

RE MIDHURST 6 SOLAR PROJECT

Natural Heritage Records Review Report

March 18, 2011

RECURRENT
ENERGY





RE Midhurst 6 ULC

Natural Heritage Records
Review Report

RE Midhurst 6 Solar Project

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Project Report

March 18, 2011

RE Midhurst 6 ULC
RE Midhurst 6 Solar Project

Natural Heritage Records Review Report

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1. Introduction

1.1 Project Description

RE Midhurst 6 ULC is proposing to develop and operate a 9-megawatt (MW) solar photovoltaic (Solar PV) facility, on an approximately 30-hectare (ha) parcel of land, located about 10 km north of Barrie and approximately 700 m north of the Midhurst Settlement Area, in the Township of Springwater in the County of Simcoe; herein referred to as “RE Midhurst 6” or the “Project” (Figure 1.1).

1.2 Legislative Requirements

Ontario Regulation (O. Reg.) 359/09 – *Renewable Energy Approvals Under Part V.0.1 of the Act*, (herein referred to as the REA Regulation) made under the *Environmental Protection Act* identifies the Renewable Energy Approval (REA) requirements for renewable energy projects in Ontario. As per Section 4 of the REA Regulation, ground mounted solar facilities with a name plate capacity greater than 10 kilowatts (kW) are classified as Class 3 solar facilities and do require an REA.

Section 25 of the REA Regulation requires proponents of Class 3 solar projects to undertake a natural heritage records review to identify whether the Project is

1. in or within 120 m of a provincial park or conservation reserve
2. in a natural feature
3. within 50 m of an area of natural and scientific interest (earth science), or
4. within 120 m of a natural feature that is not an area of natural and scientific interest (earth science).

Natural Features are defined in Section 1.1 of the REA Regulation to be all or part of

- a) an area of natural and scientific interest (ANSI) (earth science)
- b) an ANSI (life science)
- c) a coastal wetland
- d) a northern wetland
- e) a southern wetland
- f) a valleyland
- g) a wildlife habitat, or
- h) a woodland.

Subsection 3 of Section 25 of the REA Regulation requires the proponent to prepare a report “setting out a summary of the records searched and the results of the analysis” (O. Reg. 359/09). This Natural Heritage Records Review Report has been prepared to meet these requirements.

2. Methodology and Results

The following sections document the records that were searched and analyzed and the results of the analysis, with the focus on identifying whether any natural features listed in Section 1.2 are identified on or within 120 m of the Project. The sections are organized as identified in Column 1 of the Table in Section 25 of the REA Regulation.

Records covering areas within a minimum distance of 1 km from the Project location and lands within 120 m were searched. Results are discussed below in relation to the distances specified between the Project and natural features as defined in Section 25 of the REA Regulation (see Section 1.2).

There are no planning boards, local roads boards or local services boards within the jurisdiction of the Project location and lands within 120 m. Also, the Project location and lands within 120 m are not located within the Niagara Escarpment Commission Plan Area. Therefore, no records review for these governing bodies was conducted.

Municipal planning authorities are discussed in relation to the relevant upper and lower tier municipality.

