan is provided on Figure A.2.

1.2 Objective and Scope of Work

The objective of the species at risk (SAR) screening assessment presented herein is twofold; 1) to identify the presence or potential presence of any SAR and their regulated habitat within the project area, and 2) to recommend established and effective avoidance and mitigation measures to ensure that the project is completed in accordance with the provincial *Endangered Species Act, 2007*.

To meet the objectives outlined above, the following scope of work was completed:

- Task 1 – Desktop Assessment
- Task 2 – Site Investigation
- Task 3 – Assessment and Reporting

2.0 METHODOLOGY

2.1 Desktop Review

A desktop information gathering exercise was completed to aid in the scoping of field investigations and to gather information relating to natural heritage features which may be present on the subject project or within 1 km of the subject property. An additional component of the desktop review was to assess the potential presence of species at risk (SAR) to occur on the subject property or within the study boundary based on a review of publicly accessible occurrence records and review of SAR habitat requirements and range maps.

Following changes to the Ontario Ministry of Natural Resources and Forestry (OMNRF) natural heritage information request process, as of 2019, the OMNRF is no longer providing responses to these requests. As such, an information request was not submitted for this project. In lieu of

a request response, the Natural Heritage Information Request Guide (OMNRF, 2018) was consulted and the data resources listed below were reviewed for relevant natural heritage feature and SAR data relating to the site.

Information regarding the potential presence of natural heritage features and SAR within the vicinity of the site was obtained from the following sources:

- Make a Map: Natural Heritage Areas (OMNRF, 2014);
- Land Information Ontario (OMNRF, 2011);
- City of Ottawa Official Plan (Ottawa, 2003);
- Ontario Geological Survey (OGS, 2019);
- Fisheries and Oceans Canada SAR Maps (DFO, 2019);
- Natural Heritage Information Centre Biodiversity Explorer (OMNR, 2013);
- Breeding Bird Atlas of Ontario (Cadman, et al., 2007)
- Atlas of Mammals of Ontario (Dobbyn, 1994);
- Ontario Herpetofaunal Atlas (Oldham and Weller, 2000);
- Ontario Ordonata Atlas (OMNR, 2005);
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2019); and
- Species at Risk in Ottawa (MacPherson, 2019).

2.2 Site Investigation

A single field investigation was completed on December 5, 2019, from approximately 09:50 to 12:20. Conditions during the site investigation were mostly cloudy, -3°C, Beaufort wind 4 and light snow. There was approximately 10 cm of snow cover on the ground at the time of the site investigation.

The field investigation was completed by traversing the site while documenting habitat conditions and the presence/absence of SAR and their regulated habitat on-site.

Photographs taken during the site investigation are provided in Appendix B.

3.0 RESULTS

3.1 Desktop Screening Results

Results of the desktop screening exercise are summarized in Table 3.1 below. The desktop screening exercise identified the potential for three avian, three mammalian, one reptilian and one plant SAR within the project area. All eight of the SAR species are considered to have a moderate potential to occur within the project area.

