

# Appendix C

## Technical Memos

# Appendix C1

## Summary of 2013 Breeding Birds Surveys – Route B Transmission Line Study Area



**Henvey Inlet Wind LP**

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## **Summary of 2013 Breeding Birds Surveys – Route B Transmission Line Study Area**

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## List of Acronyms and Glossary

HONI ..... Hydro One Networks Inc.

SAR ..... Species at Risk

UTM ..... Universal Transverse Mercator

# 1. Introduction

In 2013, Stantec Consulting Ltd. (Stantec) collected field data to determine baseline conditions within the Route B Transmission Line study area. Data collected by Stantec included:

- Breeding Birds;
- Herpetological;
- Ecosite Classification<sup>1</sup>; and
- Incidental Wildlife Observations.

This report has been prepared by AECOM to summarize the **Breeding Birds** field data for the Route B Transmission Line study area. This is based on raw field and GIS data collected by Stantec during the 2013 season. This information was provided to AECOM by Stantec in October 2014. The following provides the work plan written by Stantec outlining data collection methods as well as AECOM's summary and analysis of the data collected, and assumptions made concerning the data.

Stantec provided AECOM with the following documents which were used to produce this report:

- Scanned handwritten field notes entitled "60824\_TL\_MTO\_BirdingPointsCounts.pdf";
- Scanned handwritten field notes entitled "60824\_TL\_MTO\_BreedingBirdObservations.pdf";
- Scanned handwritten field notes entitled "60824\_OwlPlayback\_Crepuscular.pdf"; and
- An Excel spreadsheet indicating all survey locations entitled "All survey locations\_UTM\_MC\_07112013.xlsx".

A copy of the above files is provided in **Appendix A**<sup>2</sup>.

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1. *Note: Based on AECOM's review of the raw field data provided by Stantec, undertaking digitization of these data would be inefficient and potentially inaccurate; therefore, interpretation of aerial imagery in combination with 2015 field investigations were instead completed by qualified AECOM Biologists and are considered to be sufficient to support this Environmental Assessment.*

2. *Records of Species At Risk considered to be restricted are not being made public due to the threat of poaching experienced by these species. These records will be provided under a separate cover to the Ministry of Natural Resources and Forestry (MNR) and / or Environment Canada – Canadian Wildlife Service (EC-CWS) for permitting purposes.*

## 2. Methods

### 2.1 Work Plan

The following section provides a description of work plan methods written by Stantec for the **Breeding Birds** surveys. This description is taken directly from Stantec's *Terrestrial Survey Work Program* (Stantec, 2013).

A complete copy of Stantec's *Terrestrial Survey Work Program* (Stantec, 2013) is provided in **Appendix B**.

#### 2.1.1 Daytime Breeding Birds

***“Daytime breeding birds (Two surveys, late May to early July):***

*Two rounds of breeding bird surveys will be conducted in each major habitat type with the Study Area (woodland, rock barren and wetland). Surveys will consist of ten-minute point counts, in conjunction with area searches (wandering transects) between point count locations. The area searches will allow for collection a comprehensive species list, whereas point counts will provide information on species density.*

*Surveys would take place starting 30 minutes before sunrise and continue until approximately 10:00 am. As per Environment Canada guidance, a minimum of 20 point counts will be sited in each major habitat type. However, given the variability of habitat types that occur within the Study Area, it is anticipated that many point counts may cover more than one habitat type.*

*In marsh habitat, play-back call surveys for marsh breeding birds will be conducted following the ten-minute point count, to assist in detection or more secretive marsh bird species, specifically, the threatened Least Bittern.*

*Location of all species at risk observations will be geo-referenced using a hand-held GPS unit, mapped and compared to ecosite classification to develop habitat mapping for each species.”*

#### 2.1.2 Crepuscular Breeding Birds

***“Crepuscular breeding birds (Two surveys, May and June):***

*Eastern Whip-poor-will surveys will be conducted in suitable open habitat within forested areas. Surveys will be conducted in May and June and will consist of six-minute point counts at stations spaced within the Project Location and Transmission Line corridor. Due to the remote location of much of the Study Area, survey locations may be selected with consideration to access and surveyor safety.*

*Surveys will begin approximately 30 minutes after sunset within appropriate weather conditions (not in high winds, persistent rain or an overcast sky) and will, if possible, coincide with the full moon. All individuals heard will be recorded, with an estimated direction and distance from the observer.”*

## 3. Results

The data presented below take into consideration only those observations which fall within the Route B Transmission Line study area.

### 3.1 Breeding Bird Survey Study Area

#### 3.1.1 Daytime Breeding Birds

Daytime breeding bird surveys were conducted along the portion of the Route B Transmission Line study area which follows Highway 69; however, the portions of the Route B Transmission Line study area located from Woods Road crossing east through the greenfield area to the existing 500 kV HONI transmission line and along the existing 500 kV HONI system were not studied. In general, the point count stations were both numerous and widespread across the studied portion of the Route B Transmission Line study area. Point count breeding bird survey stations are shown in **Figure 3-1**.

The breeding bird area searches were conducted as wandering transects between point count stations. UTM coordinates were not recorded therefore the routes of the area searches could not be mapped. It is assumed that these surveys were completed throughout the same portion of the Route B Transmission Line study area as the point count surveys.

#### 3.1.2 Crepuscular Breeding Birds

Crepuscular breeding bird surveys targeting Whip-poor-will (*Antrostomus vociferus*) were conducted along the portion of the Route B Transmission Line study area which follows Highway 69; however, the portions of the Route B Transmission Line study area located from Woods Road crossing east through the greenfield area to the existing 500 kV HONI transmission line and along the existing 500 kV HONI system were not studied. Refer to **Figure 3-1** for the locations of crepuscular breeding bird (Whip-poor-will) survey stations.

### 3.2 Breeding Bird Results

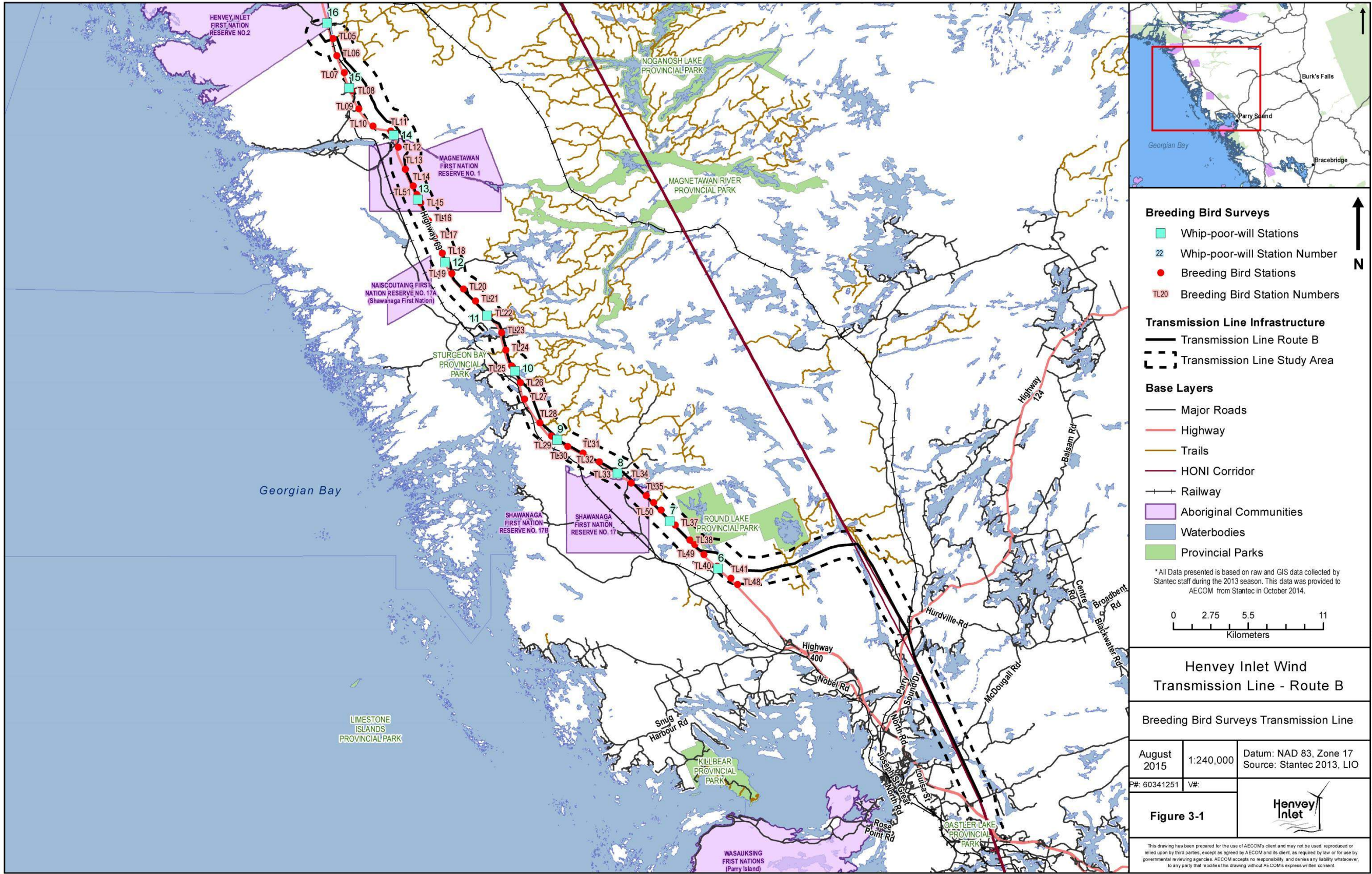
#### 3.2.1 Daytime Breeding Bird Point Counts

In general, Stantec field staff recorded the breeding bird point count data in the following manner. The date and daily weather conditions were recorded. For each point count the station, UTM coordinates, start time, end time, habitat and direction the observer was facing were also recorded. When a bird was observed or heard, the four (4) letter species code was recorded within the circles representing the distance between the bird and the observer. Bird observations were also recorded in a table that indicates the distance between the bird and the observer. Height and flyovers were also recorded in this table.

Based on the field notes provided, a total of 82 point counts were conducted at 41 point count stations between June 10 and July 4, 2013. Two point counts were conducted at each station and survey dates were generally 18 to 20 days apart at a given station. The daytime breeding bird point count field data sheets are provided in **Appendix A**. The point count station locations are shown in **Figure 3-1**. In general, the daytime breeding bird point counts were conducted in accordance with the methods described in the work plan (Stantec, 2013).



Figure 3-1: Breeding Bird Surveys





The results of the daytime breeding bird point count surveys in the Route B Transmission Line study area are summarized in **Table C-1** in **Appendix C**. A total of 1997 birds, comprised of 84 species were observed over the course of the breeding bird point count surveys. The most common species observed was Canada Goose (*Branta canadensis*) although all but one (1) of the 321 individuals observed were high elevation flyovers. Other commonly observed species during the daytime breeding bird point count surveys included Red-eyed Vireo (*Vireo olivaceus*) and Ovenbird (*Seiurus aurocapillus*), with 123 and 119 individuals observed, respectively.

Two (2) of the species observed during the daytime breeding bird point count surveys are listed as Special Concern in Ontario under the *Endangered Species Act, 2007*. These include Canada Warbler (*Wilsonia canadensis*) and Eastern Wood-pewee (*Contopus virens*). An additional three (3) species observed during the daytime breeding bird point count surveys are listed as Threatened in Ontario under the *Endangered Species Act, 2007*. These include Barn Swallow (*Hirundo rustica*), Bobolink (*Dolichonyx oryzivorus*) and Least Bittern (*Ixobrychus exilis*). Canada Warbler and Least Bittern are also listed as Threatened in Canada under the federal *Species At Risk Act*. The locations and dates of all Species at Risk sightings in the Route B Transmission Line study area are presented in **Table 3-1**.

**Table 3-1: Summary of Species at Risk Observations During Daytime Breeding Bird Point Count Surveys**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	Observation Location	Observation Date	Total Number Observed
Barn Swallow	<i>Hirundo rustica</i>	Threatened	-	TL23 TL23 TL40	June 12, 2013 July 1, 2013 June 13, 2013	21
Bobolink	<i>Dolichonyx oryzivorus</i>	Threatened	-	TL08	June 30, 2013	2
Canada Warbler	<i>Wilsonia canadensis</i>	Special Concern	Threatened Schedule 1	TL12 TL12 TL19 TL26 TL29 TL32 TL34 TL36 TL36 TL38 TL39 TL48 TL48	June 10, 2013 June 30, 2013 June 12, 2013 July 1, 2013 June 12, 2013 June 12, 2013 June 12, 2013 June 12, 2013 July 2, 2013 July 2, 2013 July 3, 2013 June 13, 2013 July 3, 2013	13
Eastern Wood-pewee	<i>Contopus virens</i>	Special Concern	-	TL18 TL33 TL41 TL51 TL51	July 1, 2013 June 12, 2013 July 3, 2013 June 13, 2013 July 4, 2013	5
Least Bittern	<i>Ixobrychus exilis</i>	Threatened	Threatened Schedule 1	TL25	July 1, 2013	1

Notes: 1. **ESA Status:** The Endangered Species Act 2007 (ESA) protects Species at Risk (Threatened and Endangered) at a provincial level.

2. **SARA Status:** The Species at Risk Act (SARA) protects Species at Risk (Special Concern, Threatened and Endangered) at a federal level.

### 3.2.2 Daytime Breeding Bird Area Searches

In general, Stantec field staff recorded the breeding bird area search data in the following manner. The date, daily weather conditions, start time, end time and each habitat type surveyed were recorded. Each habitat was given a habitat number and a habitat description. When a bird was observed or heard, the habitat number and breeding evidence of the observation were recorded.

Based on the field notes provided, a total of three (3) breeding bird area searches were conducted along the Route B Transmission Line study area on June 10, 12, and 13, 2013. The daytime breeding bird area search field data sheets are provided in **Appendix A**. The breeding bird area searches were conducted as wandering transects between point count stations. UTM coordinates were not recorded therefore the routes of the area searches could not be mapped. While the area searches could not be mapped, **Figure 3-1** shows the locations of the breeding bird point count stations and therefore gives an indication of where the daytime breeding bird area searches were conducted. In general, the daytime breeding bird area searches were conducted in accordance with the methods described in the work plan (Stantec, 2013).

The results of the daytime breeding bird area searches are summarized in **Table C-2** in **Appendix C**. The area search data does not include counts of individual birds; however, a total of 71 species and the associated breeding evidence were recorded. The most common species encountered within the daytime breeding bird area searches were Turkey Vulture (*Cathartes aura*), Barn Swallow and Red-winged Blackbird (*Agelaius phoeniceus*).

One (1) of the species observed, Canada Warbler, is listed as Special Concern in Ontario under the *Endangered Species Act, 2007*. Three (3) of the species observed are listed as Threatened in Ontario under the *Endangered Species Act, 2007*. These included Barn Swallow, Bobolink and Eastern Meadowlark (*Sturnella magna*). Canada Warbler is also listed as Threatened in Canada under the federal *Species At Risk Act*. Red-shouldered Hawk (*Buteo lineatus*) was also observed and is listed as Special Concern in Canada under the federal *Species At Risk Act*.

Canada Warbler was observed on June 13, 2013 in the area searches between point count stations TL38 and TL50. Barn Swallow was observed on June 10 and 13, 2013 in the area searches between point count stations TL01 and TL18, and TL38 and TL50, respectively. The breeding evidence for Barn Swallow included observations of nests with young. Bobolink and an Eastern Meadowlark were observed on June 10, 2013 in the area search between point count stations TL01 and TL18. Red-shouldered Hawk was observed on June 13, 2013 in the area search between point count stations TL38 and TL50.

### 3.2.3 Crepuscular Breeding Bird Results

In general, Stantec field staff recorded the crepuscular breeding bird survey data in the following manner. The date, sunset time, full moon date, current moon phase, moon above horizon, weather conditions, station, habitat, UTM coordinates of station, start time, end time, background noise and direction the observer was facing were recorded for each station. When a bird was observed or heard, the four (4) letter species code was recorded within the circles representing the distance between the bird and the observer.

Based on the field notes provided, a total of 22 surveys were conducted at 11 stations within the Route B Transmission Line study area on May 27, 28 and June 9 and 18, 2013. The results of the crepuscular breeding bird surveys conducted within the Route B Transmission Line study area are summarized in **Table C-3** in **Appendix C**. A summary of the survey dates and number of surveys conducted at each station is presented below in **Table 3-2**. Two (2) surveys were conducted at each station. The crepuscular breeding bird survey field data sheets are provided in **Appendix A**. Refer to **Figure 3-1** for the locations of crepuscular breeding bird (Whip-poor-will) stations.

**Table 3-2: Summary of Surveys Conducted at Crepuscular Breeding Bird Stations**

Station ID	Date	Number of Surveys	Number of Whip-poor-will Observed	Number of Common Nighthawk Observed
6	May 27 and June 18, 2013	2	2	0
7	May 27 and June 9, 2013	2	0	0
8	May 27 and June 9, 2013	2	1	0
9	May 27 and June 9, 2013	2	1	0
10	May 28 and June 9, 2013	2	1	1
11	May 28 and June 9, 2013	2	1	0
12	May 28 and June 9, 2013	2	2	0
13	May 28 and June 9, 2013	2	1	0
14	May 28 and June 9, 2013	2	1	0
15	May 28 and June 9, 2013	2	1	0
16	May 28 and June 9, 2013	2	1	0
<b>Total:</b>		<b>22</b>	<b>12</b>	<b>1</b>

A total of 12 Whip-poor-will and one (1) Common Nighthawk (*Chordeiles minor*) were recorded during the crepuscular breeding bird surveys (**Table 3-3**). Common Nighthawk is listed as Special Concern and Whip-poor-will is listed as Threatened in Ontario under the provincial *Endangered Species Act, 2007*. Both species are listed as Threatened in Canada under the federal *Species At Risk Act*. The locations of these Species at Risk sightings in the Route B Transmission Line study area are presented in **Table 3-2**.

**Table 3-3: Summary of Species at Risk Observations during Crepuscular Breeding Bird Surveys**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	Total Number of Observations
Whip-poor-will	<i>Caprimulgus vociferus</i>	Threatened	Threatened Schedule 1	12
Common Nighthawk	<i>Chordeiles minor</i>	Special Concern	Threatened Schedule 1	1

- Notes: 1. **ESA Status:** The Endangered Species Act 2007 (ESA) protects Species at Risk (Threatened and Endangered) at a provincial level.
2. **SARA Status:** The Species at Risk Act (SARA) protects Species at Risk (Special Concern, Threatened and Endangered) at a federal level.

## 4. Summary

Stantec conducted the following breeding bird surveys in 2013 along the Route B Transmission Line study area:

- A total of 82 daytime breeding bird point count surveys across 41 stations, which resulted in the observation of 1997 birds comprised of 84 species including three (3) Provincial Species at Risk (Barn Swallow, Bobolink and Least Bittern) and two (2) Special Concern species in Ontario (Canada Warbler and Eastern Wood-pewee). Canada Warbler and Least Bittern are also listed as Threatened in Canada under the federal *Species At Risk Act*.
- A total of three (3) daytime breeding bird area searches, which resulted in the observation of 71 bird species including three (3) Provincial Species at Risk (Barn Swallow, Bobolink and Eastern Meadowlark) and one (1) Special Concern species in Ontario (Canada Warbler).
- Crepuscular breeding bird surveys were completed at a total of 11 stations, and resulted in the observation of one (1) Provincial Species at Risk (Whip-poor-will) and one (1) Special Concern species in Ontario (Common Nighthawk). Whip-poor-will and Common Nighthawk are also listed as Threatened in Canada under the federal *Species At Risk Act*.

## 5. Assumptions and Clarification

The following are assumptions and clarifications made and / or required by AECOM based on the field notes provided by Stantec in October 2014:

### Daytime Breeding Bird Point Counts

- Myrtle Warbler (*Setophaga coronata*) was recorded on some field data sheets, however the currently accepted name for this species is Yellow-rumped Warbler (*Dendroica coronata*). Therefore records of Myrtle Warbler are shown in **Table C-1** in **Appendix C** as Yellow-rumped Warbler. On February 26, 2015, Stantec provided comments to AECOM that confirmed this assumption.
- The breeding bird point count field notes do not specify whether play-back call surveys for marsh breeding birds were conducted. On February 26, 2015, Stantec provided comments to AECOM that confirmed these surveys had been conducted.
- Survey information such as start time, end time and / or habitat was missing from numerous field sheets. On February 26, 2015, Stantec provided comments to AECOM that confirmed that this unrecorded data could not be provided.
- The four (4) letter bird code AMBL was included in the daytime breeding bird point count data. This code could not be matched to a known bird code, therefore, this code was assumed to be AMBI, American Bittern (*Botaurus lentiginosus*). This assumption was made by a qualified AECOM Biologist. On February 26, 2015, Stantec provided comments to AECOM; however, this unmatched code could not be identified. This code has been included in **Table C-1** in **Appendix C** as American Bittern.
- The four (4) letter bird code ORWA from the point count field data could not be matched to known bird codes by AECOM Biologists. On February 26, 2015, Stantec provided comments to AECOM; however, this unmatched bird code could not be identified. This code has been included in **Table C-1** in **Appendix C** as "Species Code Undetermined".