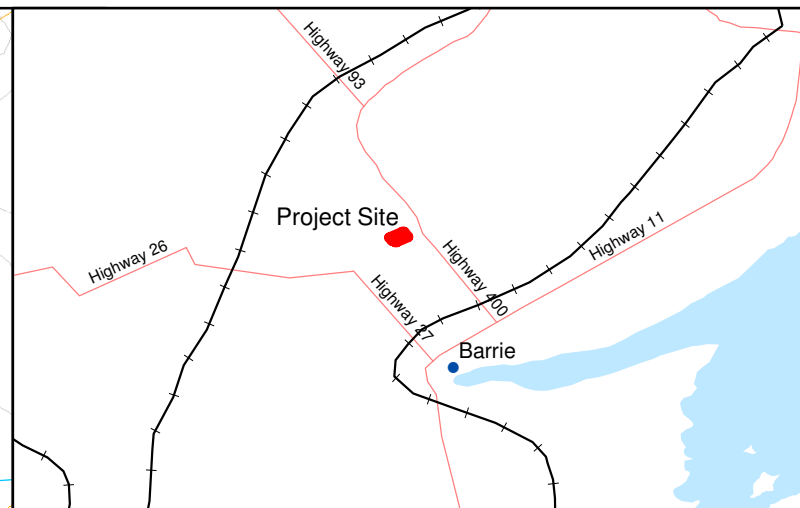
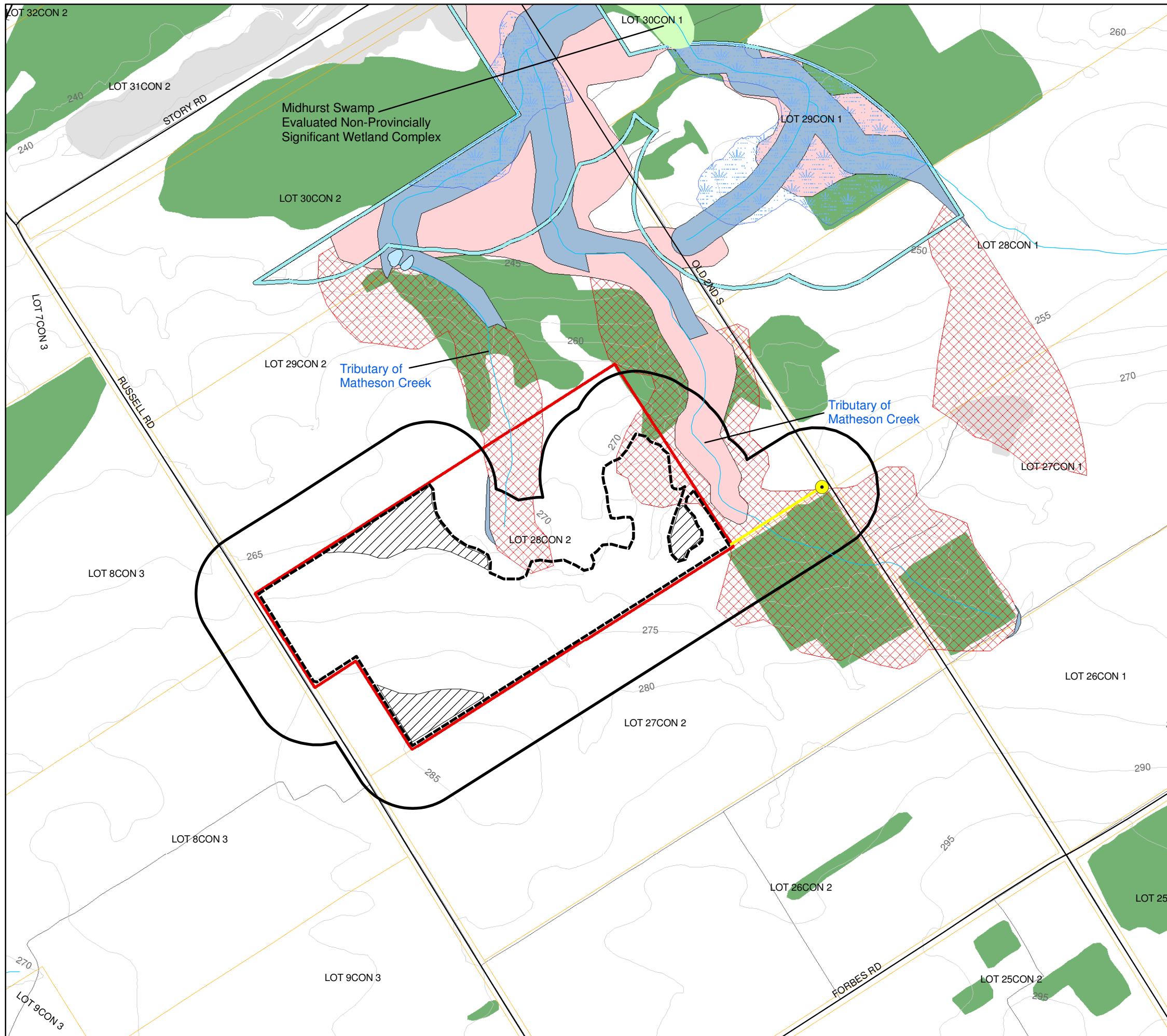
2.1 Ministry of Natural Resources Records

2.1.1 Methodology

The following MNR on-line records were reviewed:

- Ontario Crown Lands Use Mapping (<http://crownlanduseatlas.mnr.gov.on.ca/clupa.html>)
- Ontario Base Maps and natural feature layers from Land Information Ontario (LIO) (<http://www.geographynetwork.ca/website/obm/viewer.htm>)
- Natural Heritage Information Centre (NHIC) on-line mapping (<http://nhic.mnr.gov.on.ca/nhic .cfm>)
- NHIC Biodiversity Explorer (<http://www.biodiversityexplorer.mnr.gov.on.ca/nhicWEB/main.jsp>)
- NHIC Ontario Herpetofaunal Summary Atlas (<http://nhic.mnr.gov.on.ca/MNR/nhic/herps/ohs.html>)

The Midhurst District MNR office was also asked to provide any information they had available regarding natural features on or adjacent to the Project area. This information was received on May 4, 2010 (MNR, 2010).