**TABLE 3.1
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA**

Species	ESA Status	Regional Distribution	Habitat Use	Probability of Occurrence On-Site or Within Study Area	Rationale
Avian					
Bald Eagle	Special Concern	Confirmed nest at Shirley's bay since 2012.	Nest in mature forests near open water	Low	Site lacks suitable forest habitat adjacent to open water and foraging area to support Bald Eagle activity
Bank Swallow	Threatened	12 confirmed, 2 probable and 8 possible nests in recent OBBA.	Colonial nester, burrows in eroding silt, to sand banks, sand pit walls, etc.	Low	No suitable nesting habitat located on-site or within study area. Preferred foraging field habitat is not located on-site.
Barn Swallow	Threatened	33 confirmed, 2 probable, and 3 possible nests in recent OBBA.	Nests in barns and other semi-open structures. Forages over open fields and meadows.	Moderate	Potentially suitable nesting structures and foraging habitat present on-site and within broader study area.
Bobolink	Threatened	Widespread in the Ottawa region, confirmed and probable nests found in 39 or 40 local atlas squares during recent OBBA.	Nests in dense tall grass fields and meadows, low tolerance for woody vegetation.	Moderate	Potentially suitable nesting and foraging habitat present on-site and within broader study area.
Canada Warbler	Special Concern	1 confirmed, 2 probable, 6 possible nests during recent OBBA. No critical habitat identified in Ottawa region.	Prefers wet forests with dense shrub layers.	Low	No suitable forest habitat to support Canada warbler on-site.
Cerulean Warbler	Threatened	No nests reported during recent OBBA. SARO and SARA range maps both include parts of Ottawa.	Prefers mature deciduous forests.	Low	No suitable forest habitat to support cerulean warbler on-site.
Chimney Swift	Threatened	3 confirmed, 2 probable and 11 possible nests in recent OBBA. No critical habitat identified in Ottawa.	Nests in traditional-style open brick chimneys.	Low	No suitable nesting structures on-site or within broader study area to support chimney swift.
Common Nighthawk	Special Concern	6 probable, 5 possible nests reported in recent OBBA. No critical habitat identified in Ottawa region.	Nests in a variety of open sites: beaches, fields, and gravel rooftops.	Low	Suitable habitat does not occur on-site.
Eastern Meadowlark	Threatened	Sporadic occurrences in Ottawa region, more common in rural areas with pasture or fallow fields.	Nests and forages in dense tall grass fields and meadows, higher tolerance to woody vegetation.	Moderate	Potentially suitable nesting and foraging habitat present on-site and within broader study area.
Eastern Whip-poor-will	Threatened	Primary breeding range located east, west and south of the Precambrian shield. 7 probable and 10 possible nests in recent OBBA. Critical habitat tentatively identified in 4 squares in western Ottawa.	Nests on the ground in open deciduous or mixed woodlands with little underbrush, and bedrock outcrops.	Low	No suitable woodland habitat on-site or within broader study area to support eastern whip-poor-will.
Eastern Wood-Pewee	Special Concern	4 possible, 15 probable and 19 confirmed nests in recent OBBA for Ottawa area	Woodland species, often found near clearings and edge habitat.	Moderate	Potentially suitable forest habitat on-site to support eastern wood-pewee.
Golden Eagle	Endangered	Migrant only in the Ottawa area.	Nests on remote, bedrock cliffs overlooking large burns, lakes or tundra.	Low	Suitable nesting habitat does not occur on-site.
Golden-winged Warbler	Special Concern	1 confirmed, 1 probable nest in recent OBBA. Critical habitat identified in Quebec, northwest of Ottawa.	Ground nesting, edge species. Breeds in successional scrub habitats surrounded by forests.	Low	Site is unlikely to provide suitable habitat for golden-winged warblers due to the lack of successional scrub habitat.
Grasshopper Sparrow	Special Concern	4 confirmed, 5 probable, 2 possible nests in recent OBBA	Area-sensitive grassland species, nests on ground	Low	Suitable grassland habitat to support grasshopper sparrow is not present on-site.
Henslow's Sparrow	Endangered	No nests in recent OBBA	Prefers open, moist tallgrass fields.	Low	Suitable grassland habitat to support Henslow's sparrow is not present on-site.
Loggerhead Shrike	Endangered	1 possible nest in recent OBBA. Critical habitat in Montague Township, however no confirmed nests from MNRF since 2002, and the MNRF do not consider Ottawa to include any significant habitat	Prefers grazed pastures with short grass and scattered shrubs, especially hawthorn.	Low	Preferred pasture habitat and shrub vegetation does not occur on-site.
Olive-sided Flycatcher	Special Concern	1 probable, 1 possible nest in recent OBBA.	Forest edge species, forages in open areas from high vantage points in trees.	Low	No suitable forest habitat to support olive-sided flycatcher on-site.
Peregrine Falcon	Special Concern	1 confirmed nest in recent OBBA and second nest established in 2011 in the Ottawa downtown.	Nests on cliffs near water and on more anthropogenic structures such as tall buildings, bridges and smokestacks	Low	Site lacks suitable nesting structure for peregrine falcon
Red Knot	Endangered	Migrant only, Ottawa River shores, area lagoons, etc.	Nests in the far north, shorelines and lagoons of the Ottawa River	Low	Site does not provide suitable habitat for migrant Red Knot
Red-headed Woodpecker	Special Concern	1 confirmed, 1 probable and 1 possible during recent OBBA. Nesting pair reported from village of Constance Bay in recent years.	Prefers open deciduous woodlands.	Low	Mixed woodlands study area do not provide preferred habitat and structure for nesting red-headed woodpeckers.
Rusty Blackbird	Special Concern	No nests in recent OBBA, primarily observed during migration	Wet wooded or shrubby areas (nests at edges of Boreal wetlands)	Low	Suitable habitat does not occur on-site
Short-eared Owl	Special Concern	1 confirmed, 2 probable, 2 possible nests in recent OBBA.	Ground nester, prefers open habitats: fields and marshes	Low	No suitable open field or open marsh habitat on-site.
Wood Thrush	Special Concern	5 possible, 15 probable, and 16 confirmed nests in recent OBBA for Ottawa area.	Prefers deciduous or mixed woodlands.	Moderate	Potentially suitable woodlands on-site to support wood thrush.