### Daytime Breeding Bird Area Searches

- Two (2) of the four (4) field data sheets did not include any location information. On February 26, 2015, Stantec provided comments to AECOM that provided the unrecorded locations.
- The habitat column on the field data sheet was consistently used to record numbers of individuals observed rather than habitat types within which the species was identified. On February 26, 2015, Stantec provided comments to AECOM that confirmed that this interpretation of the data was correct.
- The breeding bird area search field notes do not specify whether play-back call surveys for marsh breeding birds were conducted. On February 26, 2015, Stantec provided comments to AECOM confirming that these surveys had been conducted.
- Survey information such as location, start time, end time and / or habitat was missing from numerous field sheets. On February 26, 2015, Stantec provided comments to AECOM confirming that, with the exception of locations, this unrecorded data could not be provided.

### Crepuscular Breeding Bird Surveys

- Distance and direction were not recorded during surveys when Whip-poor-will was documented. On February 26, 2015, Stantec provided comments to AECOM confirming that distance could not be accurately estimated.

## 6. References

Stantec Consulting Ltd., 2013:  
2013 Terrestrial Survey Work Program. Prepared for Nigig Power Corp., 25 p.

# Appendix A

## Stantec 2013 Field Notes and Documentation



Area A					First Visit	Second Visit
		Point Counts				
	Code	Site	Zone	Easting	Northing	
1	A1	PC201	17T	526702	5078127	4-Jun-13
2	A2	PC203	17T	526173	5078766	4-Jun-13
3	A3	PC204	17T	526055	5079242	4-Jun-13
4	A4	PC206	17T	525618	5079954	4-Jun-13
5	A5	PC207	17T	525194	5080508	4-Jun-13
6	A6	Marsh 1	17T	525860	5079203	4-Jun-13
7	A7	V1	17T	524660	5076679	16-Jun-13
8	A8	V2	17T	524778	5077164	16-Jun-13
9	A9	V3	17T	524635	5077455	16-Jun-13
10	A10	W01	17T	523585	5077154	7-Jun-13
11	A11	W02	17T	523365	5077772	7-Jun-13
12	A12	W03	17T	523059	5078254	7-Jun-13
13	A13	W04	17T	523133	5078765	7-Jun-13
14	A14	W05	17T	523320	5079223	7-Jun-13
15	A15	W06	17T	523693	5079796	7-Jun-13
Area B						
		Point Counts				
		Site	Zone	Easting	Northing	
16	B1	PC216	17T	528618	5079111	7-Jun-13
17	B2	PC217	17T	528666	5079514	7-Jun-13
18	B3	PC218	17T	528361	5079267	7-Jun-13
19	B4	PC222	17T	528063	5079633	7-Jun-13
20	B5	PC233	17T	527935	5080068	7-Jun-13
21	B6	PC224	17T	527602	5080573	7-Jun-13
22	B7	PC225	17T	527283	5081020	7-Jun-13
23	B8	PC226	17T	527388	5080346	7-Jun-13
24	B9	PC232	17T	529216	5079462	8-Jun-13
25	B10	PC233	17T	528979	5079939	8-Jun-13
26	B11	PC234	17T	528937	5080074	8-Jun-13
27	B12	PC235	17T	528809	5080360	8-Jun-13
28	B13	PC236	17T	528682	5080494	8-Jun-13
29	B14	PC237	17T	528532	5080879	8-Jun-13
30	B15	PC238	17T	528438	5081043	8-Jun-13
31	B16	PC239	17T	528256	5081418	8-Jun-13
Area C						
		Point Counts				
		Site	Zone	Easting	Northing	
32	C1	PC209 (forest)	17T	533565	5081897	6-Jun-13
33	C2	X1	17T	530013	5078948	6-Jun-13
34	C3	X2	17T	530558	5079625	6-Jun-13
35	C4	X3	17T	530764	5080346	6-Jun-13
36	C5	X4	17T	531110	5080754	6-Jun-13
Area D						
		Point Counts				
		Site	Zone	Easting	Northing	
37	D1	PC210	17T	533332	5079992	6-Jun-13
38	D2	PC211	17T	532871	5078133	6-Jun-13
39	D3	PC212	17T	532092	5078861	6-Jun-13
40	D4	PC214	17T	529757	5078310	6-Jun-13
41	D5	D1 (?) T01	17T	529201	5077915	17-Jun-13
42	D6	D2 (?) T02	17T	529411	5077454	17-Jun-13
43	D7	D3 (?) T03	17T	529783	5077131	17-Jun-13
44	D8	D4 (?) T04	17T	529758	5076540	17-Jun-13

45	D9	D5 (?) T05	17T	530275	5076494	17-Jun-13	28-Jun-13
46	D10	D6 (?) T06	17T	530830	5076637	17-Jun-13	28-Jun-13
47	D11	D7 (?) T07	17T	530650	5077108	17-Jun-13	28-Jun-13
48	D12	Z1	17T	532946	5080021	4-Jun-13	18-Jun-13
49	D13	Z2	17T	532736	5079563	4-Jun-13	18-Jun-13
50	D14	Z3	17T	532482	5079124	4-Jun-13	18-Jun-13
51	D15	Z4	17T	532289	5078660	4-Jun-13	18-Jun-13
52	D16	Z5	17T	531989	5078254	4-Jun-13	18-Jun-13
53	D17	Z6	17T	531846	5077768	4-Jun-13	18-Jun-13
54	D18	Z7	17T	531934	5077271	4-Jun-13	18-Jun-13
55	D19	Z8	17T	532418	5077061	4-Jun-13	18-Jun-13
56	D20	Z9	17T	532493	5076815	4-Jun-13	18-Jun-13
57	D21	Z10	17T	532678	5076615	4-Jun-13	18-Jun-13

#### Area E

			Point Counts				
	Site	Zone	Easting	Northing			
58	E1	PC10 (swd-ash)	17T	524945	5075396	5-Jun-13	25-Jun-13
59	E2	PC11 (marsh/fom)	17T	525437	5075483	5-Jun-13	25-Jun-13
60	E3	PC12 (swt/fom)	17T	526475	5075295	5-Jun-13	25-Jun-13
61	E4	PC8 (jack pine/red maple)	17T	526691	5075204	5-Jun-13	
62	E5	PC9 (pine)	17T	527088	5075214	5-Jun-13	
63	E6	PC7 (mas/oa/swc)	17T	527537	5074800	5-Jun-13	
64	E7	PC15(fom/poplar,spruce)	17T	525853	5076584	6-Jun-13	27-Jun-13
65	E8	PC13 (jack pine)	17T	526185	5076403	6-Jun-13	27-Jun-13
66	E9	PC14 (swt)	17T	526451	5076545	6-Jun-13	27-Jun-13
67	E10	PC16 (lowland spruce forest)	17T	527005	5076650	6-Jun-13	27-Jun-13
68	E11	PC17 (pine barren)	17T	527537	5076352	6-Jun-13	27-Jun-13
69	E12	PC18 (pine barren)	17T	527765	5075981	6-Jun-13	27-Jun-13
70	E13	PC1 (fom-pin/maple/oak)	17T	528208	5077811	7-Jun-13	24-Jun-13
71	E14	PC2 (bog)	17T	529355	5075881	7-Jun-13	24-Jun-13
72	E15	PC5 (pine barren)	17T	528224	5077357	7-Jun-13	24-Jun-13
73	E16	PC6 (pine barren)	17T	528325	5076931	7-Jun-13	24-Jun-13
74	E17	PC3 (pine barren)	17T	528789	5076454	7-Jun-13	24-Jun-13
75	E18	PC4 (bog)	17T	529180	5076307	7-Jun-13	24-Jun-13
76	E19	U1	17T	526702	5073100	15-Jun-13	26-Jun-13
77	E20	U2	17T	526797	5073664	15-Jun-13	26-Jun-13
78	E21	U3	17T	526621	5074132	15-Jun-13	26-Jun-13
79	E22	U4	17T	526118	5074163	15-Jun-13	26-Jun-13
80	E23	U5	17T	525769	5073789	15-Jun-13	26-Jun-13

#### Area F

			Point Counts				
	Site	Zone	Easting	Northing			
81	F1	Y1	17T	523131	5076211	5-Jun-13	19-Jun-13
82	F2	Y2	17T	522657	5076058	5-Jun-13	19-Jun-13
83	F3	Y3	17T	522275	5075719	5-Jun-13	19-Jun-13
84	F4	Y4	17T	522185	5075226	5-Jun-13	19-Jun-13
85	F5	Y5	17T	522697	5075239	5-Jun-13	19-Jun-13
86	F6	Y6	17T	523055	5074843	5-Jun-13	19-Jun-13
87	F7	Y7	17T	523375	5074421	5-Jun-13	19-Jun-13
88	F8	Y8	17T	523625	5074854	5-Jun-13	19-Jun-13
89	F9	Y9	17T	523294	5075229	5-Jun-13	19-Jun-13

#### Area MTO

			Point Counts				
	Site	Zone	Easting	Northing			
TL01	TL01	17T	533352	5083133	10-Jun-13	30-Jun-13	
TL02	TL02	17T	533608	5080784	10-Jun-13	30-Jun-13	

TL03	TL03	17T	533598	5079442	10-Jun-13	30-Jun-13
TL04	TL04	17T	534022	5078237	10-Jun-13	30-Jun-13
TL05	TL05	17T	534484	5076512	10-Jun-13	30-Jun-13
TL06	TL06	17T	534777	5075251	10-Jun-13	30-Jun-13
TL07	TL07	17T	535302	5074024	10-Jun-13	30-Jun-13
TL08	TL08	17T	535857	5072690	10-Jun-13	30-Jun-13
TL09	TL09	17T	536392	5071361	10-Jun-13	30-Jun-13
TL10	TL10	17T	537424	5070118	10-Jun-13	30-Jun-13
TL11	TL11	17T	538725	5069753	10-Jun-13	30-Jun-13
TL12	TL12	17T	539262	5068545	10-Jun-13	30-Jun-13
TL13	TL13	17T	539804	5066946	10-Jun-13	30-Jun-13
TL14	TL14	17T	540363	5065728	10-Jun-13	30-Jun-13
TL15	TL15	17T	540917	5064486	10-Jun-13	30-Jun-13
TL16	TL16	17T	541501	5063176	10-Jun-13	1-Jul-13
TL17	TL17	17T	541923	5061938	10-Jun-13	1-Jul-13
TL18	TL18	17T	542520	5060781	10-Jun-13	1-Jul-13
TL19	TL19	17T	543198	5059275	12-Jun-13	1-Jul-13
TL20	TL20	17T	544066	5058149	12-Jun-13	1-Jul-13
TL21	TL21	17T	544941	5057268	12-Jun-13	1-Jul-13
TL22	TL22	17T	545943	5056213	12-Jun-13	1-Jul-13
TL23	TL23	17T	546861	5054959	12-Jun-13	1-Jul-13
TL24	TL24	17T	547179	5053667	12-Jun-13	1-Jul-13
TL25	TL25	17T	547588	5052527	12-Jun-13	1-Jul-13
TL26	TL26	17T	548249	5051310	12-Jun-13	1-Jul-13
TL27	TL27	17T	548537	5050090	12-Jun-13	1-Jul-13
TL28	TL28	17T	549682	5048337	12-Jun-13	2-Jul-13
TL29	TL29	17T	550511	5047371	12-Jun-13	2-Jul-13
TL30	TL30	17T	551720	5046617	12-Jun-13	2-Jul-13
TL31	TL31	17T	552831	5046119	12-Jun-13	2-Jul-13
TL32	TL32	17T	554042	5045491	12-Jun-13	2-Jul-13
TL33	TL33	17T	555293	5044758	12-Jun-13	2-Jul-13
TL34	TL34	17T	556389	5043937	12-Jun-13	2-Jul-13
TL35	TL35	17T	557486	5043000	12-Jun-13	2-Jul-13
TL36	TL36	17T	558569	5041932	12-Jun-13	2-Jul-13
TL37	TL37	17T	559620	5040841	12-Jun-13	2-Jul-13
TL38	TL38	17T	560672	5039756	13-Jun-13	2-Jul-13
TL39	TL39	17T	561721	5038694	13-Jun-13	3-Jul-13
TL40	TL40	17T	562680	5037847	13-Jun-13	3-Jul-13
TL41	TL41	17T	563686	5036949	13-Jun-13	3-Jul-13
TL42	TL42	17T	564664	5035972	13-Jun-13	3-Jul-13
TL43	TL43	17T	565706	5034882	13-Jun-13	3-Jul-13
TL44	TL44	17T	566384	5034183	13-Jun-13	3-Jul-13
TL45	TL45	17T	573208	5029393	13-Jun-13	3-Jul-13
TL46	TL46	17T	572989	5029419	13-Jun-13	3-Jul-13
TL47	TL47	17T	568664	5031923	13-Jun-13	3-Jul-13
TL48	TL48	17T	564173	5036499	13-Jun-13	3-Jul-13
TL49	TL49	17T	561024	5039420	13-Jun-13	3-Jul-13
TL50	TL50	17T	558024	5042490	13-Jun-13	3-Jul-13
TL51	TL51	17T	540651	5065085	13-Jun-13	4-Jul-13
TL52	TL52	17T	572659	5030346	14-Jun-13	4-Jul-13
TL53	TL53	17T	578307	5022423	14-Jun-13	4-Jul-13
TL54	TL54	17T	581614	5020363	14-Jun-13	4-Jul-13
TL55	TL55	17T	581561	5020624	14-Jun-13	4-Jul-13
TL56	TL56	17T	582693	5018280	14-Jun-13	4-Jul-13
TL57	TL57	17T	582226	5019032	14-Jun-13	4-Jul-13
TL58	TL58	17T	582508	5016960	14-Jun-13	4-Jul-13
TL59	TL59	17T	583330	5016881	14-Jun-13	4-Jul-13
TL60	TL60	17T	582287	5018595	14-Jun-13	4-Jul-13

**Stantec**

Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Owl Playback Survey Observation Form

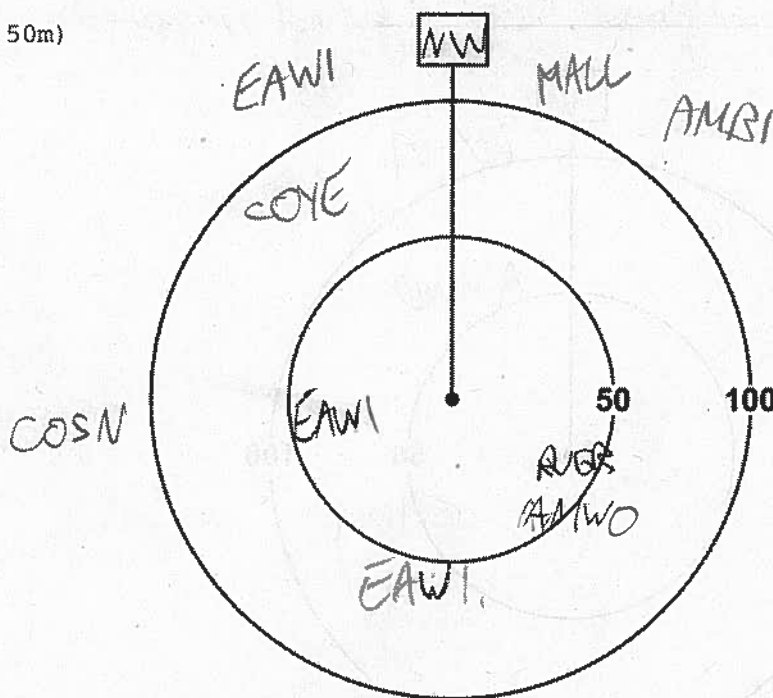
Project Number 160960824Project Name: Nigig Henvey InletDate Thurs May 16 2013Field Personnel: S. Richer & B. Miller

	Official Time of Sunset: <u>8:48</u>	Moon half full			
Weather Conditions:	Temp: <u>8°C</u>	Wind: <u>B1</u>	Cloud: <u>10</u>	PPT: <u>None</u>	PPT in last 24 hrs: <u>None</u>

Station: Stantec 2013 Owl 1Habitat: Sandy beach surrounded by inlet & jack pine/white pine/rock barrensUTM: 17T 528490 507833Start Time: 9:28 pmBackground noise: SPPE-3 across the inlet, faint but audible**Keep track of all birds seen- unlimited distance**

Note: if a bird is seen displaying indicate this with a ^ over the species code, then a dash and the max. height reached

(i.e. AMWO- 50m)



Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 2

REV: April, 08 FORM029

2013 0w12

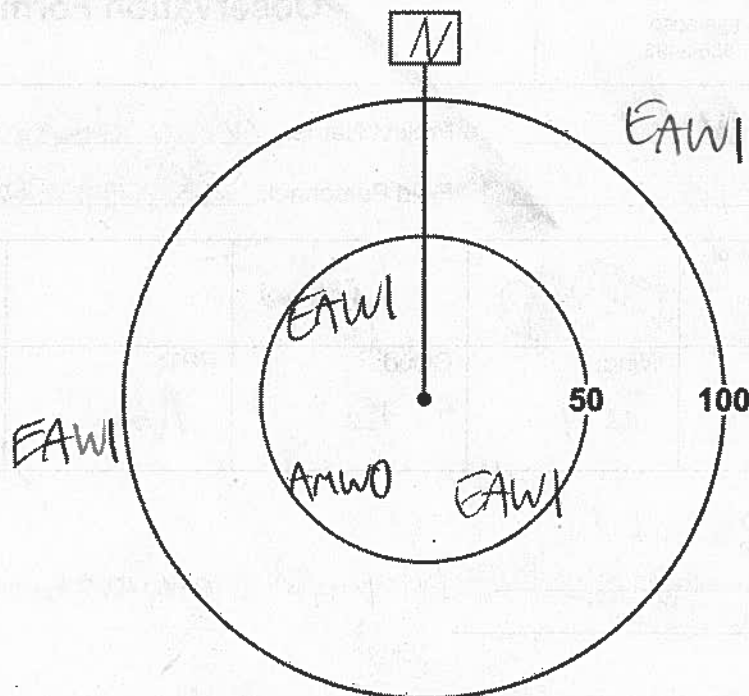
Station: \_\_\_\_\_

Habitat: Poplar/birch/pine woods

UTM: 17T 529506 5078467

Start Time: 9:49pm

Background noise: SPPE 13



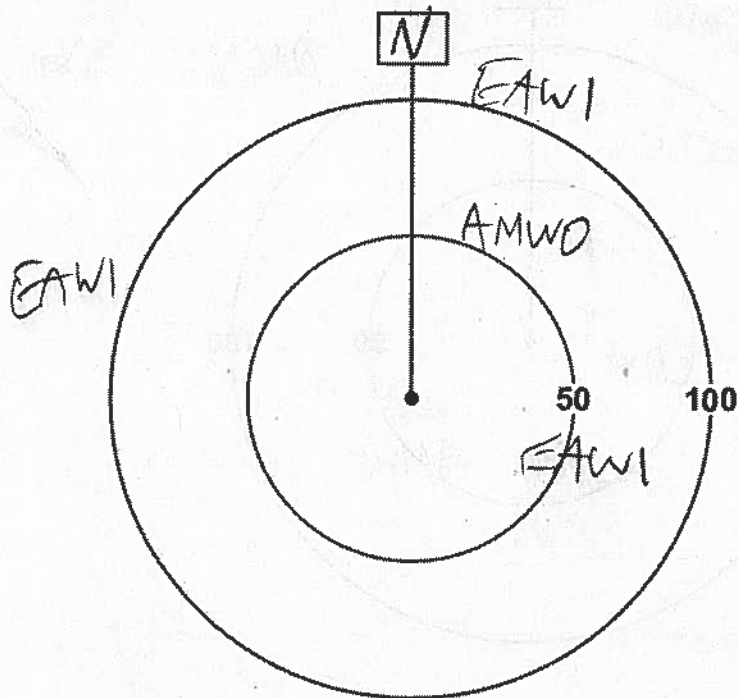
Station: 2013 0w13

Habitat: Sandy Jack pine barrens?