- Legend**
- Roads
 - Topographic Contour (5 m Interval)
 - Watercourse
 - ▭ Available Lands
 - ▭ 120 m from Project Location
 - ▭ Parcels
 - ▭ Pit/Quarry
 - ▭ Waterbody
 - ▭ Evaluated Wetland
 - ▭ Woodland
- Nottawasaga Valley Conservation Authority Data**
- ▭ Meander Belt
 - ▭ Slope Hazard Area
 - ▭ NVCA Wetlands Buffer
 - ▭ Wetlands
 - ▭ Flood Hazard Area
- Project Components**
- Connection Point With Existing Distribution Line
 - New Distribution Line From Project
 - ▭ Project Location
 - ▭ Temporary Construction Laydown Area



Notes:
 1. Base data downloaded from www.geographynetwork.ca, other environmental data from LIO,
 2. Spatial referencing UTM NAD83.

Figure 1.1
 Recurrent Energy
 RE Midhurst 6
 Natural Heritage Features **HATCH™**

Back of figure

2.1.2 Results

MNR LIO Mapping

Mapping data obtained from LIO has been summarized in Figure 1.1. Key natural features identified in this figure include

- the Midhurst Swamp Locally Significant Wetland Complex is located approximately 1 km from the Project location
- one woodland is identified which overlaps the Project location, and several woodlands are located within 120 m of the project location
- no ANSIs, specific wildlife habitat features or valleylands were identified within 120 m of the Project location
- No Crown land, and therefore Crown Forest Resources, were identified within 120 m of the Project location
- no provincial parks or conservation reserves on or within 120 m of the Project location.

Midhurst District MNR Office Information

Information provided by Midhurst District MNR office did not identify any natural features that had not been previously identified (MNR, 2010).

Natural Heritage Information Center (NHIC) Database

Records reviewed from the NHIC identified an occurrence of Milksnake (*Lampropeltis triangulum*) (NHIC, 2008). This species was not identified within 120 m of the Project location, however is considered further given that they could potentially occur on or within 120 m of the Project location.

NHIC Ontario Herpetofaunal Summary Atlas

The Ontario Herpetofaunal Summary Atlas identified several species of reptile and amphibian whose ranges may overlap with the Project location and lands within 120 m (Table 2.1). Of these species, several species of conservation concern and species at risk were identified:

- Milksnake
- Snapping Turtle (*Chelydra serpentina*)
- Blanding’s Turtle (*Emydoidea blandingii*)
- Western Chorus Frog (*Pseudacris triseriata*).

Table 2.1 Reptiles and Amphibians Potentially Occurring on or within 120 m of the Project Location and their Conservation Status¹

Species		Conservation Status ²
Common Name	Scientific Name	Ontario SRANK ³
Salamanders		
Mudpuppy	<i>Necturus maculosus</i>	S4
Yellow-spotted Salamander	<i>Ambystoma maculatum</i>	S4
Four-toed Salamander	<i>Hemidactylium scutatum</i>	S4
Eastern Red-backed Salamander	<i>Plethodon cinereus</i>	S5

Species		Conservation Status ²
Common Name	Scientific Name	Ontario SRANK ³
Eastern Newt	<i>Notophthalmus viridescens</i>	S5
Frogs and Toads		
American Toad	<i>Bufo americanus</i>	S5
Western Chorus Frog	<i>Pseudacris triseriata triseriata</i>	S4
Gray Treefrog	<i>Hyla versicolor</i>	S5
Spring Peeper	<i>Pseudacris crucifer</i>	S5
American Bullfrog	<i>Rana castebiana</i>	S4
Green Frog	<i>Rana clamitans</i>	S5
Pickerel Frog	<i>Rana palustris</i>	S4
Northern Leopard Frog	<i>Rana pipiens</i>	S5
Wood Frog	<i>Rana sylvatica</i>	S5
Turtles		
Snapping Turtle	<i>Chelydra serpentina</i>	S5
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	S5
Blanding's Turtle	<i>Emydoidea blandingi</i>	S3
Snakes		
Eastern Milksnake	<i>Lampropeltis triangulum</i>	S3
Smooth Green Snake	<i>Opheodrys vernalis</i>	S4
Dekay's Brownsnake	<i>Storeria dekayi</i>	S5
Red-bellied Snake	<i>Storeria occipitomaculata</i>	S5
Eastern Gartersnake	<i>Thamnophis sirtalis sirtalis</i>	S5

¹ As determined from potential climatic domain maps in McKenney et al (2007) and range maps provided in Oldham and Weller (2000).