**TABLE 3.1
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA**

Species	ESA Status	Regional Distribution	Habitat Use	Probability of Occurrence On-Site or Within Study Area	Rationale
Mammalian					
Eastern small-footed Myotis	Endangered	Rare throughout its range. Historical records in downtown Ottawa.	Roosts in rock crevices, barns and sheds. Overwinters in abandoned mines. Summer habitats are poorly understood in Ontario, elsewhere prefers to roost in open, sunny rocky habitat and occasionally in buildings (Humphrey, 2017).	Moderate	Anthropogenic structures within study area may provide roosting habitat.
Little Brown Myotis	Endangered	Various sites in central and western parts of the Ottawa area. No critical habitat (hibernacula) identified in Ottawa to date.	Maternal colonies known to use buildings, may also roost in trees during summer. Affinity towards anthropogenic structures for summer roosting habitat and exhibit high site fidelity (Environment Canada, 2015).	Moderate	Anthropogenic structures within study area may provide roosting habitat.
Northern myotis (Northern Long-eared Bat)	Endangered	Historical records in downtown Ottawa, more recently in sites to east (Orleans, Clarence-Rockland). No critical habitat (hibernacula) identified in Ottawa to date. Ottawa and region is at southern most limit of range.	Occurs throughout eastern North America in associated with Boreal forests. Roosts mainly in trees, occasionally anthropogenic structures during summer (Environment Canada, 2015). Overwinters in caves and abandoned mines.	Low	Species affinity is for Boreal forest habitat, which is not present on-site. Species does not typically roost in anthropogenic structures.
Tri-colored Bat	Endangered	Provincially Uncommon, only 26 documented occurrences in Ontario from pre-1980 to present (MNRF, 2016). Unknown distribution in Ottawa; historical records from sites in urban Ottawa and Lanark County.	Roosts in trees, rock crevices and occasionally buildings during summer. Overwinters in caves and mines.	Moderate	Anthropogenic structures within study area may provide roosting habitat.
Reptiles					
Blanding's Turtle	Threatened	Provincial range extends from Manitoulin Island south and east. Scattered occurrence records in central Ontario. Scattered occurrence records throughout Ottawa, with numerous sites in western half of City. Critical habitat present in Ottawa.	Quiet lakes, streams and wetlands with abundant emergent vegetation; also frequently occurs in adjacent upland forests.	Moderate	Occurrence data from the Herp Atlas indicates the species has been observed within 10 km of the property as recently as 2019. Potentially suitable habitat within the adjacent local wetland and within the broader study area.
Snapping Turtle	Special Concern	Widespread and abundant throughout Ottawa and surrounding region.	Highly aquatic species found in a wide variety of wetlands, water bodies and watercourses.	Moderate	Occurrence data from the Herp Atlas indicates the species has been observed within 10 km of the property as recently as 2017. Potentially suitable habitat within the adjacent local wetland and within the broader study area.
Plants					
Butternut	Endangered	Range is confined to eastern and southern Ontario. Widespread in Ottawa and region.	Inhabits a wide range of habitats including upland and lowland deciduous and mixed forests.	Moderate	Site is in a relatively open state.
Lichens					
Pale-bellied Frost Lichen	Endangered	Historical records in downtown , however locally extirpated. No critical or regulated habitat identified in Ottawa	Grows on the bark of hardwood trees such as hop hornbeam. It may also grow on white ash, black walnut, American elm, fence posts and boulders.	Low	Species believed to be extirpated from the Ottawa area.
Insects					
Bogbean Buckmoth	Endangered	Richmond Fen	Preferred food plant is bog bean, present in a variety of wetlands including bogs, swamps and fens.	Low	Preferred wetland habitat is not present on-site.
Gypsy Cuckoo Bumble Bee	Endangered	Historic occurrences only. Range in Ontario uncertain.	Inhabits a wide range of habits: open meadows, agricultural and urban areas, boreal forests and woodlands.	Low	Currently the only known population is in Pinery Provincial Park
Monarch Butterfly	Special Concern	Widespread in the Ottawa area	Caterpillars require milkweed plants confined to meadow and open areas. Adult butterflies use more diverse habitat with a variety of wildflowers	Moderate	Open vegetation may provide suitable foraging habitat for monarch butterfly.
Mottled Duskywing	Endangered	Constance Bay area, Burnt Lands Alvar	Larval food plant (New Jersey Tea) found in sandy areas and alvars.	Low	Sandy areas and alvars not present in the study area.
Nine-spotted Lady Beetle	Endangered	Historically present but no reports in Ontario since mid-1990s	Habitat generalist	Low	No recent occurrence reports in the area, thought to be locally extirpated
Rusty-patched Bumble Bee	Endangered	Historic records in Ottawa and Gatineau	Habitat generalist	Low	Currently the only known population is in Pinery Provincial Park
Traverse Lady Beetle	Endangered	Unknown in Ottawa region. No southern Ontario records since 1985	Habitat generalist	Low	No new records of Traverse Lady Beetle in Ontario, species thought to be absent in former habitats.
West Virginia White Butterfly	Special Concern	Unknown. No NESS or NHIC records. SARO range map includes Ottawa.	Requires mature moist deciduous woods with larval host plant toothwort.	Low	Necessary vegetation and toothwort plant not present on-site or within study area
Yellow-banded Bumble Bee	Special Concern	Unknown. Historic occurrences and a few recent occurrences in Eastern Ontario/Western Quebec region.	Habitat generalist; mixed woodlands, variety of open habitat	Moderate	Open vegetation may provide suitable foraging habitat for yellow-banded bumble bee.