UTM: 532374 5078576

Start Time: 10:12pm

Background noise: Train in distance; SPPE 3 but not overpowering



Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 2 of 2

REV: April, 08 FORM029

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Fax: (519) 836-2493

## Crepuscular Species Survey Observation Form

Project Number 160960824Project Name: X-rgrsDate June 5, 2013Field Personnel: A. Taylor / M. Caron

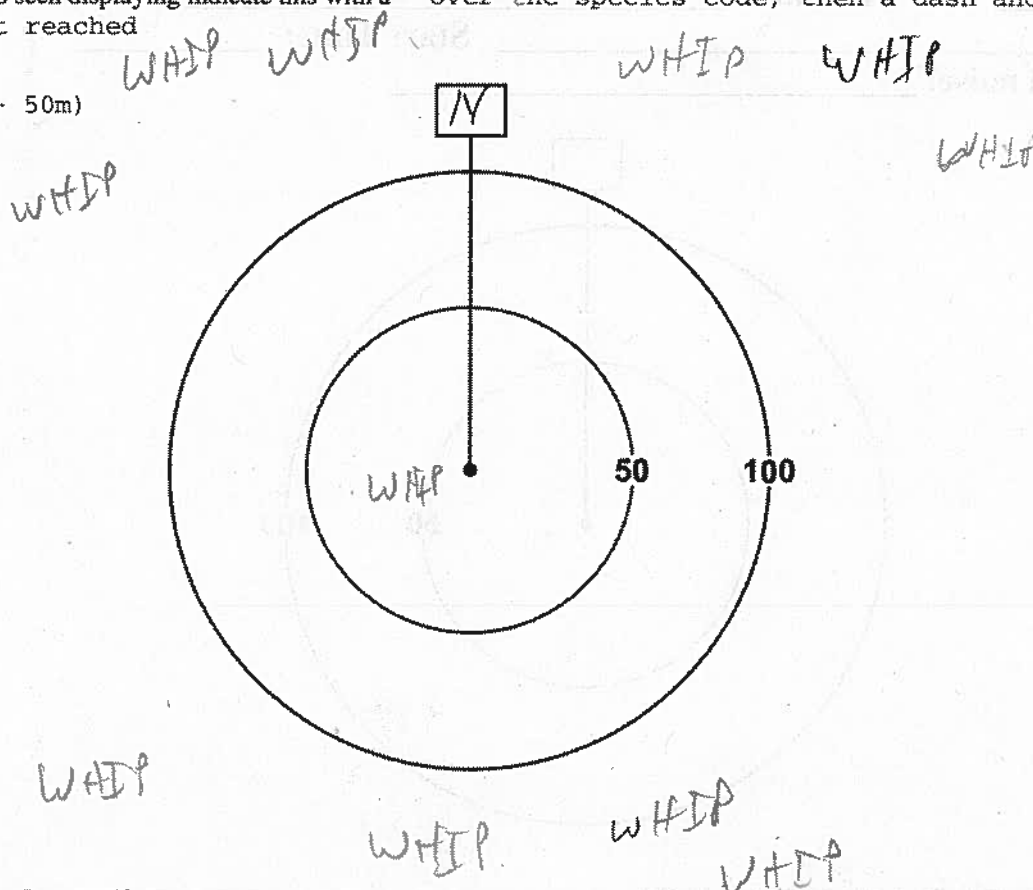
	Official Time of Sunset:				
Weather Conditions:	Temp: <u>12°C</u>	Wind: <u>1</u>	Cloud: <u>30%</u>	PPT: <u>/</u>	PPT in last 24 hrs: <u>/</u>

Station: 1  
Habitat: Rock barer / forest  
UTM: 17T 524605 5076092

Start Time: 10:05Background noise: /**Keep track of all birds seen- unlimited distance**

Note: if a bird is seen displaying indicate this with a ^ over the species code, then a dash and the max. height reached

(i.e. AMWO- 50m)



Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: April, 08 FORM029

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## Crepuscular Species Survey Observation Form

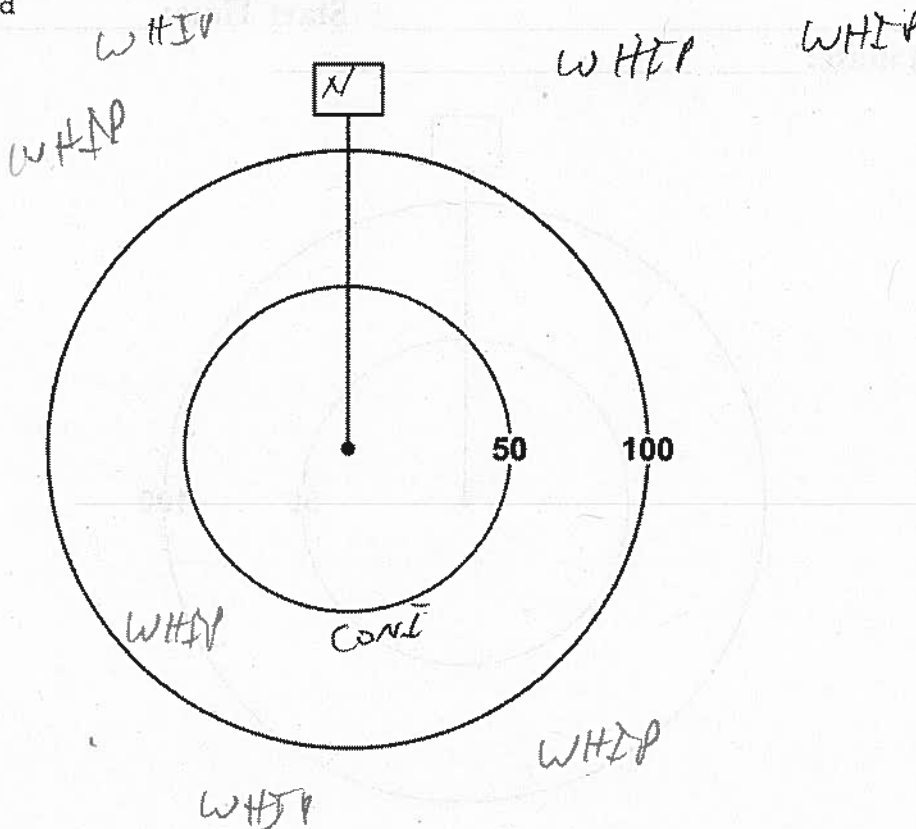
Project Number 160960824Project Name: N-gigDate June 5, 2013Field Personnel: A. Taylor / M. Cameron

	Official Time of Sunset:				
Weather Conditions:	Temp: <u>13°C</u>	Wind: <u>0</u>	Cloud: <u>60%</u>	PPT: <u>/</u>	PPT in last 24 hrs: <u>/</u>

Station: 2Habitat: Rocky open / forestUTM: 17T 527926 8077992Start Time: 10:00Background noise: /**Keep track of all birds seen- unlimited distance**

Note: if a bird is seen displaying indicate this with a ^ over the species code, then a dash and the max. height reached

(i.e. AMWO- 50m)



Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: April, 08 FORM029

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 Tel: (519) 836-6050  
 Fax: (519) 836-2493

## Nightjar Survey Observation Form

Project Number: 160960824Project Name: NigigDate: May 27, 2013Field Personnel: K. St James, S. Richer

Conditions:

Sunset (official time):

9:00pm

Full Moon (date):

May 25, 2013

Moon Phase:

Just past full

Moon above horizon?

Yes

Weather Conditions:

TEMP (°C):

12

WIND:

1

CLOUD:

65

PPT:

—

PPT (in last 24 hrs):

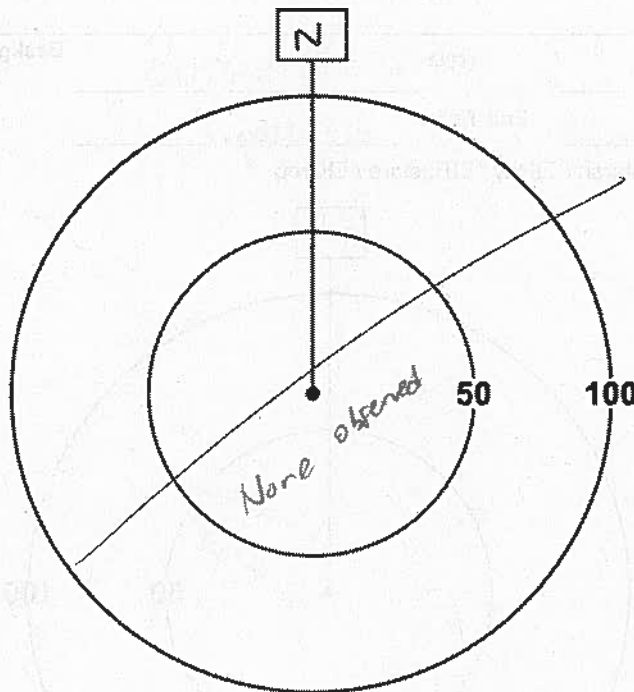
—(down to 7°C at  
end of sunsets)Station: 1UTM: 579933, 5021289

Background

Noise:

Traffic - frequentStart Time: 9:35pmEnd Time: 9:41pmHabitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: If a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.



VEER  
Bat sp.

Signature: Kathleen St James

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-13 / FORM 029



**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: 2

UTM: 576285, 5024876

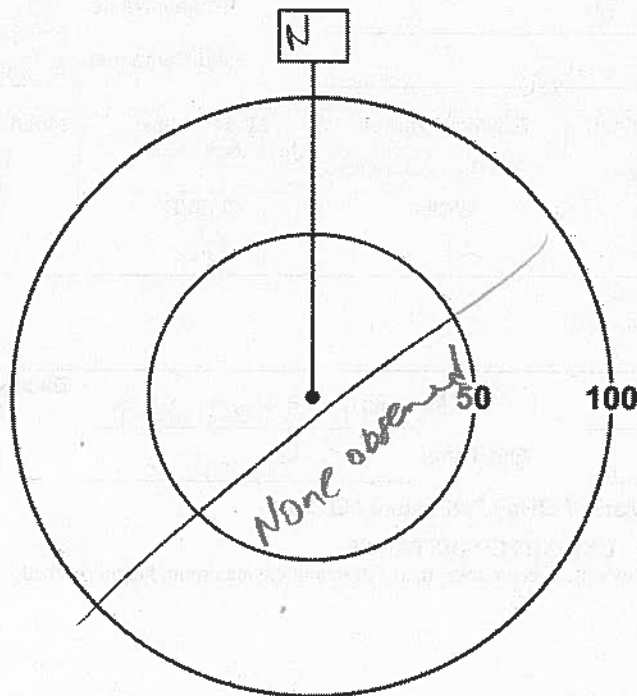
Background

Noise: Traffic-frequent

Start Time: 9:54 pm

End Time: 10:02 pm

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



SPPE  
AMTO  
KILL

Station: 3

UTM: 573399, 5028175

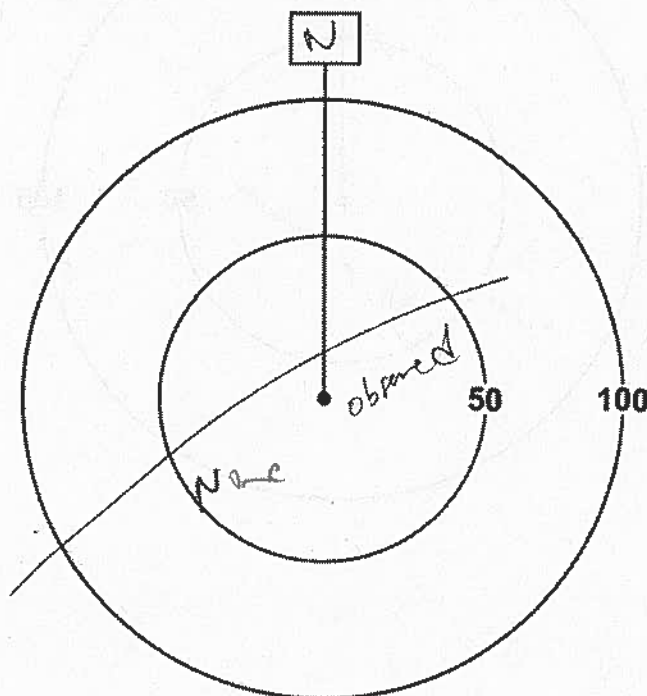
Background

Noise: Traffic-frequent

Start Time: 10:10 pm

End Time: 10:11 pm

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



SPPE

Signature: Katherine Stephens

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

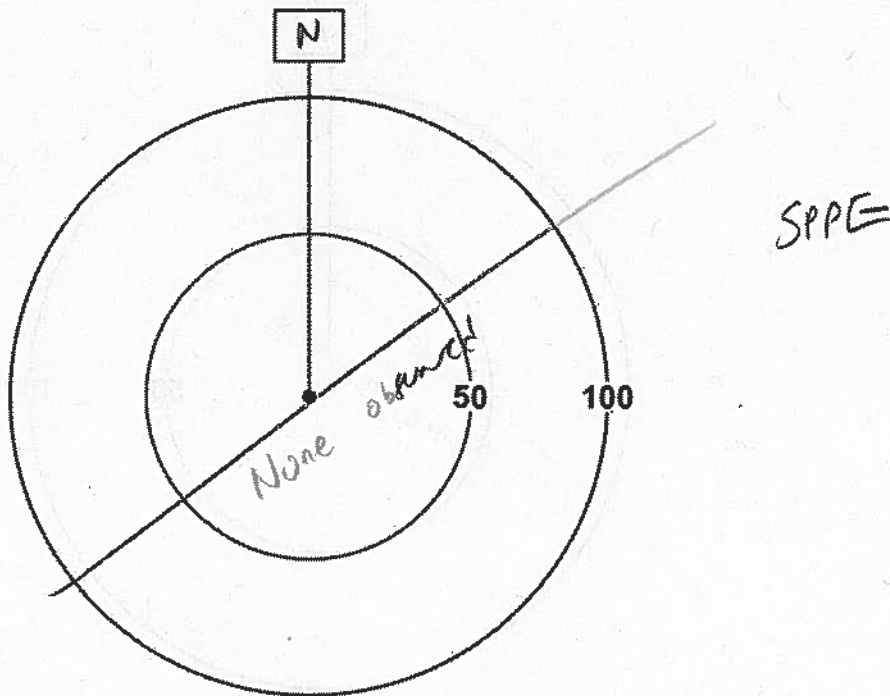
Signature: \_\_\_\_\_

(Project Manager)

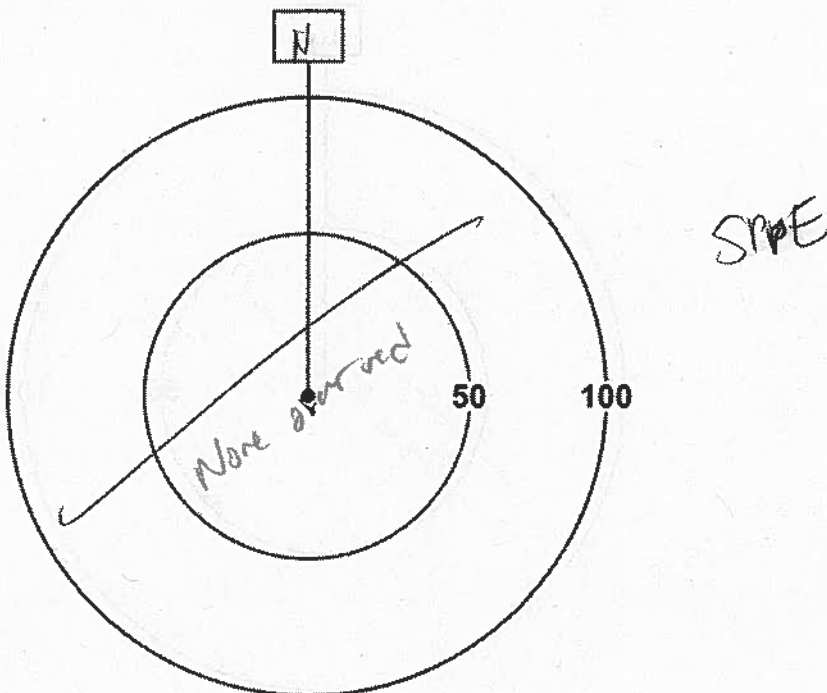
**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: 4 UTM: 570428, 5031489 Background Noise: Traffic - frequent  
 Start Time: 10:25pm End Time: 10:31pm  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



Station: 5 UTM: 506327, 5034077 Background Noise: Traffic  
 Start Time: 10:38pm End Time: 11:44  
 Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



Signature: Kathleen  
 (Field Personnel)

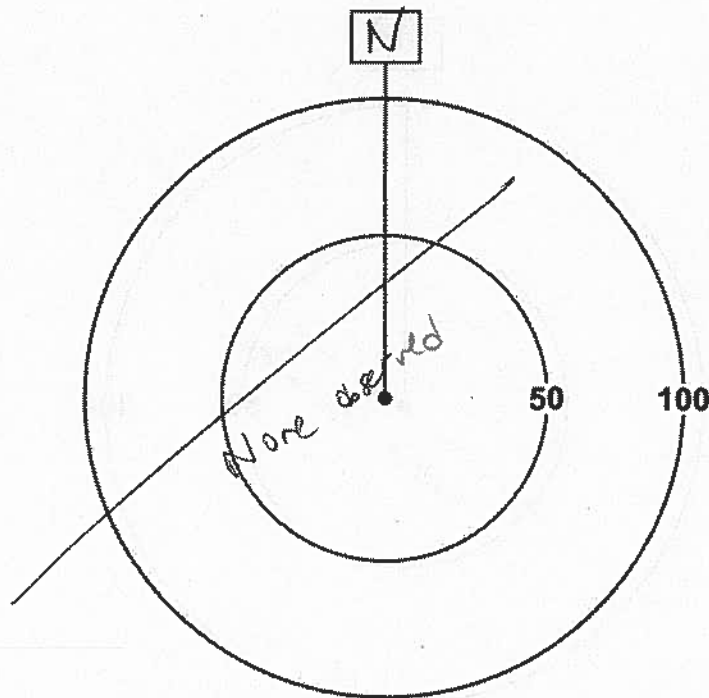
Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_  
 (Project Manager)

**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

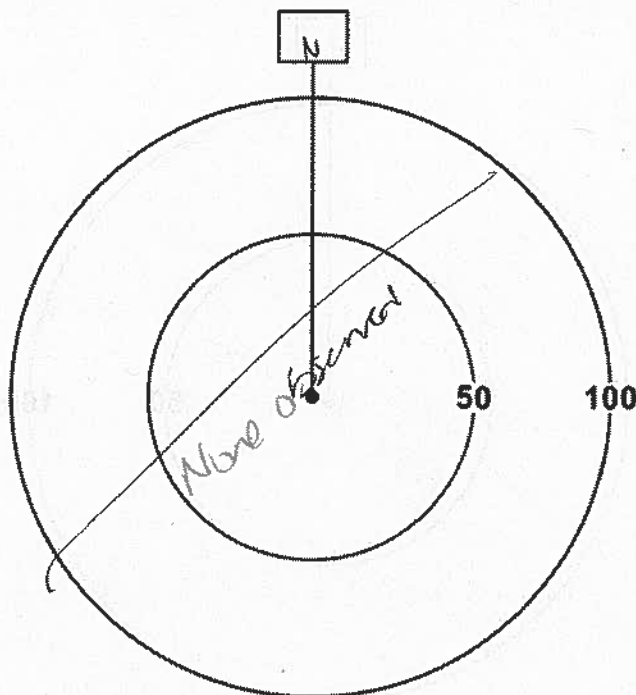
Station: 6 UTM: 562745, 5037659 Background Noise: Traffic - moderate  
 Start Time: 10:50 pm End Time: 10:56 pm  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



-can now see  
stars (dark) and  
fireflies

SPPE  
Coye

Station: 7 UTM: 559199, 5041128 Background Noise: Traffic - moderate  
 Start Time: 11:02 pm End Time: 11:08 pm  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

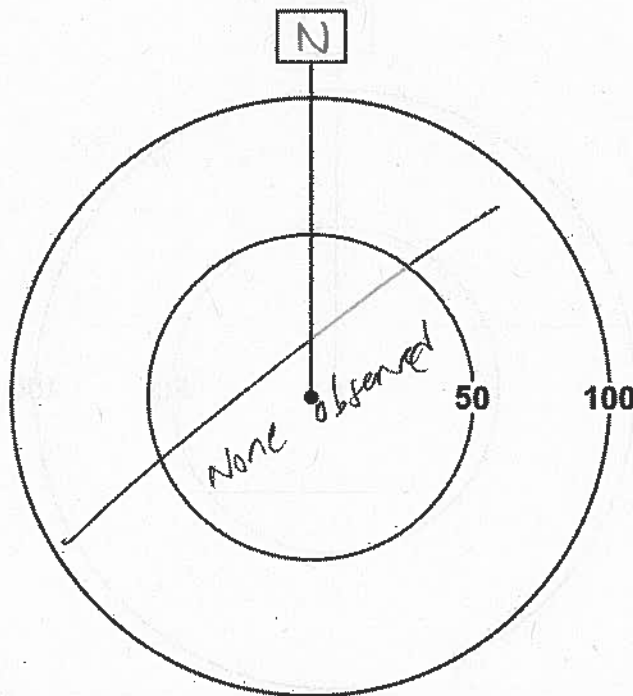


SPPE

**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

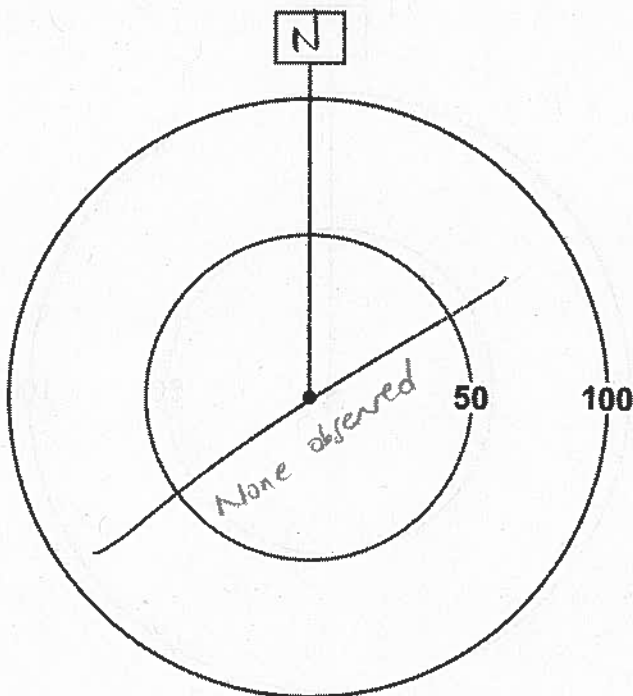
Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: 8 UTM: 555384, 5044617 Background Noise: Traffic - moderate  
 Start Time: 11:14pm End Time: 11:20pm  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



SPPE  
COYE  
OVEN

Station: 9 UTM: 550948, 5047088 Background Noise: Traffic - moderate  
 Start Time: 11:27pm End Time: 11:33pm  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



SPPE

Signature: Katherine

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

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 Guelph, ON  
 Canada N1G 4P5  
 Tel: (519) 836-6050  
 Fax: (519) 836-2493

## Nightjar Survey Observation Form

Project Number: 160960824Project Name: Henvey / NightDate: May 28 2013Field Personnel: J. Richer / K. St-James

Conditions:

Sunset (official time):

9:01

Full Moon (date):

May 25, 2013

Moon Phase:

Past full

Moon above horizon?