² Accessed from NHIC, 2008b

³ SRANK = Provincial Status (NHIC 2008b); S = Sub-national Rank (Ontario), 2 = Imperilled, 3 = Vulnerable, 4 = Apparently Secure, 5 = Secure, E = Exotic, U = Unknown

Habitat for Blanding's Turtle are protected under the Endangered Species Act, and therefore, are considered separately from the Natural Heritage Assessment conducted herein.

As species of conservation concern, potential habitat for Milksnake, Western Chorus Frog and Snapping Turtle, if present on or within 120 m of the Project location, would be considered candidate significant wildlife habitat.

2.2 Federal Government Records

2.2.1 Methodology

Natural Resources Canada's Amphibians and Reptiles of Ontario Climate Domain Maps were reviewed.

The websites of the Canadian Wildlife Service (www.cws-scf.ec.gc.ca) and Environment Canada (www.ec.gc.ca) were also reviewed. No information relevant to the Project location or lands within 120 m was available from these sources.

2.2.2 Results

The Natural Resources Canada's Amphibians and Reptiles of Ontario Climate Domain Maps was reviewed and compared with the results of the Ontario Herpetofaunal Summary Atlas (discussed in Section 2.1); no additional information was discovered in the federal records.

2.3 Conservation Authority Records

2.3.1 Methodology

The proposed Project is situated within the Nottawasaga Valley Conservation Authority (NVCA).

The NVCA was also asked to provide any information available regarding the natural features on or adjacent to the property.

2.3.2 Results

GIS information was provided by NVCA to Hatch on April 9, 2010. This information included details regarding locations of wetlands, hazard lands, and meander belts. Of these features, slope and flood hazard areas were identified on or within 120 m of the Project location (see Figure 1.1).

2.4 Municipal Records

2.4.1 Methodology

County of Simcoe

The Project is located within the upper tier municipality of County of Simcoe. Information regarding natural features was requested from County staff from the planning department during a meeting between the County of Simcoe, Hatch, and RE Midhurst 6 ULC on March 2, 2010. The County recommended reviewing their on-line mapping database (<http://maps.simcoe.ca/index.html>), which shows the general environmental and infrastructure features within the County, as well as high-resolution satellite imagery.

This information was obtained and reviewed (County of Simcoe, 2009).

Township of Springwater

The Project is also located within the lower tier municipality of the Township of Springwater. Information regarding natural features was requested from Township staff from the planning department during a meeting between the Township of Springwater, Hatch, and RE Midhurst 6 ULC on March 8, 2010. No information was available, however it was recommended that the zoning by-law be reviewed.

The Springwater Zoning By-Law was searched to find any records that may identify natural features on or within 120 m of the Project location (TSW 2005).

2.4.2 Results

County of Simcoe

Mapping available on the County's website did not identify any natural features beyond those already discussed.

The County of Simcoe Official Plan (2008) is available on line. Land Use Designations (Schedule 5.1) shows the Project location as a mix of agricultural, rural and greenland. Neither the

Evaluated Wetlands schedule (Schedule 5.2.2), nor the Areas of Natural and Scientific Interest schedule (Schedule 5.2.3) identify natural features on or within 120 m of the Project location.

Township of Springwater

Schedule A of the Springwater Zoning By-Law shows that a portion of the eastern part of the Project location, entering in the northeastern corner is zoned as an Environmental Protection Zone (TSW, 2005). No information regarding natural features was identified.

2.5 Other Records

2.5.1 Methodology

In addition to the sources identified above, the following records were also reviewed:

- Ontario Breeding Bird Atlas data (Bird Studies Canada et al., 2006)
- Atlas of the Mammals of Ontario (Dobbyn, 1994)
- Important Bird Areas of Canada website (<http://www.ibacanada.ca/mapviewer.jsp?lang=en>).