3.2 Vegetation Communities

The majority of the project area is a mosaic of cultural meadows, thickets and deciduous forest habitat. Vegetation communities are illustrated on Figure A.3. Table 3.2 below provides a summary of the various vegetation communities identified on-site.

Table 3.2 Vegetation Communities

ELC Type	Description	Size (ha)
Cultural Meadow (CUM)	<p>This community occurred in the northern portions of the property, fronting to March Road. Vegetation in this community was dominated by a mix of herbaceous vegetation including reed canary grass (<i>Phalaris arundinacea</i>), brome (<i>Bromus</i> sp), wild carrot (<i>Daucus carota</i>), switch grass (<i>Panicum virgatum</i>) and milkweed (<i>Asclepias syriaca</i>). Red-osier dogwood (<i>Cornus stolonifera</i>) was present surrounding the ponds and ditches near March Road.</p> <p>This community was highly disturbed with laneways and trails bisecting the community.</p>	1.76
Cultural Thicket (CUT)	<p>This community occurs south of the cultural meadows on-site. Shrubs and tree species were more prominent in this community than within the cultural meadow. Tree species included eastern hemlock (<i>Tsuga canadensis</i>), spruce (<i>Picea</i> spp), ash (<i>Fraxinus</i> spp.) and aspen (<i>Populus</i> spp.). Herbaceous vegetation included reed canary grass, brome, wild carrot, switch grass and milkweed.</p>	0.90
Deciduous Forest (FOD)	<p>This community occurs in the southern portion of the property and was primarily dominated by deciduous species.</p> <p>Trees in this community immediately adjacent to the proposed kennel expansion included trembling aspen (<i>Populus tremuloides</i>), white birch (<i>Betula papyrifera</i>), white ash (<i>Fraxinus americana</i>), eastern hemlock, white pine (<i>Pinus strobus</i>), scots pine (<i>Pinus sylvestris</i>), white spruce (<i>Picea glauca</i>), crack willow (<i>Salix fragilis</i>), black willow (<i>Salix nigra</i>) and red pine (<i>Pinus resinosa</i>).</p>	5.11
Rural Property (CVR_4)	<p>This community occurs in the centre of the property and includes the existing kennel development and residential buildings on-site. Vegetation in this community primarily consisted of manicured lawn, small patches of herbaceous vegetation and sporadic tree plantings including white ash, white spruce, crack willow, eastern white cedar (<i>Thuja occidentalis</i>) and pine.</p>	1.79

3.3 Wildlife

No targeted wildlife surveys were completed as part of this project. Typical year-round wildlife species, including blue jay and American crow were observed on-site during the site investigation. It is assumed that a greater diversity of wildlife species would be anticipated to occur on-site during the spring and summer months.