No

Weather Conditions:

TEMP (°C):

14

WIND:

2-3

CLOUD:

100%

PPT:

light rain -  
none

PPT (in last 24 hrs):

rain

Station:

10UTM: 547835, 5052136

Background

Noise:

Traffic - frequent

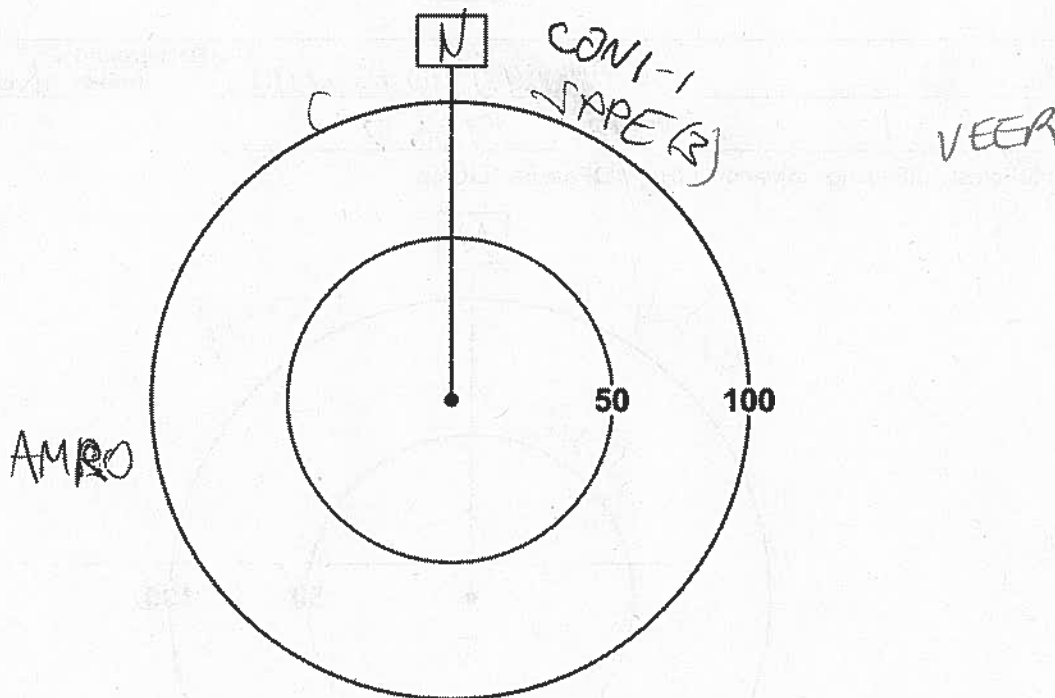
Start Time:

9:21

End Time:

9:27Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Page 1 of 5

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

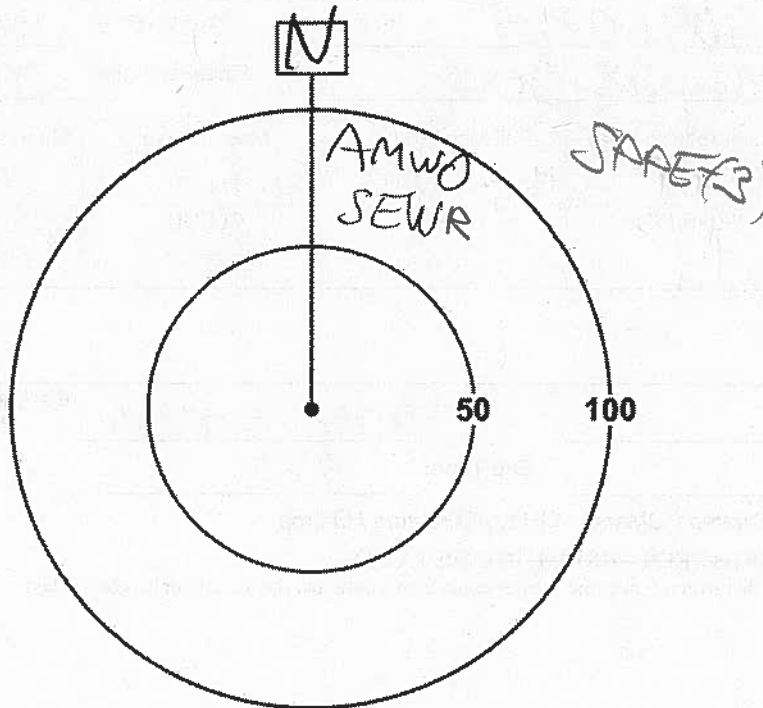
(Project Manager)

REV: 2011-05-13 / FORM 029

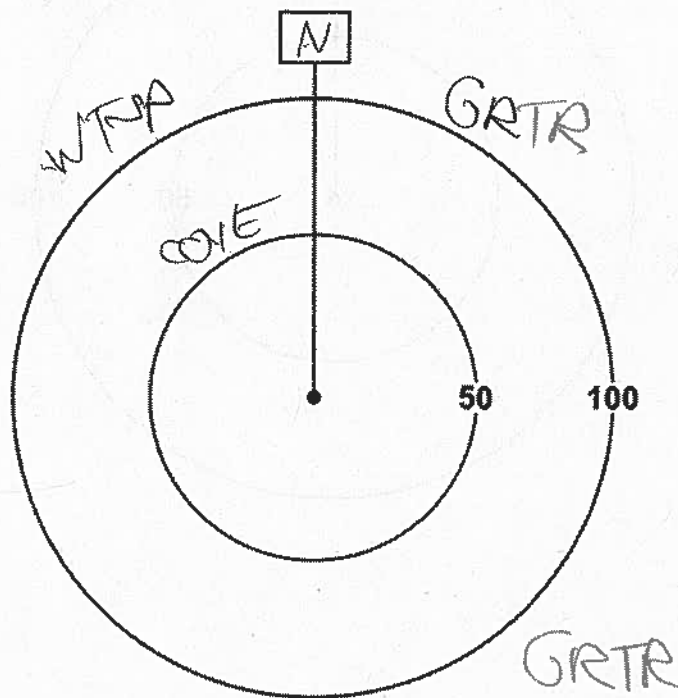
**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: 11 UTM: 545810 5056218 Background Noise: Traffic-Frequent  
 Start Time: 9:33 End Time: 9:39  
 Habitat: ☒ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



Station: 12 UTM: 542710 5060124 Background Noise: Traffic-Frequent  
 Start Time: 9:51 End Time: 9:57  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



Signature: A. R. L.  
 (Field Personnel)

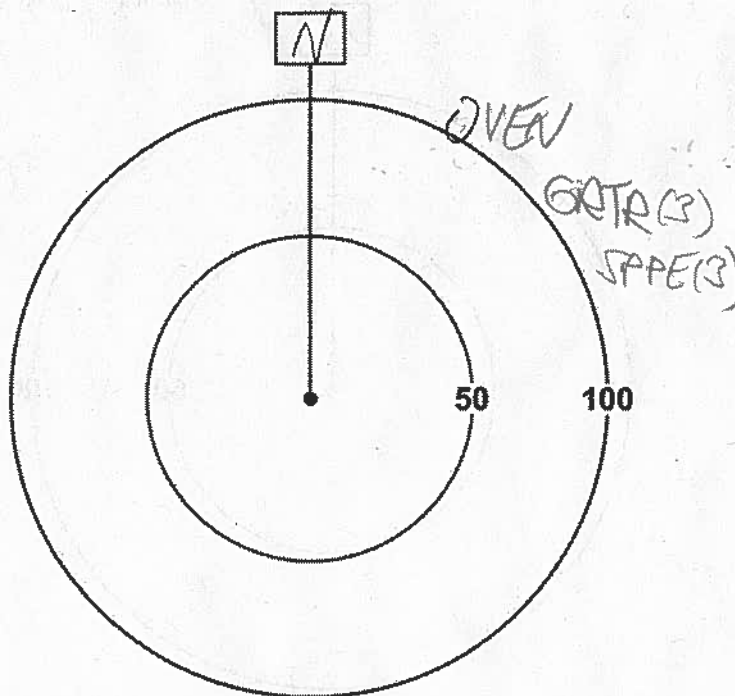
Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_  
 (Project Manager)

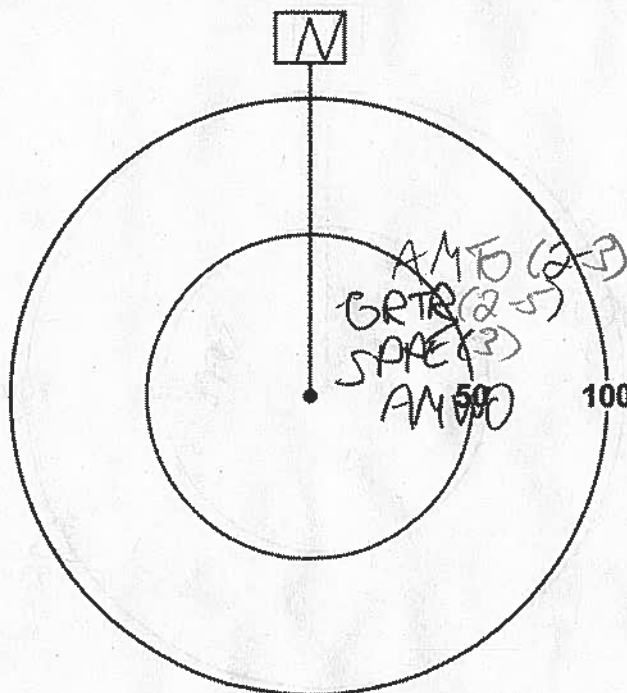
KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: 13 UTM: 540718 5064706 Background Noise: Traffic-frequent  
 Start Time: 10:03 End Time: 10:09  
 Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



Station: 14 UTM: 538955 5069441 Background Noise: Traffic-frequent  
 Start Time: 10:15 End Time: 10:21  
 Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



Signature: D. Kie

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

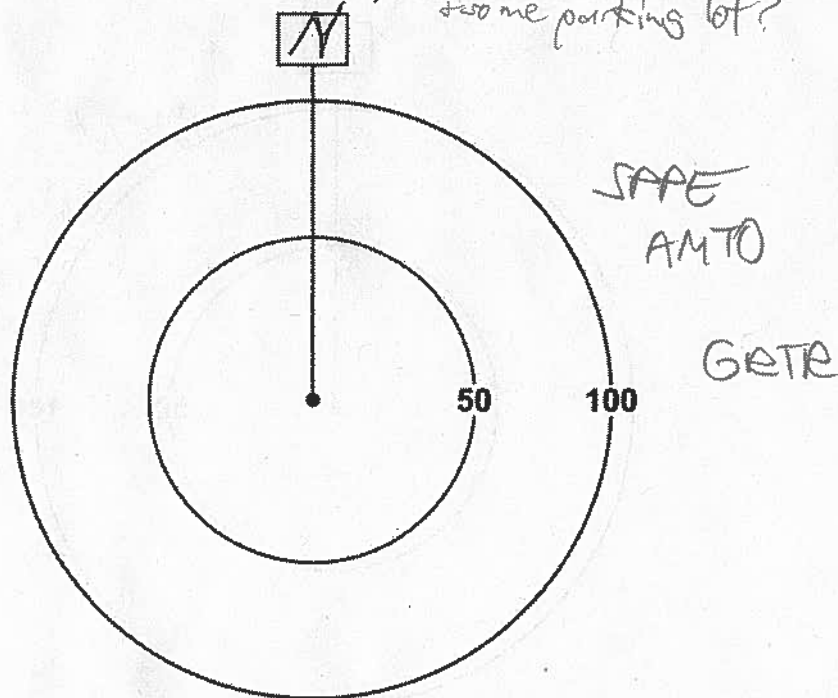
(Project Manager)



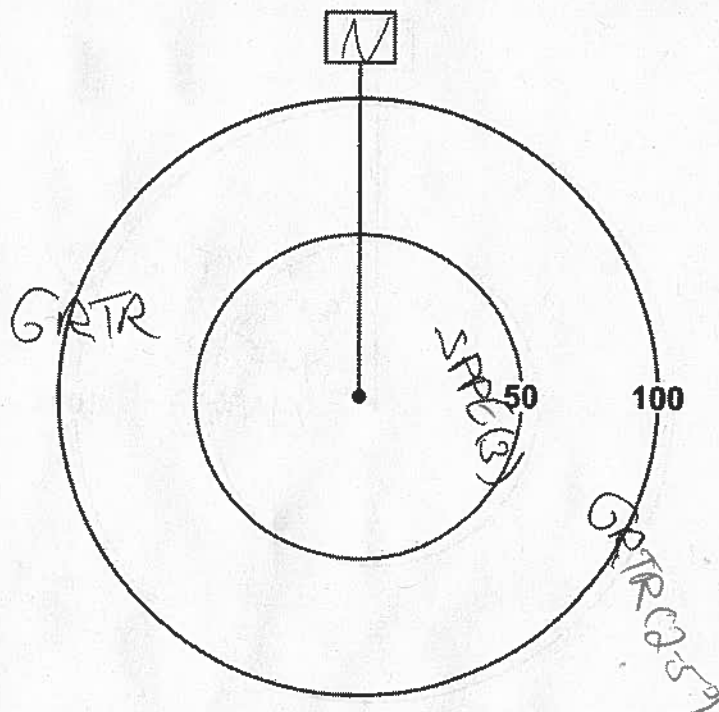
# KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: 15 UTM: 535685 5072881 Background Noise: Traffic - Frequent  
 Start Time: 10:27 End Time: 10:33  
 Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop / ☒ cultural meadow? + some parking lot?



Station: 16 UTM: 534069 5077650 Background Noise: Traffic - Frequent  
 Start Time: 10:38 End Time: 10:44  
 Habitat: ☒ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop / ☒ cultural (meadow (lumberyard) & lawn)

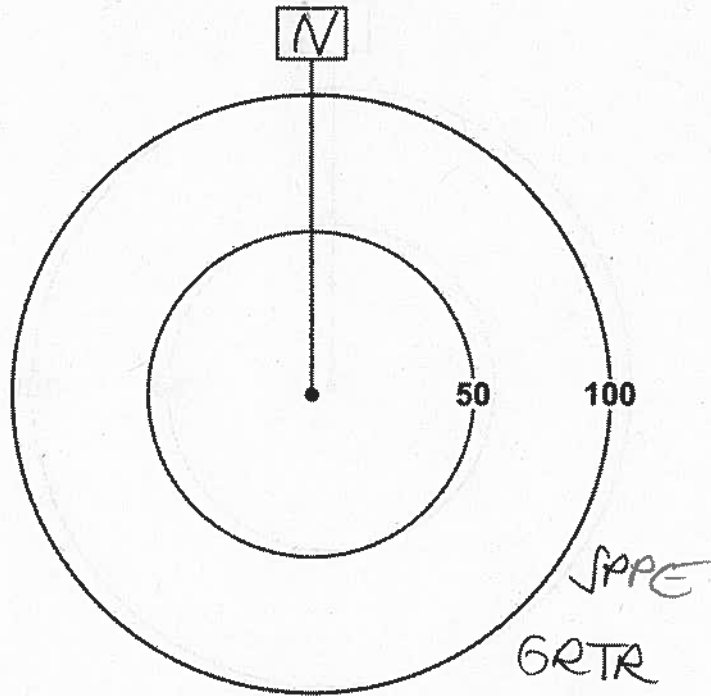




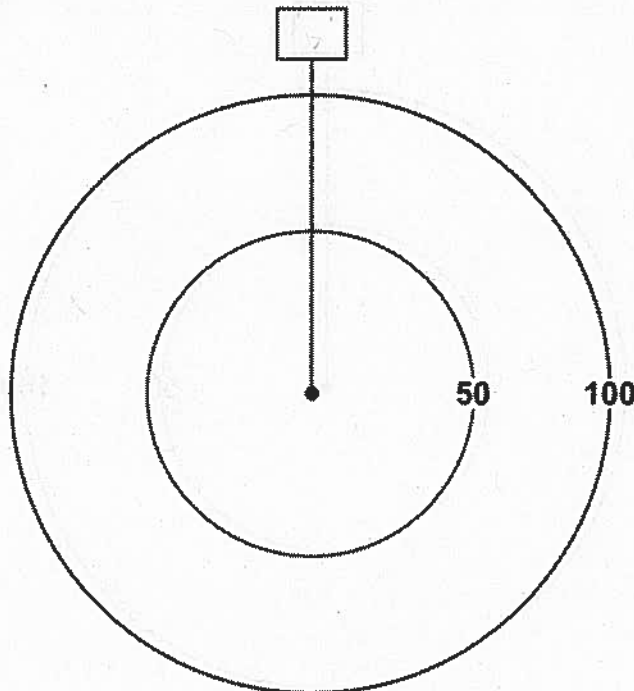
**KEEP TRACK OF ALL BIRDS SEEN – UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: 17 UTM: 523626 5082442 Background Noise: Traffic - frequent  
 Start Time: 10:49 End Time: 10:55  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ River ☒ cultural meadow



Station: \_\_\_\_\_ UTM: \_\_\_\_\_ Background Noise: \_\_\_\_\_  
 Start Time: 10 End Time: \_\_\_\_\_  
 Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop



Page 55 of 55

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-13 / FORM 029

**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: \_\_\_\_\_

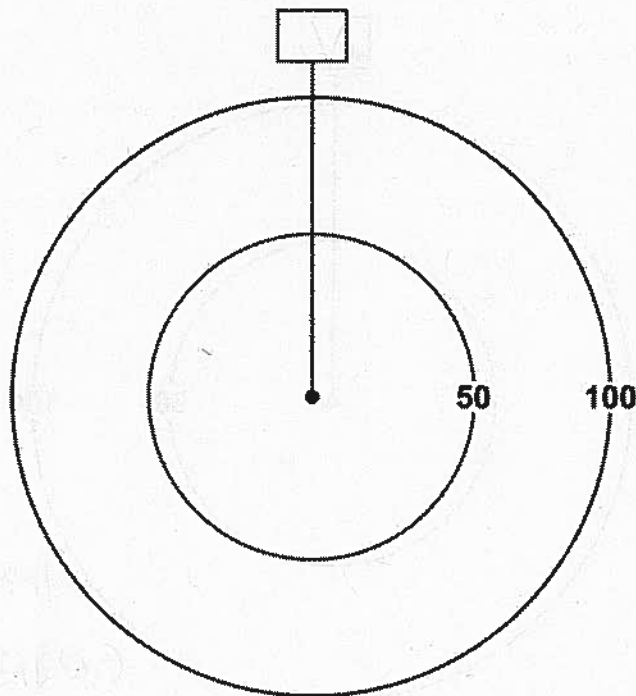
UTM: \_\_\_\_\_

Background  
Noise: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

Habitat: ☐Forest / ☐Swamp / ☐Marsh / ☐Hay / ☐Pasture / ☐Crop



Station: \_\_\_\_\_

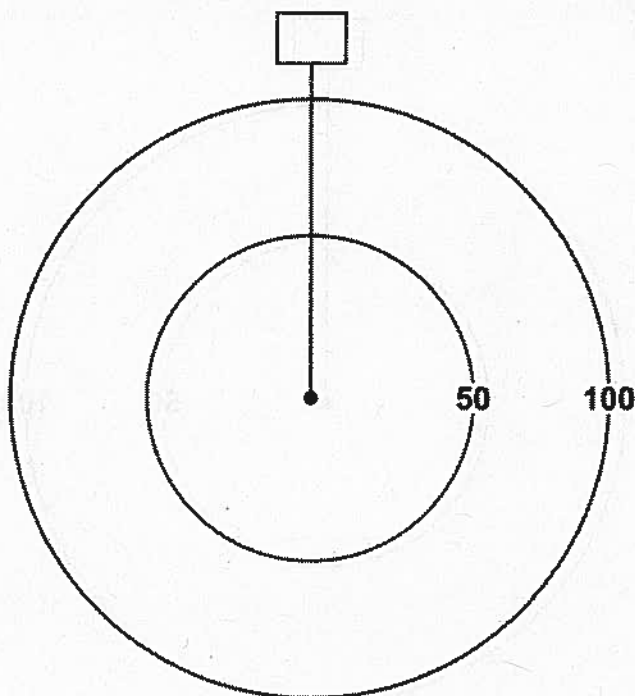
UTM: \_\_\_\_\_

Background  
Noise: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

Habitat: ☐Forest / ☐Swamp / ☐Marsh / ☐Hay / ☐Pasture / ☐Crop



Page \_\_\_\_ of \_\_\_\_

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-13 / FORM 029

**Stantec**

**Stantec Consulting Ltd.**  
 1 - 70 Southgate Drive  
 Guelph, ON  
 Canada N1G 4P5  
 Tel: (519) 836-6050  
 Fax: (519) 836-2493

## Nightjar Survey Observation Form

Project Number: 160960824Project Name: Night/Heavey InletDate: May 29 2013Field Personnel: S Richer

Conditions:

Sunset (official time):

21:02

Full Moon (date):

May 25 2013

Moon Phase:

70% full

Moon above horizon?

no

Weather Conditions:

TEMP (°C):

10

WIND:

East 0-1

CLOUD:

15

PPT:

None

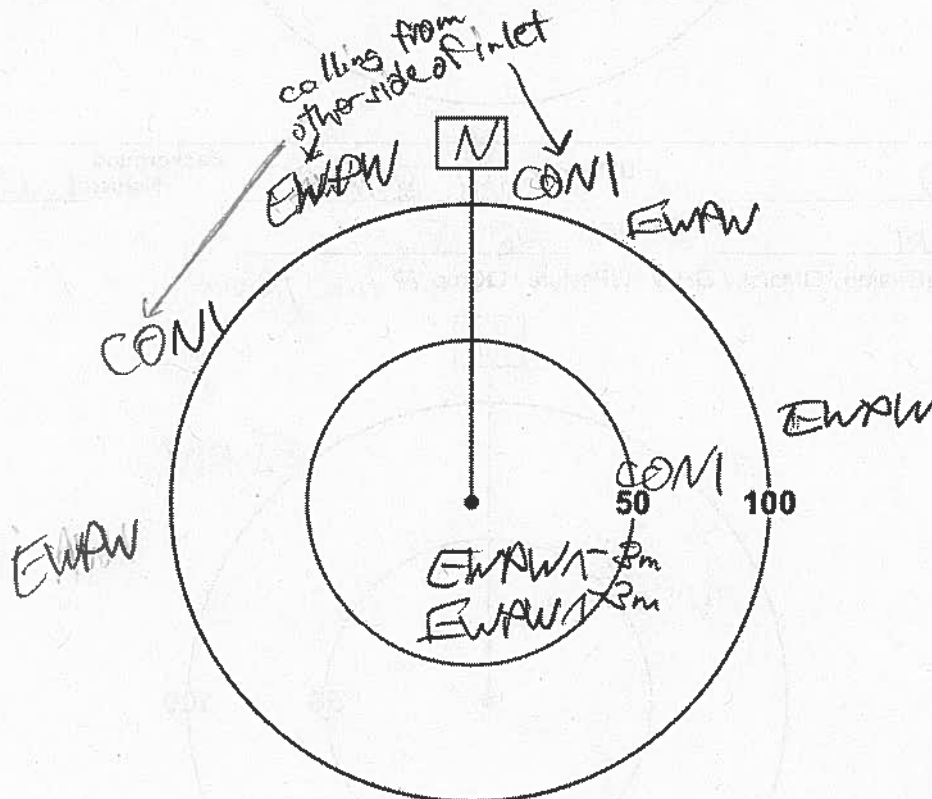
PPT (In last 24 hrs):

heavy rainStation: 18UTM: 508490 507225

Background

Noise: None. Too beautifulStart Time: 21:39End Time: 21:45Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Inlet/River**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Page 1 of 3Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

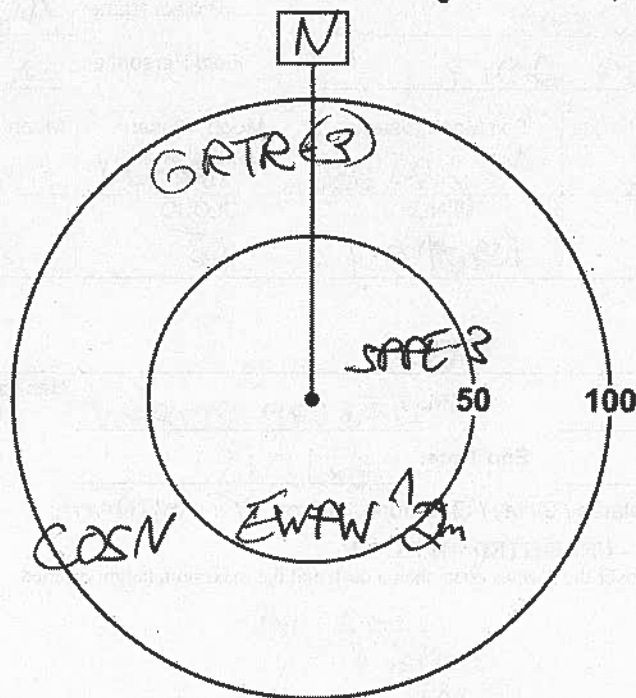
(Project Manager)

REV: 2011-05-13 / FORM 029

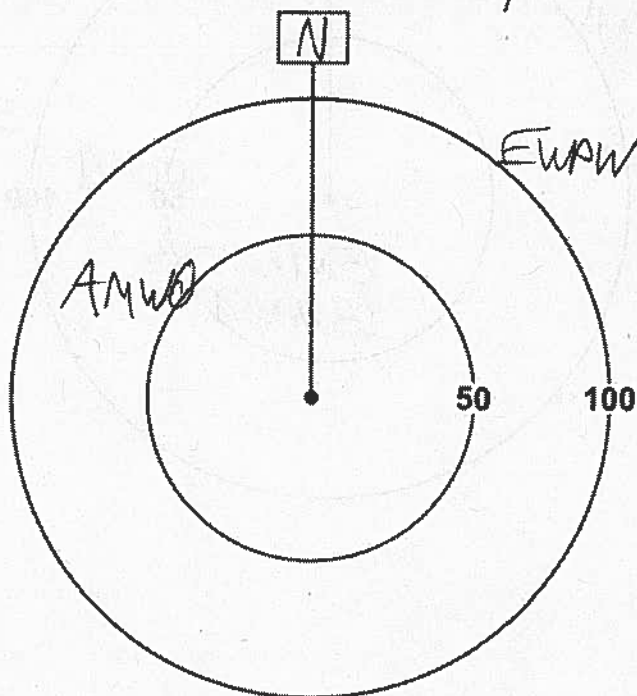
**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: 19 UTM: 529800 5077968 Background Noise: Criabto on VPRE  
 Start Time: 21:56 End Time: 22:02 + GTR  
 Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ bog/fen ☒ rock/jackpine/whitepinebarren  
Coniferous



Station: 20 UTM: 530146 5078785 Background Noise: Rabbling brook  
 Start Time: 22:09 End Time: 22:15  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Inlet/River

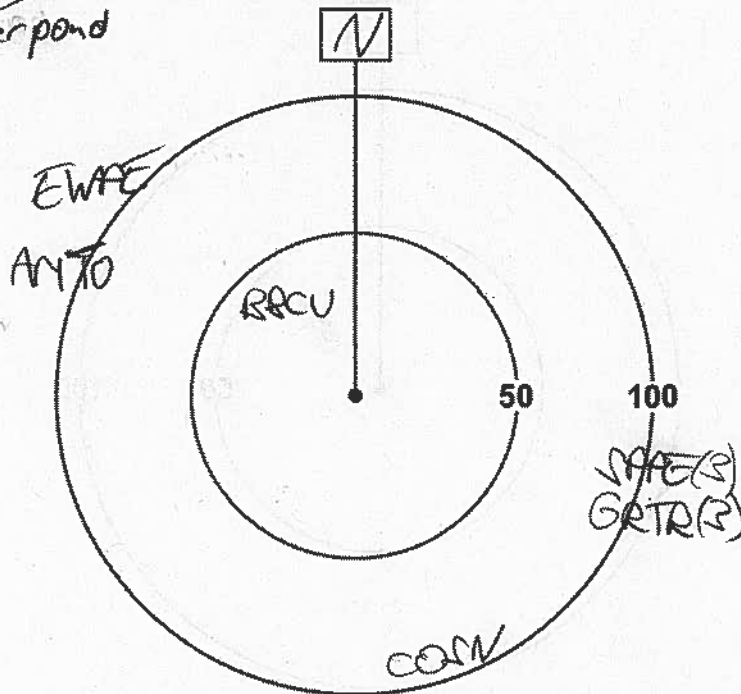


**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

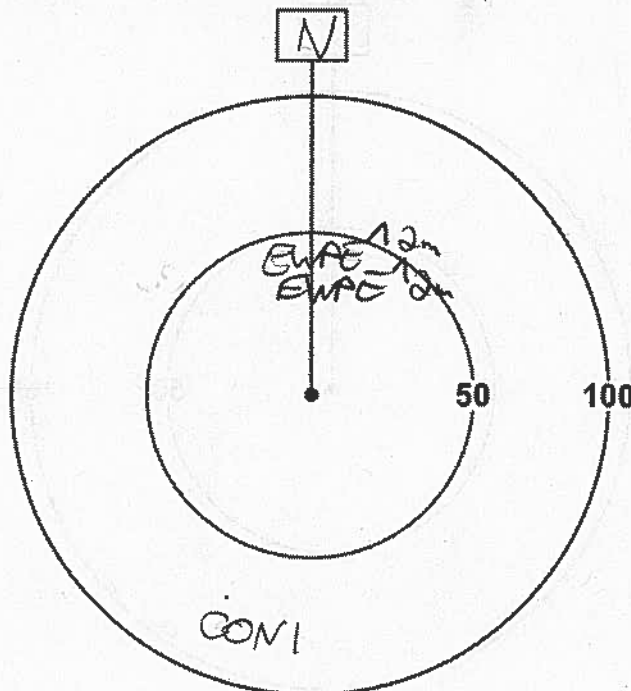
Station: 21 UTM: 531193 5078785 Background Noise: SPPG, crickets, GRTR  
 Start Time: 22:21 End Time: 22:27  
 Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

beaver pond



Station: 22 UTM: 532289 5078663 Background Noise: GRTR, SPPG, crickets, ANTO, NLFR  
 Start Time: 22:45 End Time: 22:54  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ many ponds

all calling codes except NLFR





**Stantec**

Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Crepuscular Species Survey Observation Form

Project Number 160960824Project Name: Nigig/Heavey InletDate June 17 2013Field Personnel: J. Fisher

	Official Time of Sunset: <u>9:14</u>				
Weather Conditions:	Temp: <u>8°C</u>	Wind: <u>Bart 1</u>	Cloud: <u>0</u>	PPT: <u>None</u>	PPT in last 24 hrs: <u>Light steady rain</u>

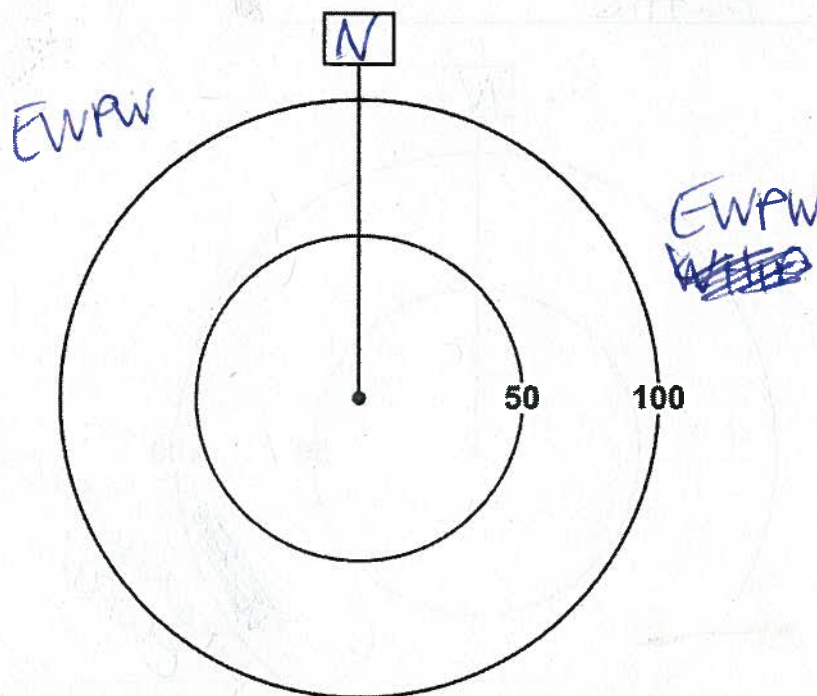
Station: WHIP 17

Habitat: \_\_\_\_\_

UTM: 533626 5082442Start Time: 9:50 pmBackground noise: trafficMoonrise 2:25 pmMoonset 1:25 am**Keep track of all birds seen- unlimited distance**

Note: if a bird is seen displaying indicate this with a ^ over the species code, then a dash and the max. height reached

(i.e. AMWO- 50m)

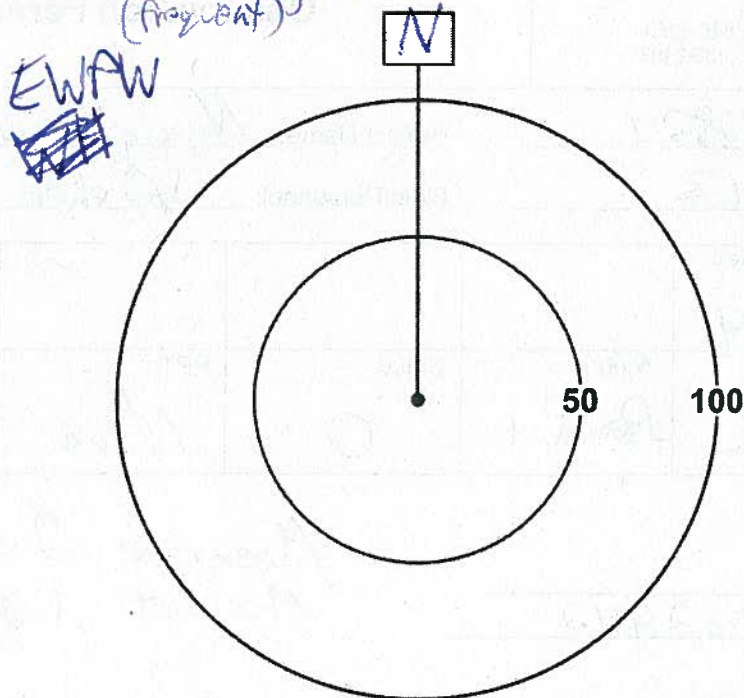


Quality Control: This form is complete ( ) &amp; legible ( ).

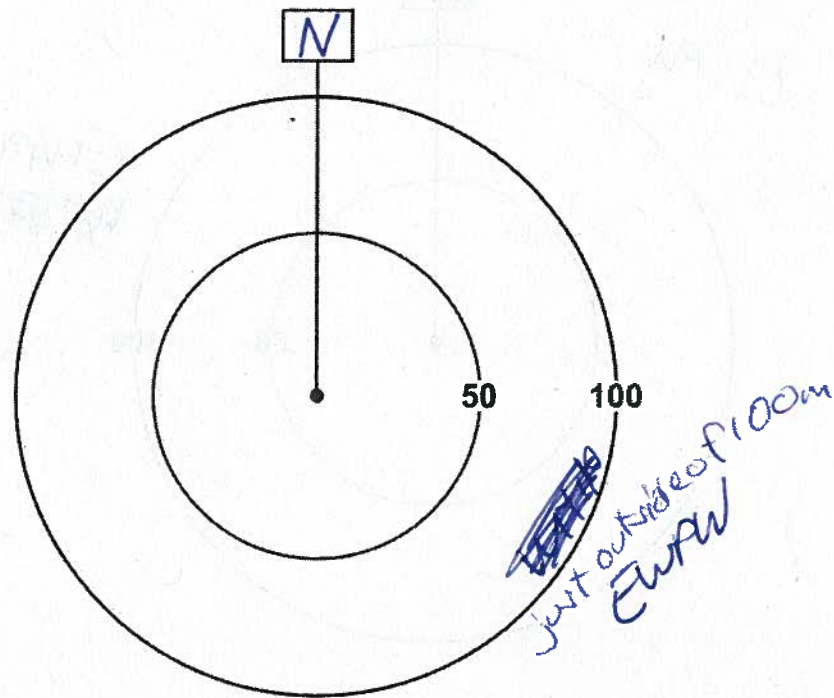
Signature: [Signature]  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)Page 1 of 6

REV: April, 08 FORM029

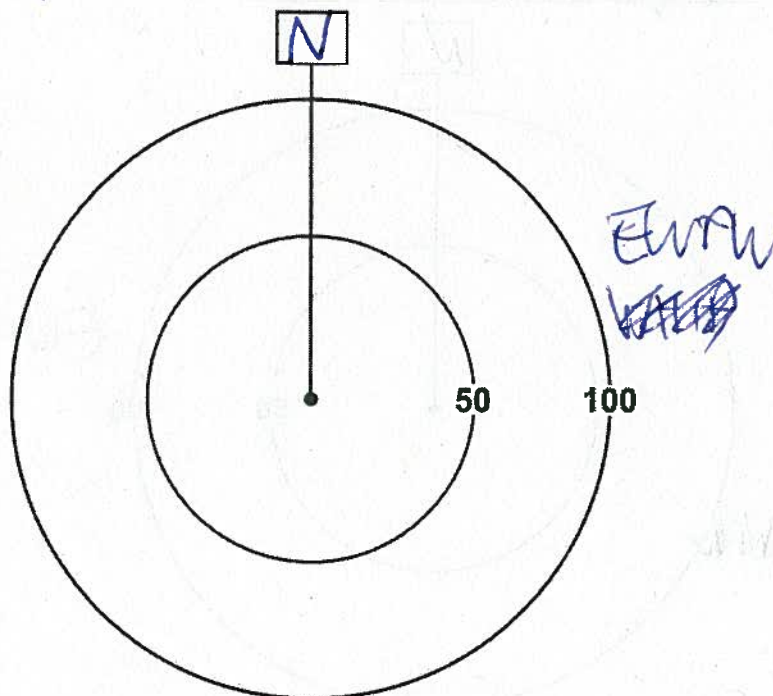
Station: WHIP16 Habitat: \_\_\_\_\_  
UTM: 534069 5077650 Start Time: 10:01  
Background noise: traffic crickets  
(frog croak)



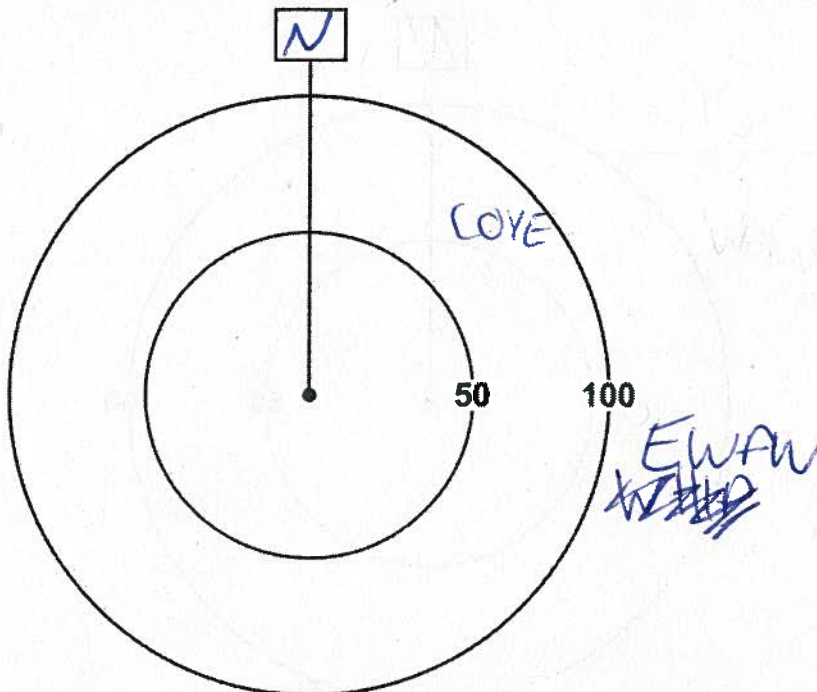
Station: WHIP15 Habitat: \_\_\_\_\_  
UTM: 535685 5072881 Start Time: 10:12  
Background noise: traffic



Station: WHIP14 Habitat: \_\_\_\_\_  
UTM: 538955 5069441 Start Time: 10:20  
Background noise: traffic



Station: WHIP13 Habitat: \_\_\_\_\_  
UTM: 540718 5064706 Start Time: 10:30  
Background noise: traffic (frequent)



Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

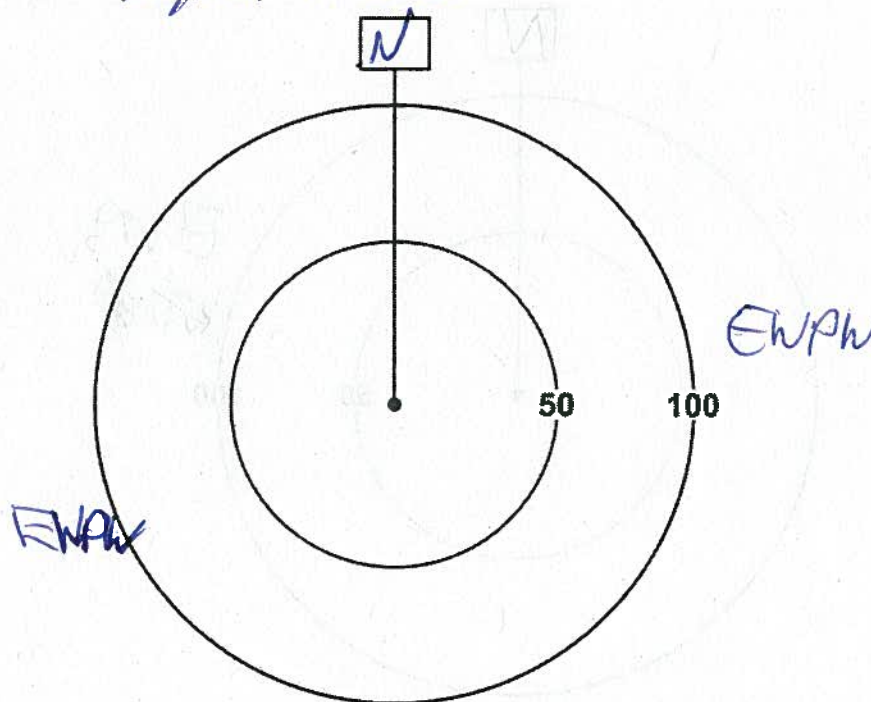
Page 3 of 6

Signature: \_\_\_\_\_  
(Project Manager)

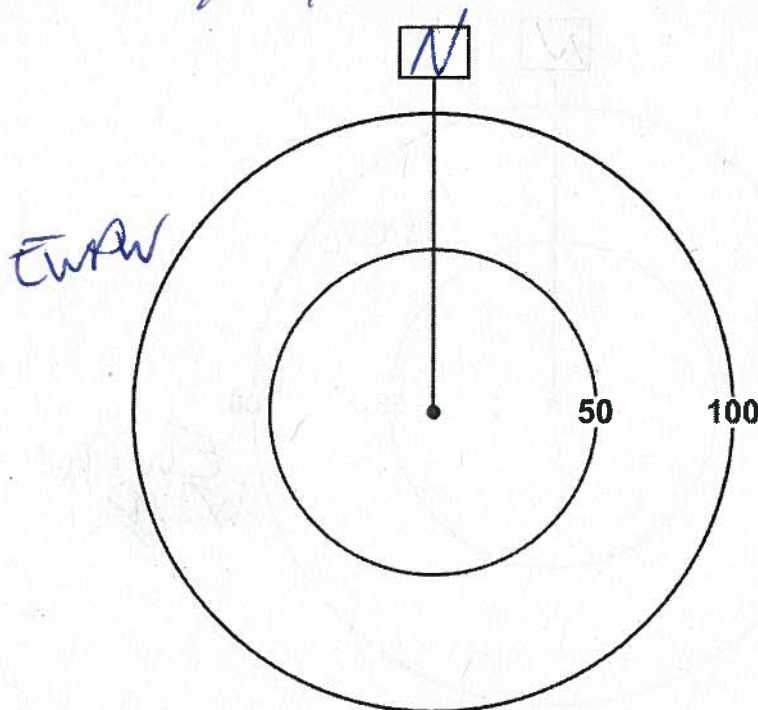
REV: April, 08 FORM029



Station: WHIP 12 Habitat: forest & rock barrens  
UTM: 542710 5060124 Start Time: 10:40  
Background noise: frequent traffic



Station: WHIP 11 Habitat: Rock barren/woodland  
UTM: 545810 5056216 Start Time: 10:50  
Background noise: frequent/regular traffic



Quality Control: This form is complete ( ) & legible ( ).