2.5.2 Results

Map square 17PK02 in the Ontario Breeding Bird Atlas overlaps the Project location and lands within 120 m. Results from surveys within this square were reviewed to determine what bird species can be expected to occur on or within 120 m of the Project location (results of the surveys within this square are provided in Appendix A). Of the species that were recorded, several species of conservation concern/species at risk were identified:

- Bobolink (*Dolichonyx oryzivorus*)
- Olive-sided Flycatcher (*Contopus cooperi*)
- Red-headed Woodpecker (*Melanerpes erythrocephalus*)
- Common Nighthawk (*Chordeiles minor*)
- Forest breeding species [(Golden-winged Warbler (*Vermivora chrysoptera*), Canada Warbler (*Wilsonia canadensis*)].

Habitat for Bobolink is protected under the Endangered Species Act, and therefore is considered separately from the Natural Heritage Assessment conducted herein.

As species of conservation concern, potential habitat for Olive-sided Flycatcher, Red-headed Woodpecker, Golden-winged Warbler, Canada Warbler and Common Nighthawk if present on or within 120 m of the Project location, would be considered candidate significant wildlife habitat.

No Important Bird Areas are identified on or within 120 m of the Project location.

The Atlas of the Mammals of Ontario (Dobbyn, 1994) identified several species of mammals that may occur on or within 120 m of the Project location. This list of these species is provided in Table 2.2. None of these species are considered to be species of conservation concern or species at risk.

Table 2.2 Mammal Species Potentially Occurring on or within 120 m of the Project Location¹

Species		Conservation Rank ²
Common Name	Scientific Name	Ontario SRANK ³
Shrews and Moles		
Smoky Shrew	<i>Sorex fumeus</i>	S5
Common Shrew	<i>Sorex cinereus</i>	S5
Star-nosed Mole		
Northern Short-tailed Shrew	<i>Blarina brevicauda</i>	S5
Bats		
Little Brown Bat	<i>Myotis lucifuga</i>	S5
Silver-haired Bat	<i>Lasiurus noctivagans</i>	S4
Big Brown Bat	<i>Epstesicus fuscus</i>	S5
Eastern Red Bat	<i>Lasiurus borealis</i>	S4
Hoary Bat	<i>Lasiurus cinereus</i>	S4
Rabbits and Hares		
Eastern Cottontail	<i>Sylvilagus floridanus</i>	S5
Snowshoe Hare	<i>Lepus americanus</i>	S5
Rodents		
Eastern Chipmunk	<i>Tamias striatus</i>	S5
Woodchuck	<i>Marmota monax</i>	S5
Grey Squirrel	<i>Sciurus carolinensis</i>	S5
Red Squirrel	<i>Tamiasciurus hudsonicus</i>	S5
Northern Flying Squirrel	<i>Glaucomys sabrinus</i>	S5
Beaver	<i>Castor canadensis</i>	S5
White-footed Mouse	<i>Peromyscus leucopus</i>	S5
Deer Mouse	<i>Peromyscus maniculatus</i>	S5
Meadow Vole	<i>Microtus pennsylvanicus</i>	S5
Muskrat	<i>Ondatra zibethicus</i>	S5
Porcupine	<i>Erethizon dorsatum</i>	S5
Norway Rat	<i>Rattus norvegicus</i>	SE
House Mouse	<i>Mus musculus</i>	SE
Meadow Jumping Mouse	<i>Zapus hudsonius</i>	S5
Carnivores		
Coyote	<i>Canis latrans</i>	S5
Grey Wolf	<i>Canis lupus</i>	S4
Red Fox	<i>Vulpes vulpes</i>	S5
Raccoon	<i>Procyon lotor</i>	S5
Ermine	<i>Mustela erminea</i>	S5
Mink	<i>Mustela vison</i>	S5
Striped Skunk	<i>Mephitis mephitis</i>	S5
Ungulates		
White-tailed Deer	<i>Odocoileus virginianus</i>	S5

¹ Based on Range Maps provided in Dobbyn, 1994.

² Accessed from NHIC, 2008b

³ SRANK = Provincial Status (NHIC, 2008b); S = Sub-national Rank (Ontario), E = Exotic species, 2 = Imperilled, 3 = Vulnerable, 4 = Apparently Secure, 5 = Secure, ? = Rank Uncertain

3. Summary of Results

Table 3.1 summarizes the results of the records review according to the features identified in Section 1.3. A map depicting the identified natural features on and in proximity to the site is provided in Figure 1.1.

Table 3.1 Summary of Records Review Determinations

Determination to be Made	Yes/No	Description
If the Project in or within 120 m of a provincial park or conservation reserve	No	
Is the Project in a natural feature?	Yes	There is a small portion of woodland identified on the Project location
Is the Project within 50 m of an ANSI (earth science)?	No	The nearest earth science ANSI is located several kilometres from the Project location.
Is the Project within 120 m of a natural feature that is not an ANSI (earth science)?	Yes	There are woodlands located within 120 m of the Project location.