3.4 Species at Risk

A total of eight SAR species were identified as having a moderate potential to occur on-site during the desktop review.

Potentially suitable nesting structure for barn swallow, an avian SAR species, occurs on-site within the existing barn structure on-site. However, the interior and exterior of the barn were inspected and no barn swallow nests were observed. Additionally, as the barn structure is not being removed and no potential foraging habitat is being impacted, no negative impacts are anticipated to occur to barn swallow from a result of the proposed project.

Cultural meadows in the north end of the property and surrounding agricultural lands within the broader study area may provide suitable nesting and foraging habitat for bobolink (*Dolichonyx oryzivorus*), an avian SAR species. However, Bobolink are area sensitive and require grassland habitat to be larger than their defended territory; it is reported that the minimum area requirement is 5-10 ha and 30-50 ha (OMNRF, 2013a). Total cultural meadow habitat on-site is less than 2 ha, the majority of which is bisected by laneways and hedgerows. Meadow habitat on-site does not meet the recommended size criteria for bobolink as outlined in the bobolink General Habitat Description (OMNRF, 2013a). Therefore, it is unlikely to provide suitable nesting habitat for bobolink on-site. Furthermore, the proposed kennel expansion is proposed to occur outside of the cultural meadow habitat, and no changes are anticipated to occur to existing meadow habitat on-site. As such, no negative impacts are anticipated to occur to bobolink as a result of the proposed development and no mitigation measures are provided for the protection of bobolink and they are not discussed further in this report.

Cultural meadows in the north end of the property and surrounding agricultural lands within the broader study area may provide suitable nesting and foraging habitat for eastern meadowlark (*Sturnella magna*), an avian SAR species. While eastern meadowlark are less area-sensitive than bobolink, preference has still been shown for large grassland patches. The minimum patch size requirement for eastern meadowlark is about 5 ha (McCracken et al., 2013 in OMNRF, 2013b). Total cultural meadow habitat on-site is less than 2 ha, the majority of which is bisected by laneways and hedgerows. Meadow habitat on-site does not meet the recommended size criteria for eastern meadowlark as outlined in the eastern meadowlark General Habitat Description (OMNRF, 2013b). Therefore, it is unlikely to provide suitable nesting habitat for eastern meadowlark on-site. Furthermore, the proposed kennel expansion is proposed to occur outside of the cultural meadow habitat, and no changes are anticipated to occur to existing

meadow habitat on-site. As such, no negative impacts are anticipated to occur to eastern meadowlark as a result of the proposed development and no mitigation measures are provided for the protection of eastern meadowlark and they are not discussed further in this report.

The site is located within a greater area of known Blanding's turtle, a reptilian SAR species; occurrence data from the Ontario Reptile and Amphibian Atlas indicates Blanding's turtles have been observed within 10 km of the site. While suitable habitat occurs in the surrounding area, no suitable wetland habitat occurs on-site. As such, the site has the potential for Blanding's turtles to occur in a transient nature, but no category 1, 2 or 3 habitat has been confirmed for the site. As no Blanding's habitat occurs on-site and the proposed development occurs more than 110 m away from the adjacent wetland, no impacts are anticipated to occur to Blanding's turtle or their habitat.

No butternut, a plant SAR were observed on-site. As such no negative impacts are anticipated to occur to butternut as a result of the proposed development.

Three mammalian SAR species, eastern small-footed myotis (*Myotis leibii*), little brown myotis (*Myotis lucifugus*) and tri-colored bat (*Perimyotis subflavus*) were identified as having a moderate potential to occur within the project area. Trees immediately adjacent to the proposed expansion area, with a potential to be removed, were surveyed during the tree inventory completed for the project. These trees do not provide suitable snag habitat to support maternity roost habitat but may provide suitable non-maternal summer roosting habitat. The woodlands in the south end of the property may also provide maternal and non-maternal roosting habitat, but as development is proposed to occur outside of the woodlands, they are not anticipated to be impacted by the proposed kennel expansion. Furthermore, existing structures on the property may provide suitable summer non-maternal roosting habitat for bat species and are not proposed to be removed as a result of this project. The removal of trees may result in a loss of daily, summer roost habitat.