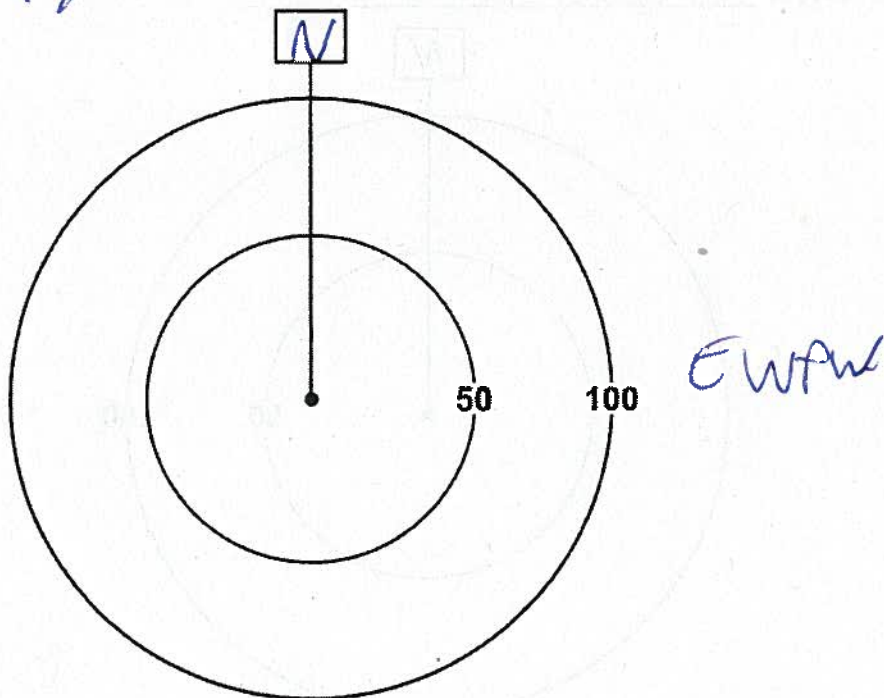
Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

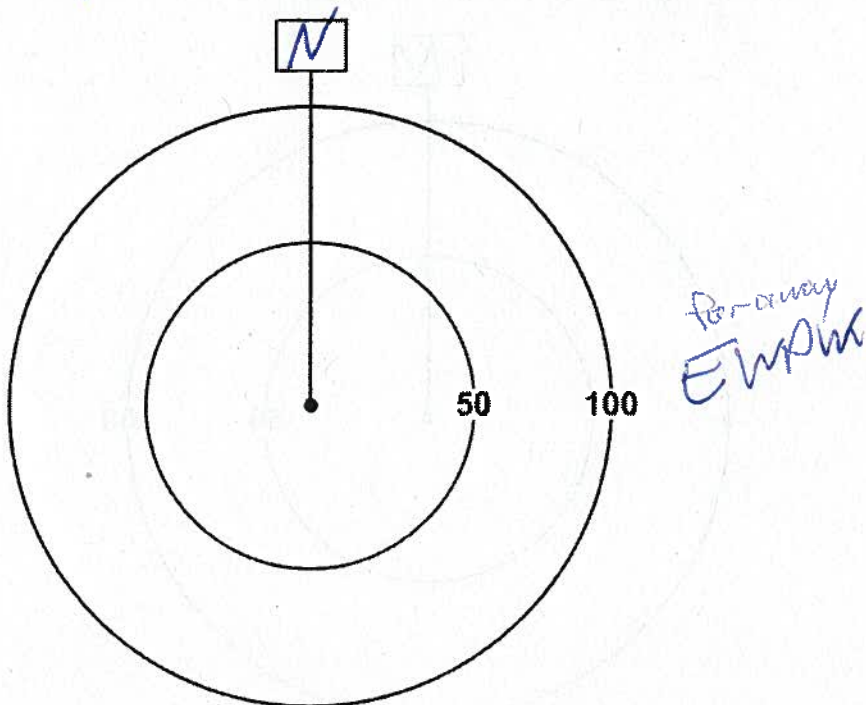
Page 4 of 6

REV: April, 08 FORM029

Station: WHIP10 Habitat: Moose Lake Trail, forest + campground/cabins  
UTM: 547835 5052136 Start Time: 11:01  
Background noise: frequent traffic *small lawn, lake, trails*



Station: WHIP09 Habitat: Forest  
UTM: 550947 5047088 Start Time: 11:11  
Background noise: frequent traffic



Quality Control: This form is complete ( ) & legible ( ).

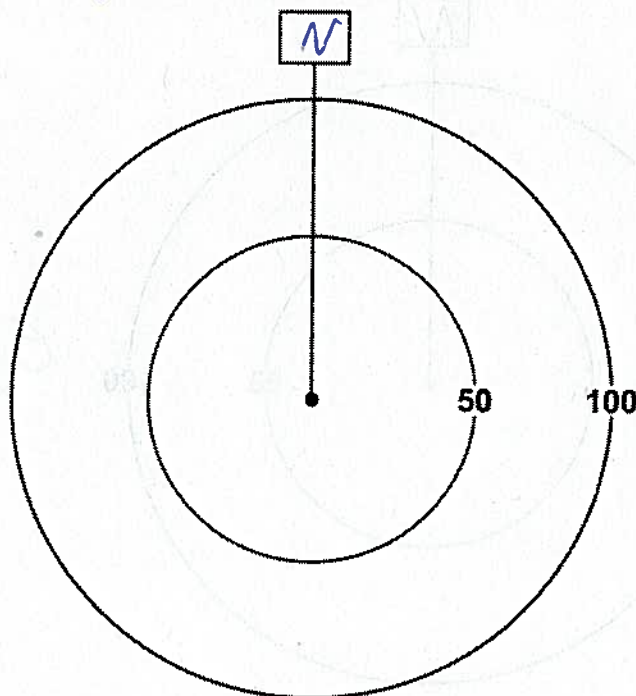
Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 5 of 6

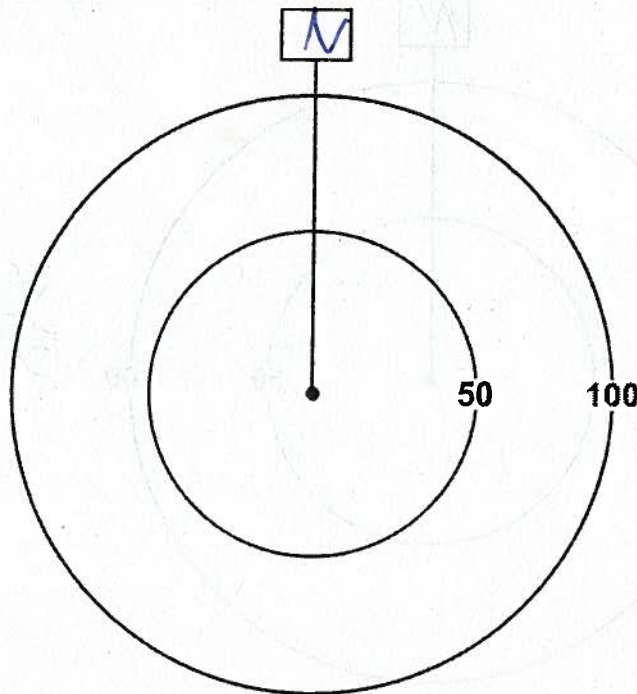
REV: April, 08 FORM029

Station: WHIP08 Habitat: forest?  
UTM: 555384 5044617 Start Time: 11:22  
Background noise: frequent traffic



EWPW

Station: WHIP07 Habitat: forest  
UTM: 559199 5041128 Start Time: 11:24  
Background noise: Regular traffic



Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 6 of 6

REV: April, 08 FORM029



**Stantec Consulting Ltd.**  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

**Stantec**

## Nightjar Survey Observation Form

Project Number: 160960824

Project Name: Nigig/Henvey Inlet

Date: June 18 2013

Field Personnel: J Richer

Conditions:

Sunset (official time):

21:10pm

Full Moon (date):

June 23/13

Moon Phase:

0 2/3 full

Moon above horizon?

Yes

Weather Conditions:

TEMP (°C):

12°C

WIND:

Beauf 1-2

CLOUD:

0

PPT:

None

PPT (in last 24 hrs):

None

Station: WHIP 00

UTM: 582508 5016960

Background

Noise: diverted traffic

Start Time: 9:40

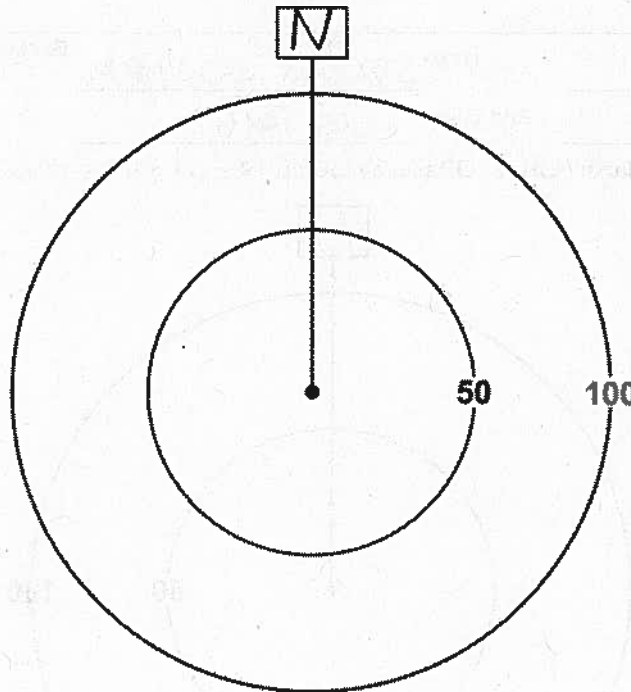
End Time: 9:46

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

railway, transformer station, cottager

**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.



Page 1 of 4

Signature: A. Richer

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

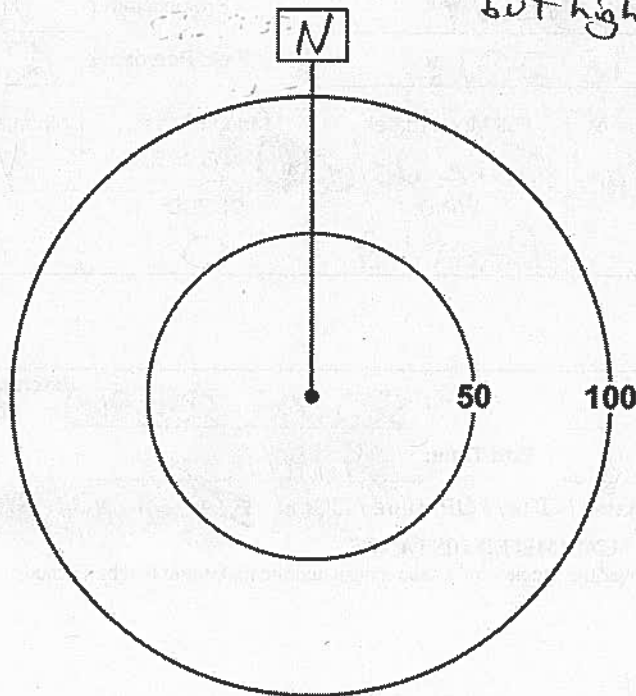
REV: 2011-05-13 / FORM 029



**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

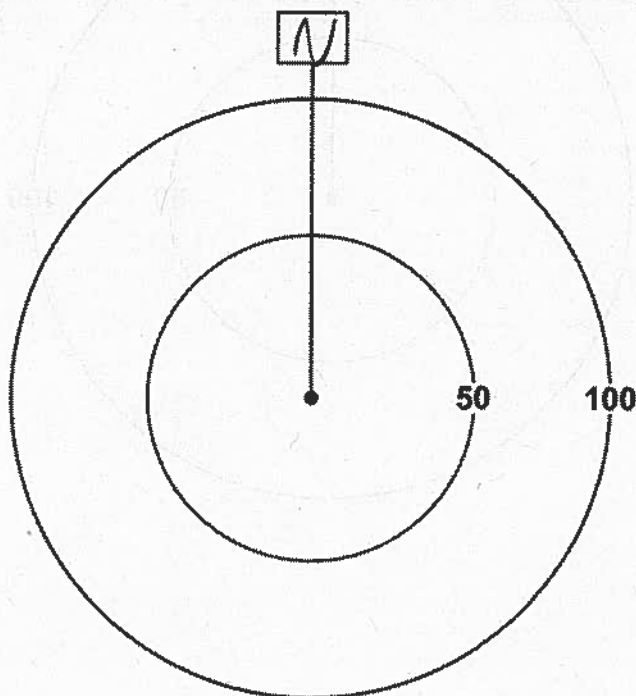
Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: WH1A01 UTM: 579933 5021289 Background Noise: Frequent traffic  
 Start Time: 22:02 End Time: 22:08  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop gravel pit, forested on all sides but highway



None  
obs

Station: WH1A02 UTM: 576285 5024876 Background Noise: Frequent traffic  
 Start Time: 22:20 End Time: 22:26  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop cut area along highway

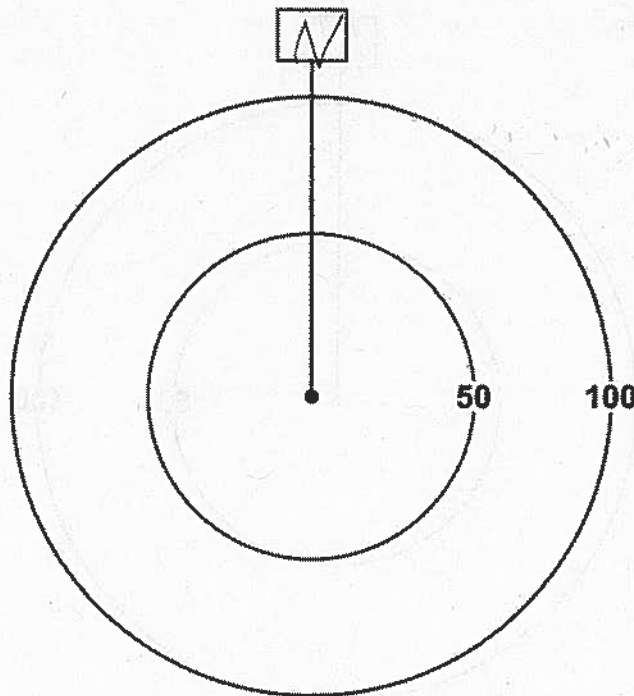


ELWAW

**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

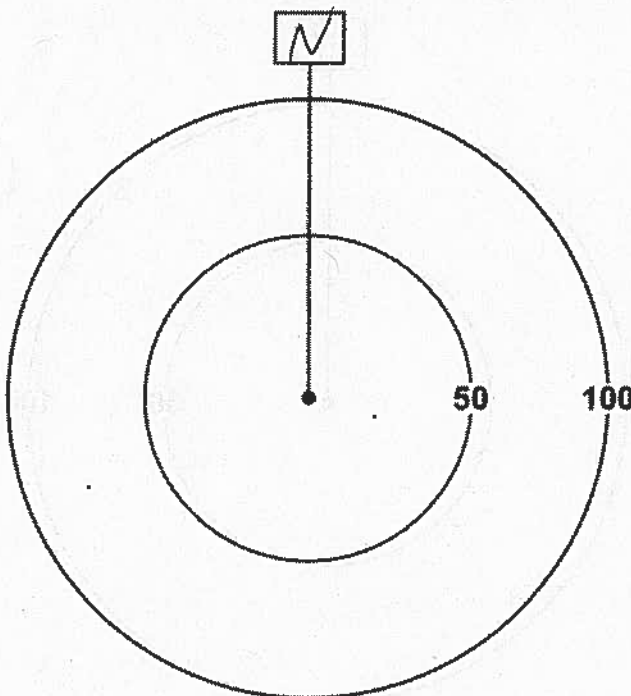
Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: WHIP08 UTM: 573299 5028175 Background Noise: Frequent traffic  
 Start Time: 22:29 End Time: 22:35  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop  
☒ Lake



None  
obs

Station: WHIP04 UTM: 570428 5031489 Background Noise: Frequent traffic  
 Start Time: 22:40 End Time: 22:46  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop  
☐ Lake

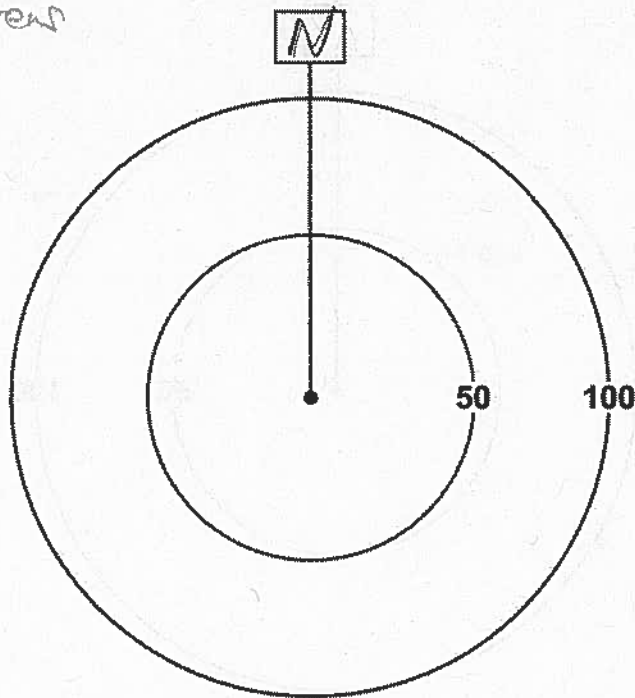


None  
obs

**KEEP TRACK OF ALL BIRDS SEEN - UNLIMITED DISTANCE**

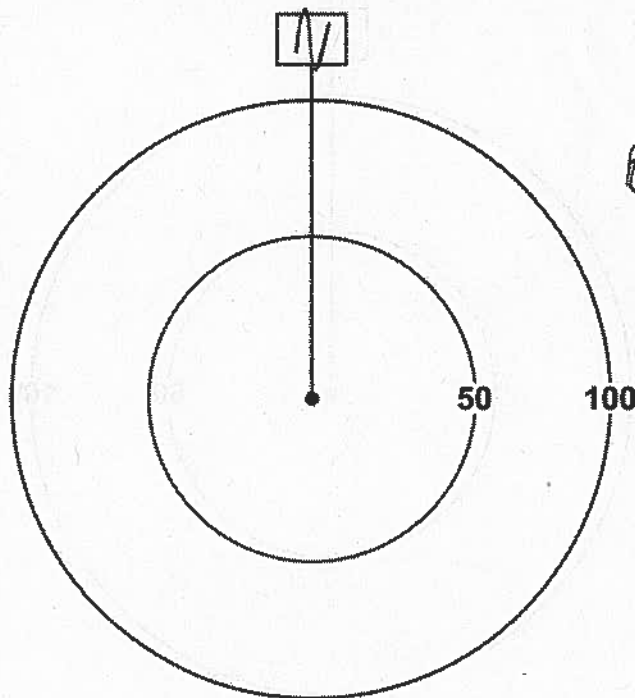
Note: if a bird is seen, indicate this with a ^ over the species code, then a dash and the maximum height reached.