As per Section 26 of the REA Regulation, a site investigation will be required to confirm the features identified during this records review. The site investigation will i) identify if any corrections to the information presented herein are required, ii) determine whether any additional natural features exist on or adjacent to the Project location, iii) confirm the boundaries of the natural features within 120 m of the Project, and iv) determine the distance from the Project to the natural feature boundary.

4. References

Bird Studies Canada, Ontario Field Ornithologists, Environment Canada, Ontario Nature, and Ontario Ministry of Natural Resources. 2006. Ontario Breeding Bird Atlas Internet Site. Available on-line at www.birdsontario.org/atlas/atlasmain.html. Accessed February 16, 2010.

County of Simcoe. 2010. Simcoe County Interactive Mapping. Available on-line at <http://maps.simcoe.ca>. Accessed February 24, 2010; Last Updated December 2009.

County of Simcoe. 2008. County of Simcoe Official Plan. Available on-line at http://www.simcoe.ca/municipalservices/planning/policyplanning/wscos_002389. Accessed October 4, 2010.

Dobbyn, J.S. 1994. Atlas of the Mammals of Ontario. Federation of Ontario Naturalists. 122 pp.

Government of Canada. 2009a. Species Profile – Red-headed Woodpecker. Government of Canada, Species at Risk Public Registry, Available on-line at http://www.sararegistry.gc.ca/species/speciesDetails_e.cfm?sid=57. Accessed February 24, 2010; Last Updated January 11, 2010.

Government of Canada. 2009b. Species Profile – Olive-sided Flycatcher. Government of Canada, Species at Risk Public Registry, Available on-line at

http://www.sararegistry.gc.ca/species/speciesDetails_e.cfm?sid=999. Accessed February 24, 2010; Last Updated January 11, 2010.

Ministry of Natural Resources (MNR). 2010. Letter. A. McLachlan (District Planner, MNR) to N. Boucher (Aquatic Biologist, Hatch Ltd.). May 4, 2010.

McKenney, D., M. Oldham, J. Bogart, and B. Mackey. 2007. Amphibians and Reptiles of Ontario. Natural Resources Canada. Available on-line at <http://cfs.nrcan.gc.ca/subsite/glfc-amphibians>. Accessed February 17, 2010; Last Updated November 30, 2007.

Natural Heritage Information Centre (NHIC). 2008. Geographic Query. Ontario Ministry of Natural Resources, Queen's Printer for Ontario. Available on-line at <http://nhic.mnr.gov.on.ca/MNR/nhic/queries/geographic.cfm>. Accessed February 12, 2010, Last Updated June 27, 2008.

Poulin, R. G., S. D. Grindal, and R. M. Brigham. 1996. Common Nighthawk (*Chordeiles minor*), The Birds of North America On-line (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America On-line: <http://bna.birds.cornell.edu/bna/species/213>. Accessed February 17, 2010.

Township of Springwater (TSW). 2005. Township of Springwater – Comprehensive Zoning By-Law. Accessed on-line at <http://www.springwater.ca/Services/Planning/ZoningBy-Law/index.htm>. Accessed February 24, 2010.

Appendix A

Ontario Breeding Bird Data



Square Summary (17PK02)

#species (1st atlas)				#species (2nd atlas)				#hours		#pc done	
poss	prob	conf	total	poss	prob	conf	total	1st	2nd	road	offrd
31	39	30	100	20	32	50	102	48	46	59	2

Region summary (#13: Simcoe County)

#squares	#sq with data		#species		#pc done	target #pc
	1st	2nd	1st	2nd		
68	63	65	181	190	2075	850

Target number of point counts in this square: 21 road side, 4 off road (2 in deciduous forest, 1 in coniferous forest, 1 in mixed forest). Please try to ensure that each off-road station is located such that the entire 100m radius circle is within the prescribed habitat.