4.0 AVOIDANCE AND MITIGATION MEASURES

The following avoidance and mitigation measures are recommended in order to minimize, to the greatest extent possible, the potential impacts from the redevelopment project on the local environment, including SAR identified as having a moderate potential to occur on-site.

- To protect roosting and foraging bats, tree removal should take place outside of the spring and summer active season (typically May 1 to September 1), when bats are more likely to be using tree and buildings for daily roosting. If vegetation clearing must be conducted during the spring and summer timing window then a roost survey should be conducted by a qualified professional.
- Vegetation removal should occur outside the key breeding bird period (typically April 15 to August 15) as identified by Environment Canada for the protection of migratory birds

and to avoid contravention of the Migratory Bird Convention Act. If vegetation clearing activities must take place during the aforementioned timing window than a nest survey shall be conducted by a qualified professional.

- To protect trees identified to be retained during construction, the Critical Root Zone (CRZ) should be identified and fenced. The CRZ is defined as 10 cm from the base of the tree for every centimetre in diameter of the tree trunk at breast height.
- To protect wildlife during construction, construction should be completed in accordance with the best practices outlined in Protocols for Wildlife Protection During Construction from the City of Ottawa (Ottawa, 2015).
- Perform daily pre-work sweeps of the construction area to ensure no species at risk are present and to remove any wildlife from inside the construction area.
- All on-site construction staff should undergo environmental awareness training to be able to identify the potential SAR that may occur on-site.
- Should any additional species at risk be discovered throughout the course of the proposed works, the species at risk biologist with the local MECP district should be contacted immediately and operations modified to avoid any negative impacts to species at risk or their habitat until further direction is provided by the MECP.
- If the barn is to be removed in the future, barn swallow surveys and bat exit surveys should be completed prior to any construction activities.

5.0 CLOSURE

This Species at Risk Assessment was completed based on our understanding of the project at the time of writing. The investigation undertaken by GEMTEC with respect to this report and any conclusions or recommendations made in this report reflect the best judgements of GEMTEC based on the site conditions observed during the investigations undertaken at the date(s) identified in the report and on the information available at the time the report was prepared.

This report has been prepared for the application noted and it is based, in part, on visual observations made at the site, all as described in the report. Unless otherwise stated, the findings contained in this report cannot be extrapolated or extended to previous or future site conditions or for portions of the site that were unavailable for direct investigation.

Should new information become available during future work or other studies, GEMTEC should be requested to review the information and, if necessary, re-assess the conclusions presented herein.

We trust this report provides sufficient information for your present purposes. If you have any questions concerning this report, please do not hesitate to contact our office.