Station: WHIP05 UTM: 566327 5034077 Background Noise: regular traffic  
 Start Time: 22:50 End Time: 22:56  
 Habitat: ☒ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop  
 + ☒ Brook barrens



Station: WHIP06 UTM: 562745 5037659 Background Noise: infrequent traffic  
 Start Time: 22:59 End Time: 23:05  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

fireflies!



EWPW

EWPW

Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: [Signature]

(Project Manager)





Stantec Consulting Ltd.  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

**Stantec**

## Birding Point Counts Survey Observation Form

Project Number: 160960824

Project Name: Nisig Henvey Inlet

Date: June 30 2013

Field Personnel: J. Richer

Weather Conditions:	TEMP (°C): <u>15</u>	WIND: <u>B12</u>	CLOUD: <u>50</u>	PPT: <u>None</u>	PPT (in last 24 hrs): <u>Light rain</u>
---------------------	-------------------------	---------------------	---------------------	---------------------	--

GPS #: T 17

Area MTD

Station: TLO1

Feature: \_\_\_\_\_

UTM: 533352 582122

Start Time: 5:10

End Time: 5:20

Habitat: ☐ Forest / ☒ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

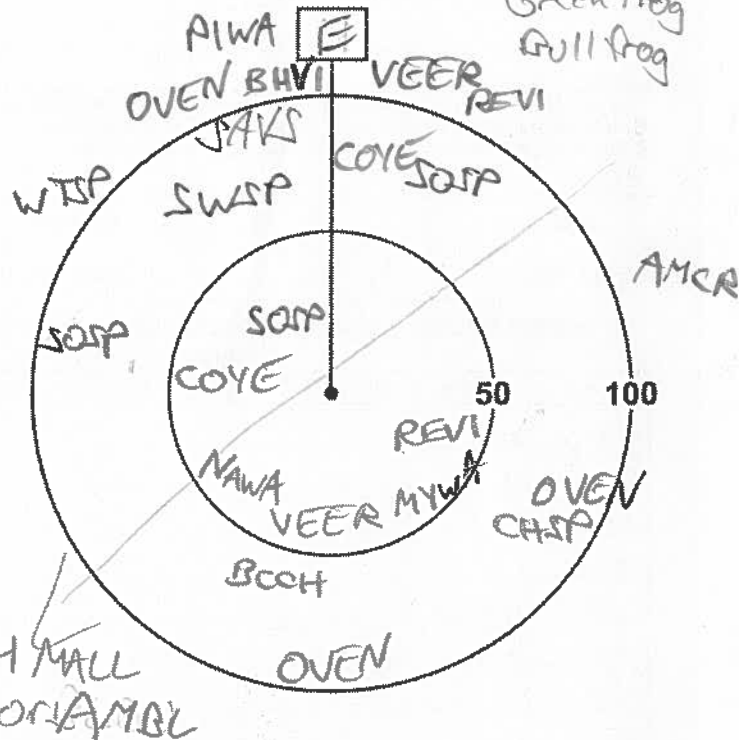
Constant drumming, nearly  
no live ceremony

Green Frog  
Gull Frog

Species	<50m	50-100m	>100m	Flyovers	Height*
SOOP	1	11			
CHSP		1			
COFE	1	1			
NAWA	1				
MYWA	1				
OVEN		11	1		
SAVS		1			
SWSP		1			
REVI	1		1		
VEER	1		1		
BCCH		1			
WTSP			1		
PIWA			1		

\* Height of blade sweep varies from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep

BHVI  
AMCR



Page 1 of 8

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

533608 508078

**UTM:**

End Time: 5:42

Still hear the drums

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep

4RSA

UTM: 533598

End Time: 5:57

5079442

[illegible]

O-On ground; A-Below height of blade sweep; B-At height of blade sweep; C-Above height of blade sweep; D-Well above height of blade sweep

BCCH  
OVEN

**Signature:**

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

(Project Manager)

REV: 2011-05-04 / FORM 020

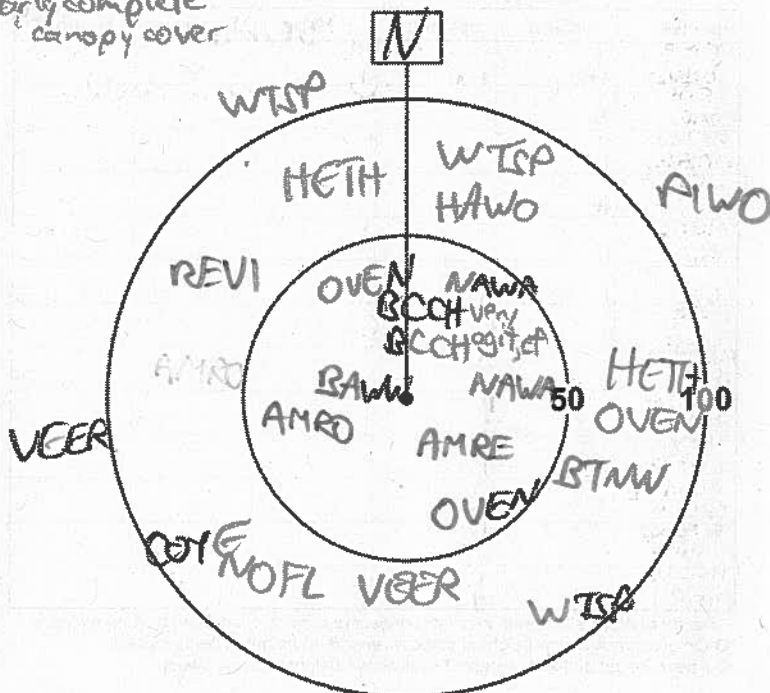
MTD

Station: TL04

Feature: \_\_\_\_\_

UTM: 534022 5078287Start Time: 6:09End Time: 6:19Habitat: ☒ Forest / ☒ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ CropSphagnum moss & other understory, nearly complete canopy cover

Species	<50m	50-100m	>100m	Flyovers	Height*
BECH	11				
COYE	11	1			
NAWA	11				
OVEN	11	1			
BAWW	1				
AMRE	1				
BTNW		1			
AMRO	1				
REVI		1			
HETH		11			
WTSP		11	1		
PIWO		1			
HAWO		1			
VEER		1	1		
NOFL		1			



\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL05

MTD

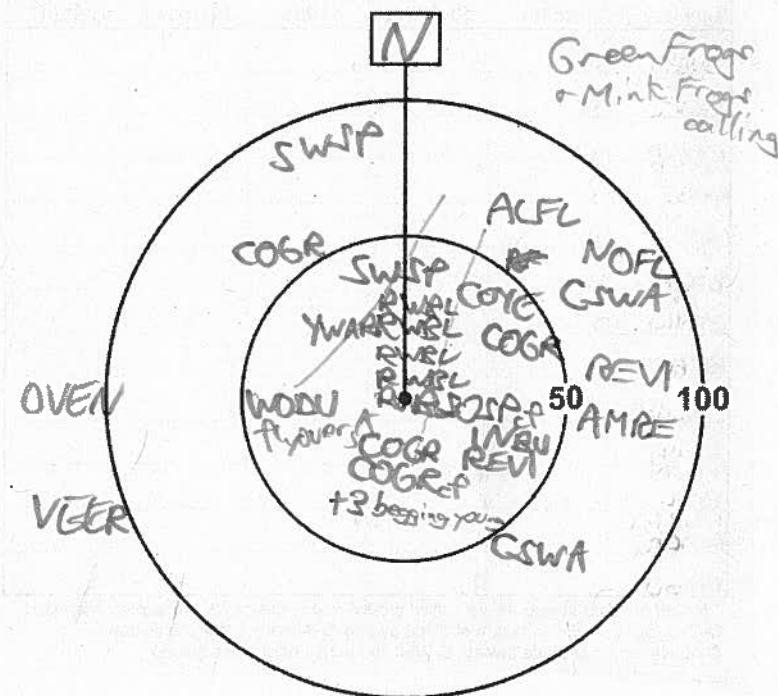
Feature: \_\_\_\_\_

UTM: 534484 5076510Start Time: 6:25End Time: 6:35Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Cropdecid. alder cattail

Species	<50m	50-100m	>100m	Flyovers	Height*
RUBL	111				
YWAR	1				
COYE	1				
CSWA		11			
AMRE		1			
OVEN			1		
ALFL		1			
NOFL		1			
SWSP	1	1			
SGSP	1				
ENBU	1				
REVI	1	1			
WODU				11	
COGR	1	1		11	

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

VEER



Green Frogs  
 & Mink Frogs  
 calling

Page 3 of 8Signature: A. R. J.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

UTM: 534727 50750

End Time: 6:50

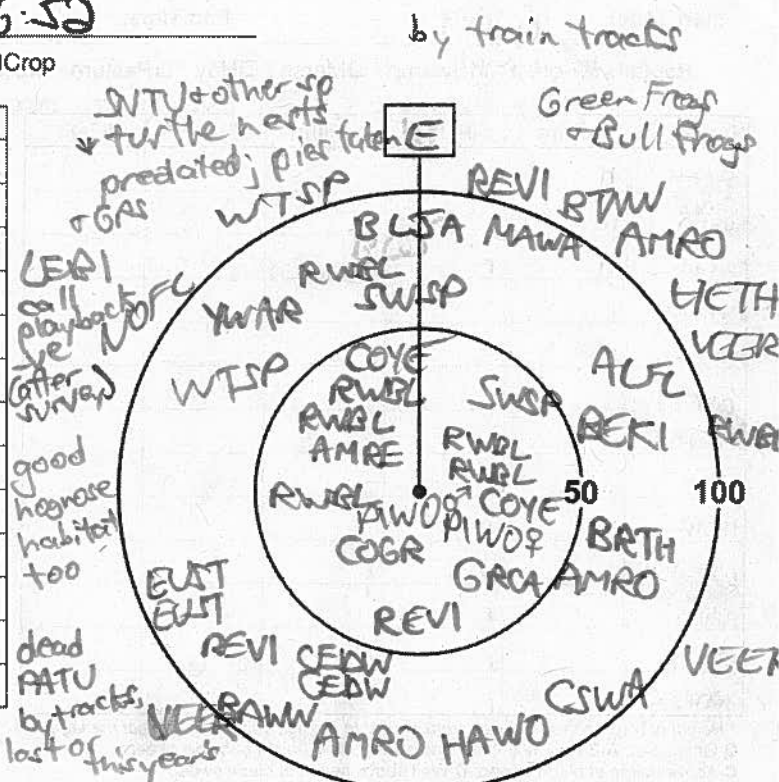
Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop  
decid alder cotton

Species	<50m	50-100m	>100m	Flyovers	Height*
VEER					
RWBL					
HETH					
COXE					
GTNW					
AMRE					
UTSP					
PIWO					
NOFL					
GRCA					
REVI					
BRTH					
SWSP					
BERI					
ALFL					
MAWA					
BLSA					
YWAR					
WTSP					
EUST					
CEOW					
SMWW					
CSWA					
HAWO					
AMPO					

\* Height of blade sweep will vary from project to project; check with project manager.

**O**-On ground; **A**-Below height of blade sweep; **B**-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



UTM: 535300 5074024

End Time: 7:20 (delay when stopped questioned by

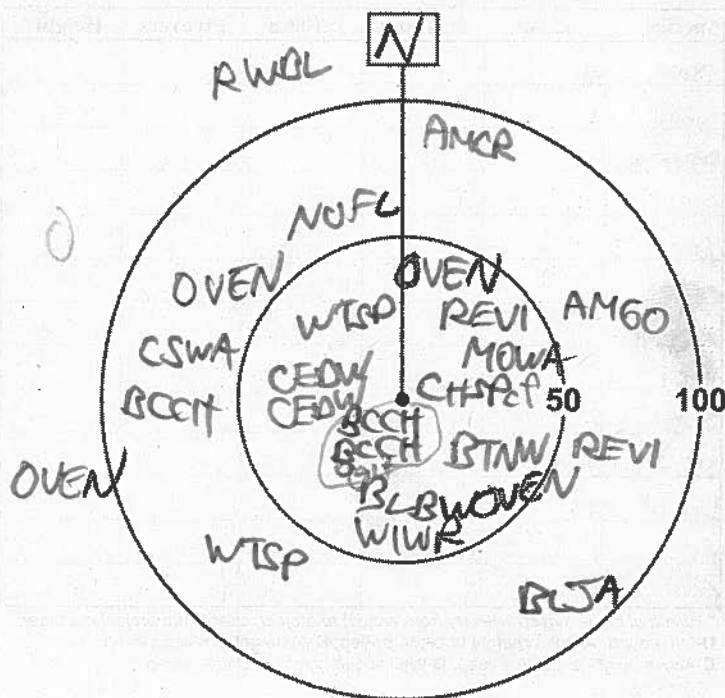
Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop  
Mixed ☒ Rock ledges

Species	<50m	50-100m	>100m	Flyovers	Height*
OVEN	11	1	1		
REVT	1	1			
MOWA	1				
WTSP	1	1			
CHSP	1				
CEBW	11				
ROCH	11	1			
BTNW	1				
BLBW	1				
WTWR	1				
CSWA		1			
BLJA		1			
NOFL		1			
RWBL			1		
AMCR		1			
AMGO		1			

\* Height of blade sweep will vary from project to project; check with project manager.

Q-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



**Signature:**

*[Signature]*  
(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

(Project Manager)





Station: TL10 MTD

Feature: \_\_\_\_\_

UTM: 537424 507011Start Time: 8:02End Time: 8:12Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ rock pine barrengrass hedge small but distinct

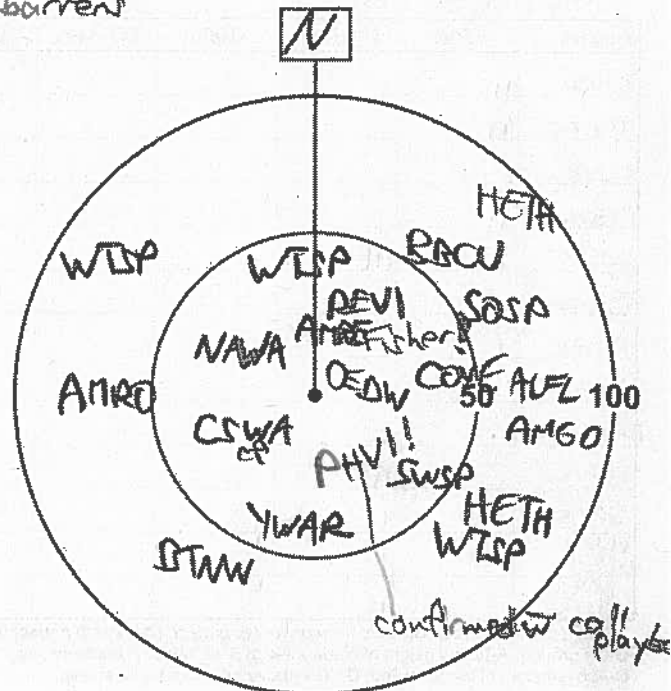
Species	<50m	50-100m	>100m	Flyovers	Height*
WTSP	1	11			
REVI	1				
AMRE	1				
NAWA	1				
COYE	1				
CEW	1				
CSWA	1				
PHVI	1				
YWAR	1				
SO SP		1			
SWSP	1				
AL FL		1			
BTW		1			
BB CO		1			
AMRO		1			
HETH		11			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

AMGO

Station: TL11 MTD

Feature: \_\_\_\_\_

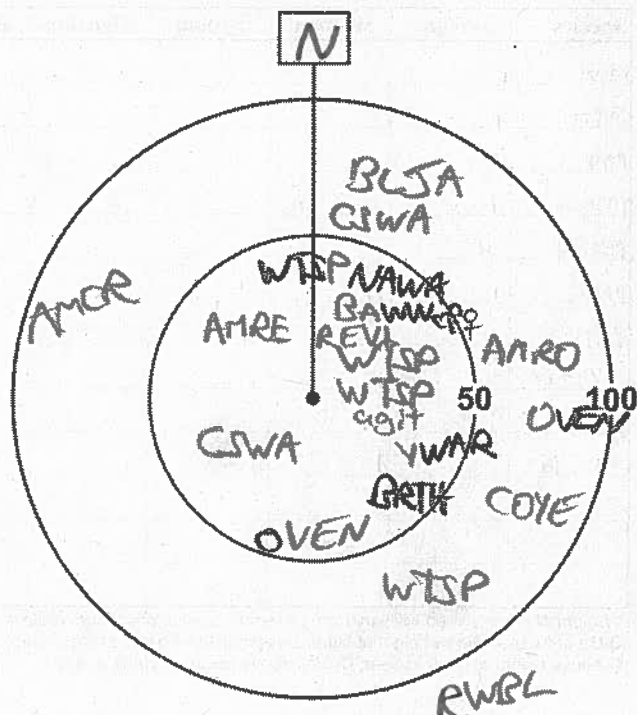
UTM: 537426 506975Start Time: 8:22End Time: 8:32Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ rock pine barrens

Species	<50m	50-100m	>100m	Flyovers	Height*
WTSP	11	1			
OVEN	1	1			
CSWA	1	1			
YWAR	1				
AMRE	1				
NAWA	1				
BAWW	1				
COYE		1			
REVI	1				
AMCR		1			
BLJA		1			
AMRO		1			
RWBL			1		

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Page 6 of 8

Signature: D. P. C.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

MTD

Station: TL12

Feature: \_\_\_\_\_

UTM: 539262 5068545

Start Time: 8:37

End Time: 8:47

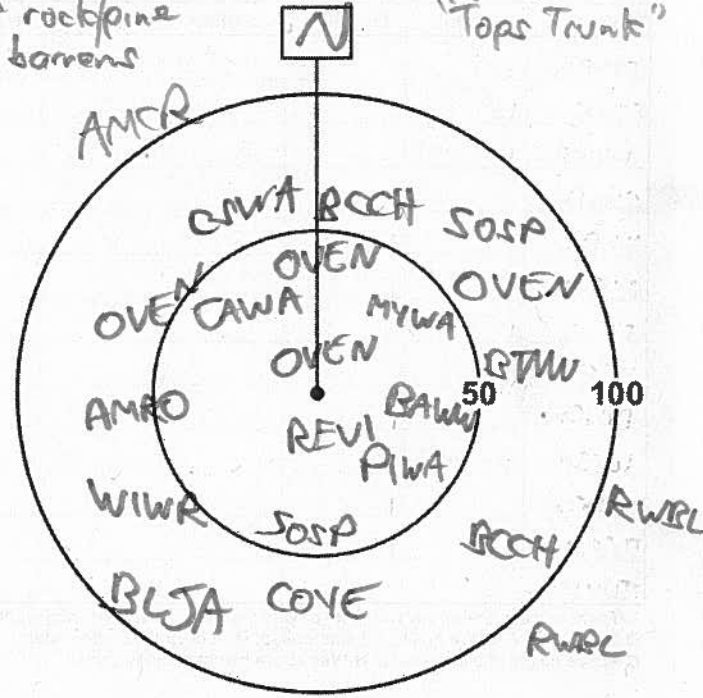
Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

+ some patches of rock/pine barrens

along snowmobile trail  
"Tops Trunk"

WTWR mixed

Species	<50m	50-100m	>100m	Flyovers	Height*
OVEN	11	11			
CAWA	1				
BAWW	1				
PIWA	1				
BTNW		1			
COYE		1			
CSWA		1			
BCCH		1			
AMRO		1			
SSSP	1	1			
REVI	1				
RWBL			11		
AMCR			1		



\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep  
BLJA 1  
MYWA 1

Station: TL13

MTD

Feature: \_\_\_\_\_

UTM: 539804 5066946

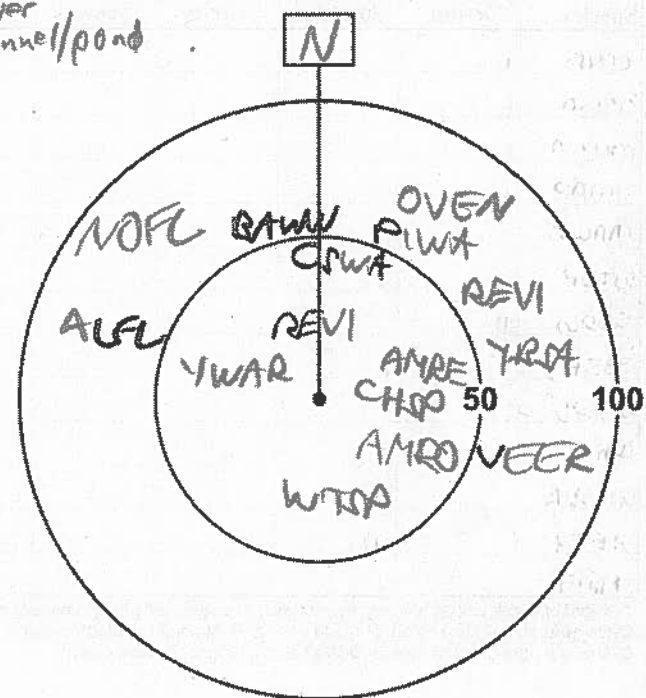
Start Time: 8:54

End Time: 9:04

Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Open water floating veg + sediment  
beaver channel/pond

Species	<50m	50-100m	>100m	Flyovers	Height*
CSWA	1				
YWAR	1				
AMRF	1				
PIWA		1			
OVEN		1			
BAWW		1			
NOFL		1			
ALFL		1			
YBSA		1			
VEER		1			
REVI	1	1			
CHSP	1				
WTSP	1				