SPECIES	Code		%		SPECIES	Code		%		SPECIES	Code		%	
	1st	2nd	1st	2nd		1st	2nd	1st	2nd		1st	2nd	1st	2nd
Canada Goose	FY	AE	58	95	Black-crown N.-Heron † §	H		12	9	Caspian Tern †			1	3
Trumpeter Swan †		H	0	43	Yellow-crn N.-Heron †			0	0	Black Tern † §			30	21
Wood Duck	FY	H	76	78	Turkey Vulture	H	P	77	84	Common Tern §			34	23
Gadwall ‡			6	4	Osprey	H	NY	42	53	Forster's Tern † §			0	1
American Wigeon			6	12	Northern Harrier	P		76	66	Mourning Dove	NY	AE	95	95
American Black Duck	P	FY	44	47	Sharp-shinned Hawk	H		50	60	Yellow-billed Cuckoo		S	6	18
Mallard	FY	FY	93	95	Cooper's Hawk		FY	17	47	Black/Yell-billed Cuckoo			0	18
<u>Blue-winged Teal</u>	P		79	53	Northern Goshawk			15	27	Black-billed Cuckoo	S	S	58	75
Northern Shoveler			11	10	Red-should Hawk †		H	17	44	Eastern Screech-Owl			12	49
Northern Pintail			14	7	<u>Broad-winged Hawk</u>	H		58	66	Great Horned Owl	T	FY	74	55
Green-winged Teal			0	18	Red-tailed Hawk	NY	T	92	81	Barred Owl		S	20	49
Redhead †			3	1	American Kestrel	NE	V	85	76	Long-eared Owl ‡			3	4
Ring-necked Duck			4	21	Merlin ‡			1	21	Short-eared Owl †			1	4
Lesser Scaup ‡			1	1	Yellow Rail †			3	3	North Saw-whet Owl			9	12
Hooded Merganser			25	30	King Rail †			3	3	<u>Common Nighthawk</u>	D		63	40
Common Merganser			36	46	Virginia Rail	S		36	47	Whip-poor-will	T	S	60	38
Red-breast Merganser			9	20	Sora		DD	31	43	<u>Chimney Swift</u>	H		63	32
Gray Partridge ‡			0	1	Common Moorhen			17	12	Ruby-thr Hummingbird	P	D	88	95
Ring-necked Pheasant			15	10	American Coot			15	12	Belted Kingfisher	P	AE	95	92
Ruffed Grouse	FY	H	92	81	Coot/Moorhen			0	0	<u>Red-headed Woodpecker †</u>	P		65	29
Wild Turkey		S	0	81	Sandhill Crane ‡			0	21	Yellow-bellied Sapsucker	P	T	80	95
<u>Common Loon</u>			28	52	Killdeer	FY	NE	96	96	Downy Woodpecker	P	FY	95	96
Pied-billed Grebe			22	32	Rock Dove	NY	AE	87	84	Hairy Woodpecker	P	FY	95	93
Double-crest Cormorant §		X	11	27	Spotted Sandpiper	H	H	95	78	Northern Flicker	CF	D	98	95
<u>American Bittern</u>	S		50	44	<u>Upland Sandpiper</u>	H		60	38	Pileated Woodpecker	H	AE	80	93
Least Bittern †			12	23	Common Snipe	D	S	79	61	<u>Olive-sided Flycatcher</u>	S		22	20
Great Blue Heron §	H		77	63	American Woodcock	FY	T	79	72	Eastern Wood-Pewee	T	T	96	96
Great Egret †			0	1	Ring-billed Gull §			6	33	Alder Flycatcher	S	S	47	76
Green Heron §	H	NY	84	70	Herring Gull §			49	38	<u>Willow Flycatcher</u>			42	55

[next page >>](#)

Ontario Breeding Bird Atlas - Summary Sheet for Square 17PK02 (page 2 of 3)