Sincerely,



Taylor Warrington, B.Sc.
Biologist



Drew Paulusse, B.Sc.
Senior Biologist

6.0 REFERENCES

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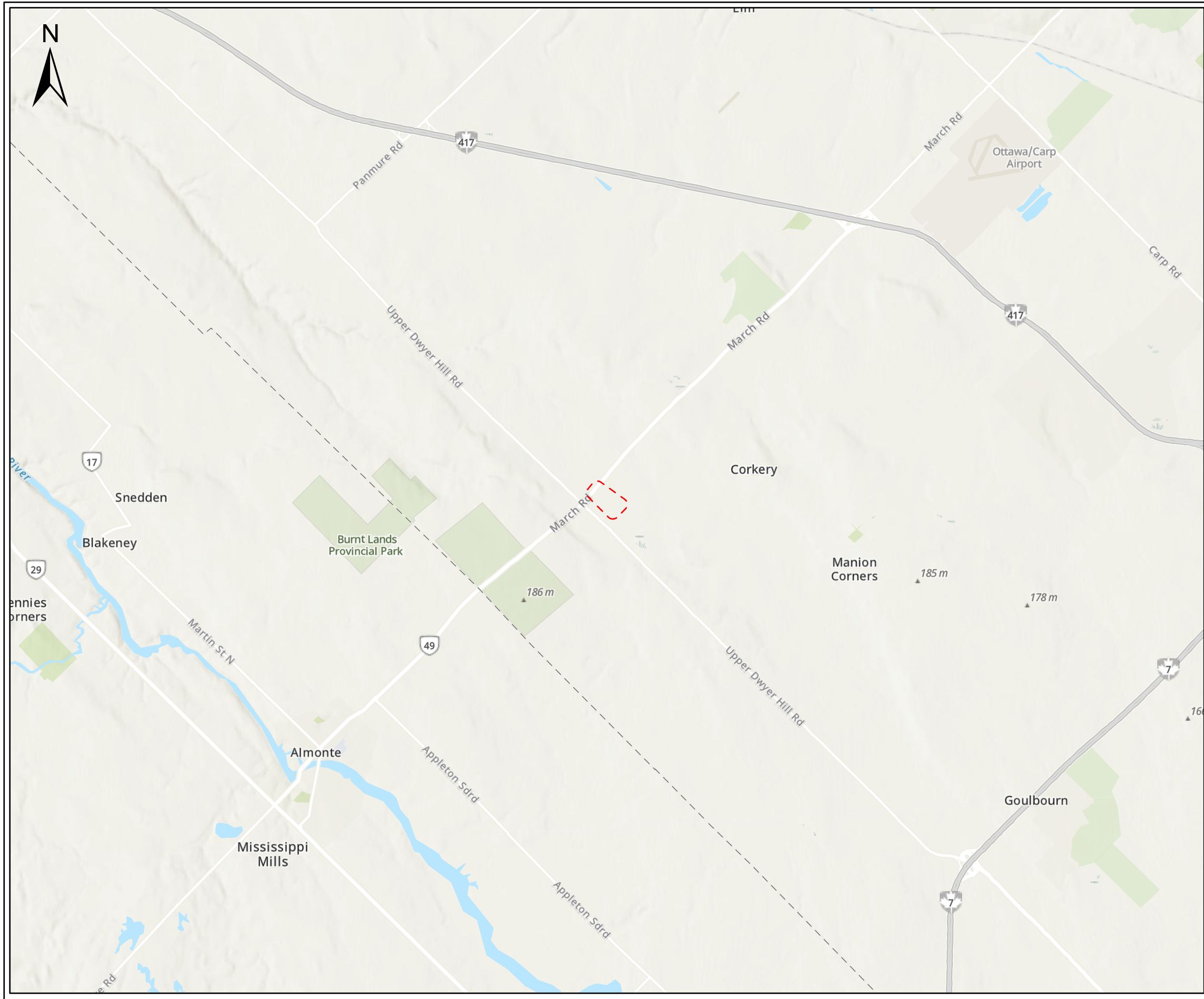
APPENDIX A

Report Figures


Figure A.1 – Site Location

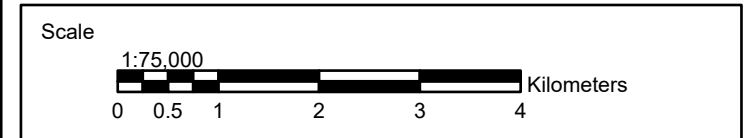
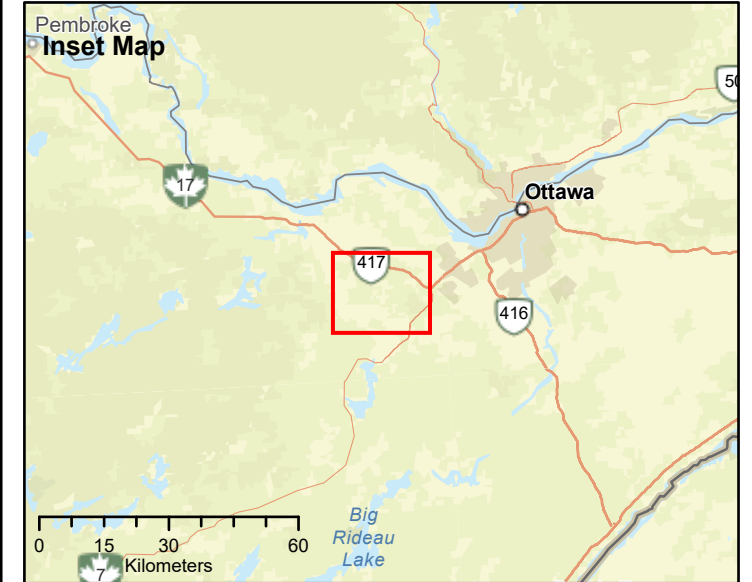
Figure A.2 – Site Layout

Figure A.3 – Vegetation Communities



Legend

 Study Area




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Client:	Dogworld	Project:	60215.35
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Location	3904 March Road Ottawa, Ontario
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Drwn By:	Chkd By:	Site Location
TW	DP	