SPECIES	Code		%		SPECIES	Code		%		SPECIES	Code		%	
	1st	2nd	1st	2nd		1st	2nd	1st	2nd		1st	2nd	1st	2nd
Least Flycatcher	T	T	88	89	<u>Marsh Wren</u>	H		42	33	Kirtland's Warbler †			1	0
Eastern Phoebe	T	AE	95	96	Golden-crown Kinglet			7	21	Prairie Warbler †			6	9
Gr Crested Flycatcher	A	T	98	96	Ruby-crown Kinglet			6	7	Bay-breasted Warbler ‡			1	3
Eastern Kingbird	NY	CF	98	95	Blue-gr Gnatcatcher ‡			14	24	Cerulean Warbler †			12	16
Loggerhead Shrike †			15	3	Eastern Bluebird	NY	AE	57	73	Black-white Warbler	S	T	84	93
Yellow-throated Vireo ‡			30	26	Veery	T	T	95	96	American Redstart	A	S	85	90
Blue-headed Vireo			9	38	Swainson's Thrush			14	20	Ovenbird	T	A	98	96
Warbling Vireo	S	T	92	93	Hermit Thrush	H	CF	39	69	North Waterthrush	S	A	61	86
Philadelphia Vireo ‡			1	4	Wood Thrush	T	T	90	92	Mourning Warbler	S	DD	63	81
Red-eyed Vireo	T	AE	93	96	American Robin	NY	CF	98	96	Common Yellowthroat	A	A	92	95
Blue Jay	P	NY	96	96	Gray Catbird	A	P	98	96	<u>Canada Warbler</u>			46	56
American Crow	N	CF	98	96	Northern Mockingbird			6	18	Scarlet Tanager	T	S	79	86
Common Raven		FY	7	55	Brown Thrasher	T	FY	96	92	Eastern Towhee	A		53	73
Horned Lark	P	T	68	47	European Starling	NY	NY	98	96	Chipping Sparrow	CF	NY	96	96
<u>Purple Martin</u>	NY		61	27	Cedar Waxwing	CF	FY	98	96	Clay-colored Sparrow			14	36
Tree Swallow	AE	AE	98	96	Blue-winged Warbler			4	24	Field Sparrow	T	T	84	87
North Rgh-wing Swallow	H	FY	68	56	Golden-winged Warbler			30	43	Vesper Sparrow	T	S	84	70
Bank Swallow §	AE	H	88	58	Blue/Gold-wing Warbler ‡			0	15	Savannah Sparrow	CF	NE	88	81
Cliff Swallow §	H	V	82	63	Brewster's Warbler †			0	3	Grasshopper Sparrow		A	38	41
Barn Swallow	NY	AE	96	95	Nashville Warbler	S	T	74	84	Song Sparrow	S	CF	98	96
Black-capped Chickadee	FY	CF	96	96	Northern Parula			12	21	Swamp Sparrow	S	CF	84	86
Tufted Titmouse †			1	0	Yellow Warbler	T	T	98	92	White-throat Sparrow	S	T	95	87
Red-breast Nuthatch		CF	52	90	Chestn-sided Warbler		T	68	95	Dark-eyed Junco			25	21
White-breast Nuthatch	FY	FY	87	93	Magnolia Warbler		S	20	58	Northern Cardinal	T	P	66	84
Brown Creeper	H	S	55	60	Black-thr Blue Warbler	S	T	22	63	Rose-breast Grosbeak	T	FY	95	93
Carolina Wren ‡			1	6	Yellow-rumped Warbler		CF	41	78	Indigo Bunting	FY	FY	90	93
House Wren	NE	AE	87	95	Black-thr Green Warbler		T	34	90	Bobolink	T	T	87	83
Winter Wren		S	68	95	Blackburnian Warbler		T	28	58	Red-wing Blackbird	T	NE	96	96
Sedge Wren			19	20	Pine Warbler		T	26	80	Eastern Meadowlark	T	CF	88	83

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SPECIES	Code		%	
	1st	2nd	1st	2nd
Western Meadowlark ‡			6	1
Yellow-h Blackbird †			1	0
Rusty Blackbird ‡			1	1
Brewer's Blackbird ‡			3	7
Common Grackle	CF	FY	96	96
Brown-head Cowbird	FY	NY	98	95
Orchard Oriole ‡			0	1
Baltimore Oriole	FY	CF	96	96
Purple Finch	S	S	66	73
House Finch		NY	3	72
Red Crossbill ‡			7	1
White-winged Crossbill ‡			1	3
Pine Siskin			17	18
American Goldfinch	P	NY	98	96
Evening Grosbeak			15	15
House Sparrow	FY	AE	88	75

This list includes all species found during the Ontario Breeding Bird Atlas (1st atlas: 1981-1985, 2nd atlas: 2001-2005) in the region #13 (Simcoe County). Underlined species are those that you should try to add to this square. They have not yet been reported during the 2nd atlas, but were found during the 1st atlas in this square or have been reported in more than 50% of the squares in this region during the 2nd atlas so far. In the species table, "BE 2nd" and "BE 1st" are the codes for the highest breeding evidence for that species in square 17PK02 during the 2nd and 1st atlas respectively. The % columns give the percentage of squares in that region where that species was reported during the 2nd and 1st atlas (this gives an idea of the expected chance of finding that species in region #13). Rare/Colonial Species Report Forms should be completed for species marked: § (Colonial), ‡ (regionally rare), or † (provincially rare). Current as of 16/02/2010. An up-to-date version of this sheet is available from <http://www.birdsontario.org/atlas/summaryform.jsp?squareID=17PK02>

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