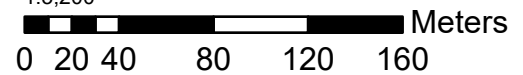

Date: May 2020	Rev.	Figure: A.1
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Coordinate System: NAD 1983 UTM Zone 18N
 Service Layer Credits: World Street Map: Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
 World Topographic Map: Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Legend

- Property Boundary
- Study Area
- Existing Building
- Proposed Development
- Proposed Driveway and Parking
- Proposed Septic
- 30 m Wetland Setback
- Local Wetland

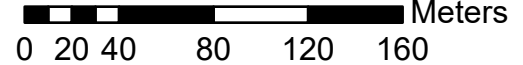

Scale		1:3,200	
		Meters	
		32 Steacie Drive, Ottawa, ON K2K 2A9 T: (613) 836-1422 www.gemtec.ca ottawa@gemtec.ca	
Client:		Dogworld	Project: 60215.35
Location 3904 March Road Ottawa, Ontario			
Drwn By: TW	Chkd By: DP	Site Layout	
Date: May 2020		Rev. 0	Figure: A.2
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Legend

- Property Boundary
- Study Area
- Existing Building
- Proposed Development
- Proposed Driveway and Parking
- Proposed Septic
- Local Wetland
- Vegetation Communities

FOD = Deciduous Forest
 CUT = Cultural Thicket
 CUM = Cultural Meadow
 CVR_4 = Rural Property

Scale		1:3,200	
		Meters	
		32 Steacie Drive, Ottawa, ON K2K 2A9 T: (613) 836-1422 www.gemtec.ca ottawa@gemtec.ca	
Client:		Dogworld	Project: 60215.35
Location 3904 March Road, Ottawa, Ontario			
Drwn By: TW	Chkd By: DP	Vegetation Communities	
Date: May 2020		Rev. 0	Figure: A.3
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APPENDIX B

Site Visit Photographs



Site Photograph 1 – Barn Exterior



Site Photograph 2 – Barn Exterior



Site Photograph 3 – Barn Interior



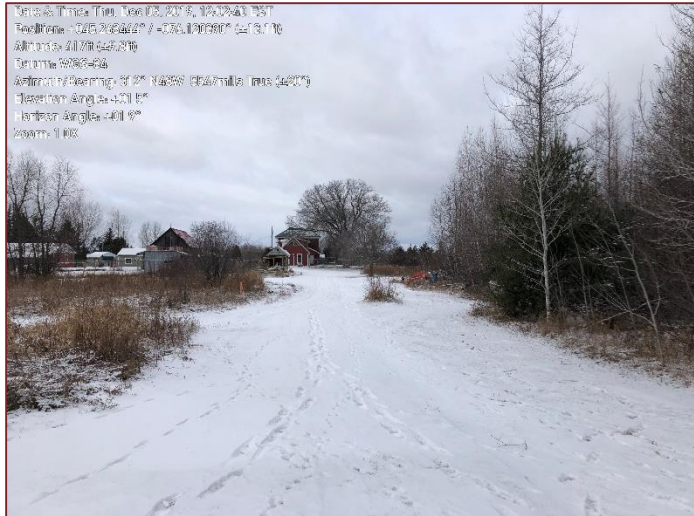
Site Photograph 4 – Barn Interior



Site Photograph 5 – Existing Development and Area of Proposed Development



Site Photograph 6 – Area of Proposed Development



Site Photograph 7 – Existing Development and Area of Proposed Development



Site Photograph 8 – Area of Proposed Development



Site Photograph 9 – Deciduous Woodlands



Site Photograph 10 – Deciduous Woodlands

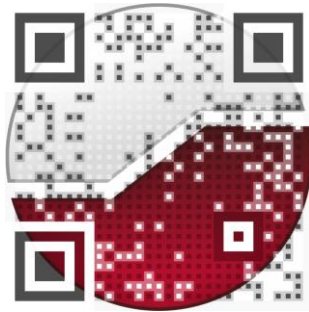


Site Photograph 11 – Cultural Thicket and Meadow Habitat



Site Photograph 12 – Cultural Thicket and Meadow Habitat

experience • knowledge • integrity



civil
geotechnical
environmental
field services
materials testing

civil
géotechnique
environnementale
surveillance de chantier
service de laboratoire des matériaux

expérience • connaissance • intégrité