\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep  
AMRO 1

Page 1 of 8

Signature: \_\_\_\_\_

A. R. O.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



MTD

Station:

TL14

Feature:

UTM:

540363 512657

Start Time:

9:12

End Time:

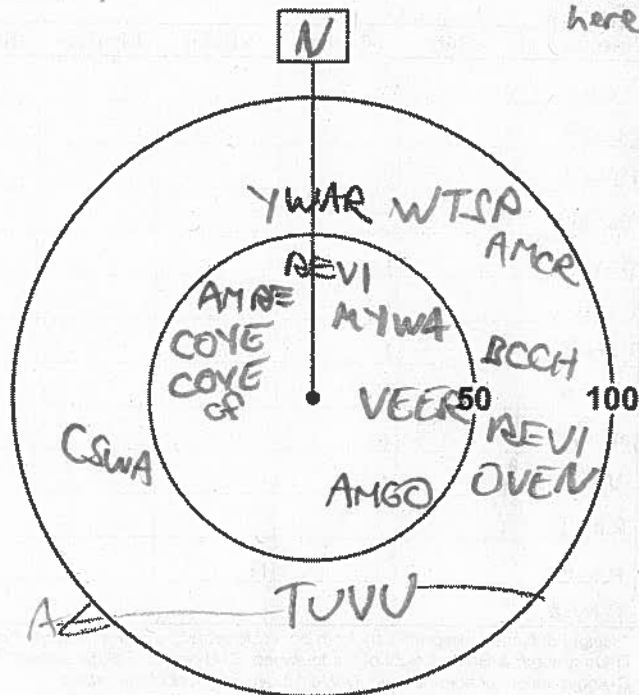
9:22

Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

rock/pine barrens, also more red oak here

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRE	1				
COYE	11				
MYWA	1				
CSWA		1			
YWAR		1			
OVEN		1			
REVI	1	1			
VEER	1				
AMGO		1			
WTSP		1			
AMCR		1			
BCCH		1			
TUVU				1	

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Station:

TL15

MTD

Feature:

UTM:

540917 5064486

Start Time:

9:29

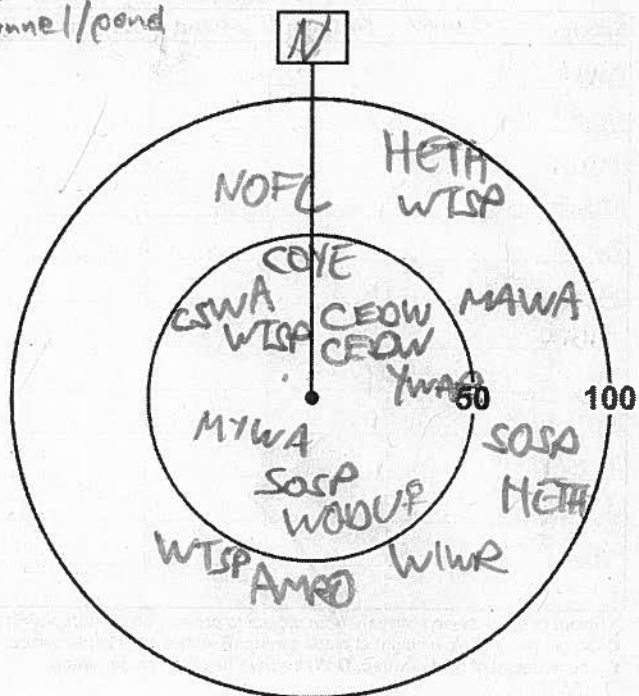
End Time:

9:39

Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Croprock/pine barrens  
Open water / floating veg beaver  
channel/pond

Species	<50m	50-100m	>100m	Flyovers	Height*
COYE	1				
CSWA	1				
MYWA	1				
YWAR	1				
MAWA		1			
WTSP	1	11			
CEOW	11				
SSSP	1	1			
WOODU	1				
AMRO		1			
WIWR		1			
HETH		11			
NOFL		1			

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Page

8 of 8

Signature:

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-04 / FORM 020



Stantec Consulting Ltd.  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

**Stantec**

## Birding Point Counts Survey Observation Form

Project Number:

160960824

Project Name:

Nigig/Henvey Inlet

Date:

June 10 2013

Field Personnel:

S. Richer

Weather Conditions:

TEMP (°C):

12

WIND:

Beauf 1

CLOUD:

75%

PPT:

None

PPT (in last 24 hrs):

None

Area MTD

Station:

TL01

Feature:

UTM:

532352 5003123

Start Time:

5:32

End Time:

5:42

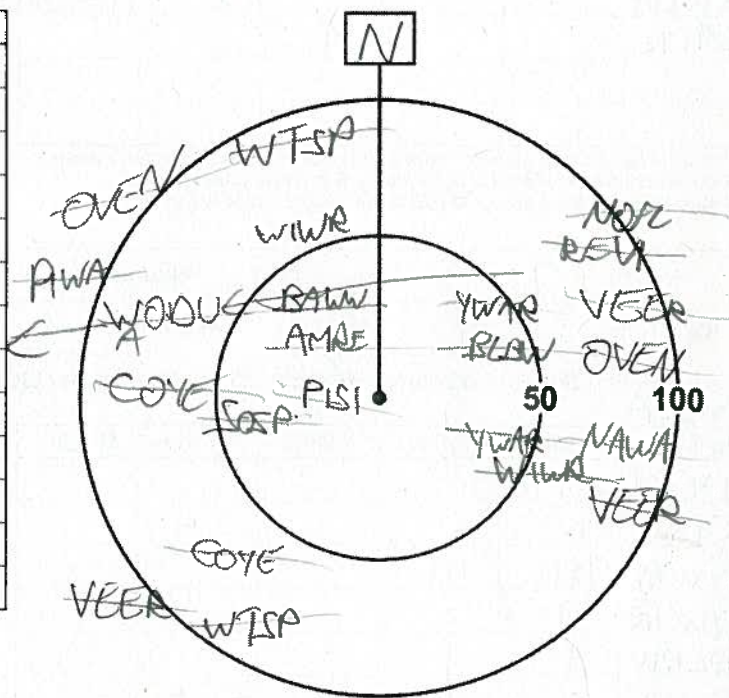
Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

frequent traffic noise

Species	<50m	50-100m	>100m	Flyovers	Height*
BAWW	1				
AMRE	1				
PISI	1				
YWAR	11				
BLRW	1				
WIWR		1			
SOAP	1				
COYE		11			
WOUU		1		1	A
PIWA			1		
OVEN		1	1		
VEER		11	1		
WTSP		11			

\* Height of blade sweep varies from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep

NAWA  
REVI  
NOFL



Page 1 of 10

Signature:

*[Signature]*

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-04 / FORM 020



Area MTO

Station: TL02

Feature: \_\_\_\_\_

UTM: 533608 508078Start Time: 5:46End Time: 5:56

frequent traffic

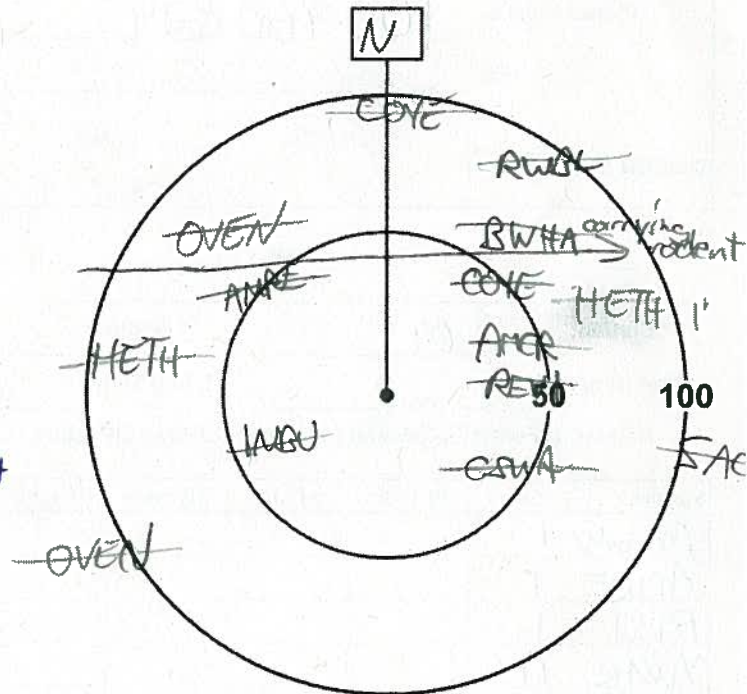
Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
COYE	1	1			
AMCR	1				
REVI	1				
CSWA	1				
INGU	1				
AMRE		1			
OVEN		1	1		
HETH		11			
<del>COYE</del>		1			
BWHA				1	A carrying rodent
SACR			1		

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL03

Area MTO

Feature: \_\_\_\_\_

UTM: 533598 50794Start Time: 6:00End Time: 6:10

frequent traffic

Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

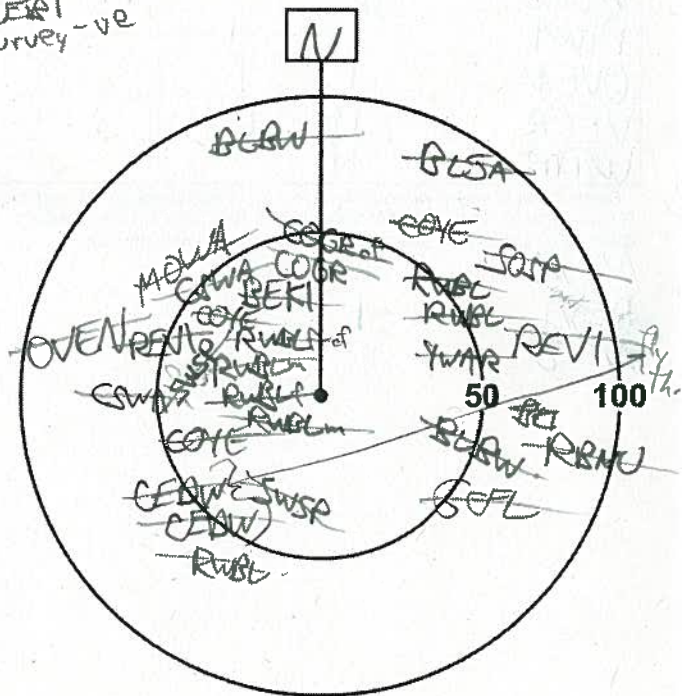
Species	<50m	50-100m	>100m	Flyovers	Height*
BEKI	1				
COBR	11				
RWBL	1111	111			
YWAR	1				
RLGW	1	1			
GCFZ		1			
SWSP	11				
CEOW				11	A
COYE	11	1			
CSWA	1	1			
OVEN		1			
MOVA		1			
REVI	8	11			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

\* LEAF Survey - ve



Page 2 of 10

Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



Area MTD

Station: TL04

Feature:

UTM: 534022 507827

Start Time: 6:21

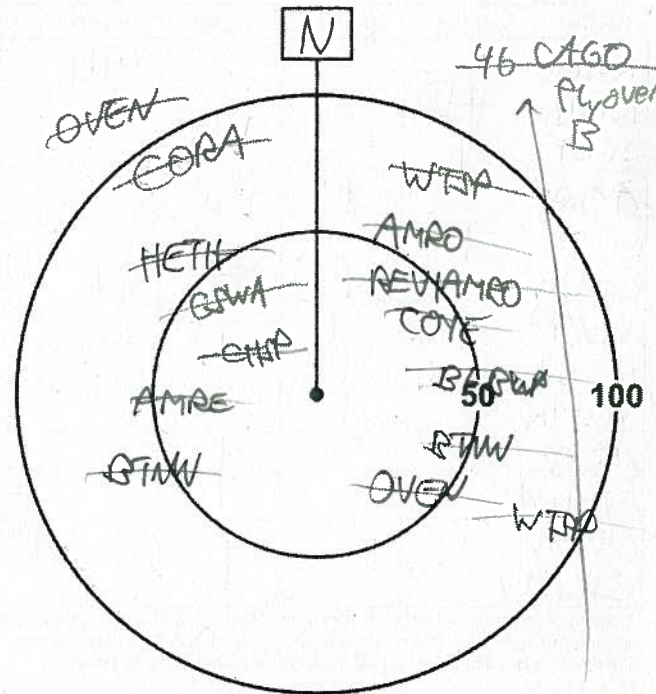
End Time: 6:31

frequent traffic

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Rock barren

Species	<50m	50-100m	>100m	Flyovers	Height*
CHSP					
CSWA					
AMRE					
OVEN					
RTNW					
RLW					
COYE					
REVI					
AMRO					
WTSP					
CORA					
HETH					
CAGO				46	B

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep



Station: TL05

Area MTD

Feature:

railway present, <sup>Shower on</sup> west side of road

UTM: 534484 507652

Start Time: 6:33

End Time: 6:43

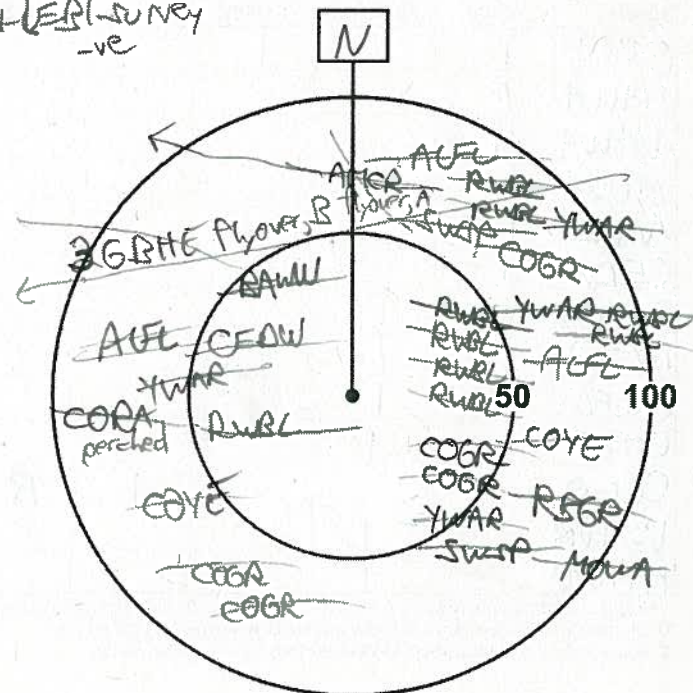
frequent traffic

Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
CEOW					
RWRL					
BAWW					
COGR					
YWAR					
SWSP					
COYE					
CORA					
ALFL					
GRHE					B
AMCR					A
RRGR					
MDWA					

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep

LEPI-Survey  
-ve



Page 3 of 10

Signature: AMQ

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



# Area MTO

Station: TL06 Feature: railway; train come through UTM: 534777 502525  
 Start Time: 6:47 End Time: 6:55 beginning of count tower during count frequent traffic  
 Habitat: ☐ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop  
 CAGO 320 R

Species	<50m	50-100m	>100m	Flyovers	Height*
RGGU				HHH	B
RWRL	HHH				
SOSP	I				
AMRE		I			
COYE	I				
CEOW		I	III	II	B
SWSP		I	I		
REVI		I	I		
YWAR		I			
NOFL			I		
MOWA			I		
OVEN			I		
CSWA			I		

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

COGR II

Station: TL07 Area MTO Feature: rock barren forest UTM: 535302 507402  
 Start Time: 7:04 End Time: 7:14 frequent traffic  
 Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
OVEN	I		I		
MAWA	I				
NAWA	II				
MOWA	I				
AMRE	I				
CEOW	I				
CSWA		II			
BLJA			I		
GOFL		I			
COYE		I			
COGR				I	B
WIWR		I			
HAWO		I			

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

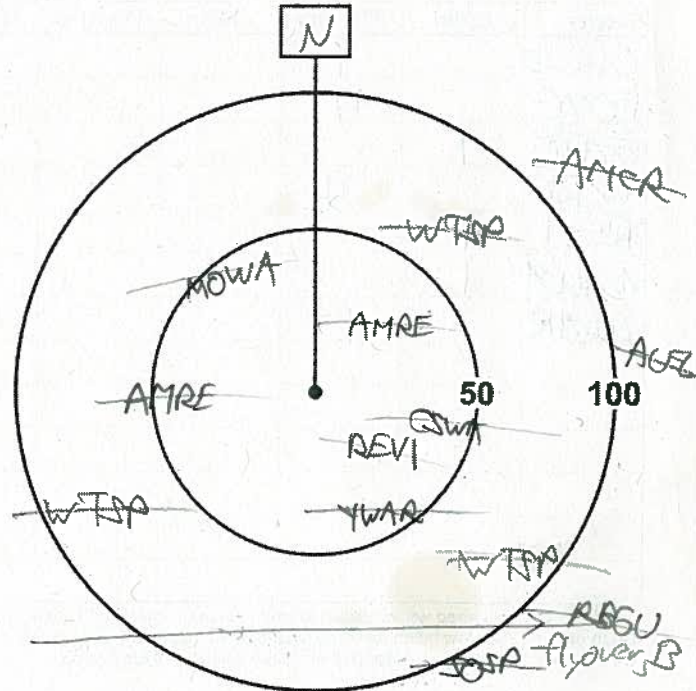


Area MTD

Station: TLO8 Feature: 01/15/11 R. Ver R. another train UTM: 535857 5072690  
 Start Time: 7:16 End Time: 7:26 frequent traffic  
 Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ rock barren forest

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRE	1	1			
GWA	1				
REVI	1				
YWAR	1				
MOWA	1				
WTPP		111			
AMCR			1		
AUE			1		
RGU				1	B
SOFP			1		

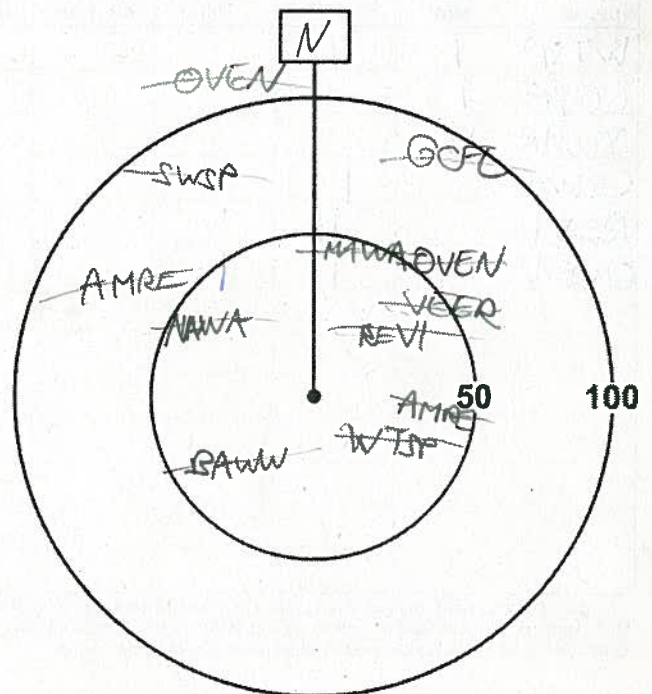
\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Station: TLO9 Area MTD Feature: tower topped w white ball? UTM: 536392 5071361  
 Start Time: 7:29 End Time: 7:39 +communication tower frequent traffic  
 Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ rock barren forest

Species	<50m	50-100m	>100m	Flyovers	Height*
REVI	1				
AMRE	1	1			
WTPP	1				
BAWW	1				
NWA	1				
VEER	1				
MAWA	1				
OVEN		1	1		
GCP		1			
SWSP		1			

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Page 5 of 10

Signature: A. R. R.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



Arca MTD

Station: TL10  
 Start Time: 7:43  
 Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

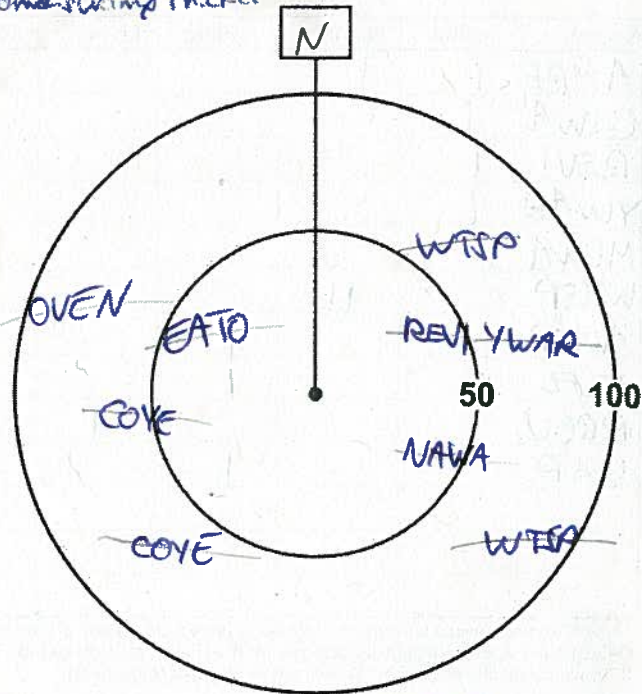
Feature: \_\_\_\_\_  
 End Time: 7:53

UTM: 537<sup>424</sup>~~116~~ 5070<sup>118</sup>~~000~~  
 Frequent traffic

rock barrens forest,  
 some swamp thicker

Species	<50m	50-100m	>100m	Flyovers	Height*
OVEN		1			
COYE		11			
EATO	1				
WTSP		11			
REVI	1				
NAWA	1				
YWAR		1			

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; Q-Well above height of blade sweep



Station: TL11 Arca MTD  
 Start Time: 7:55  
 Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

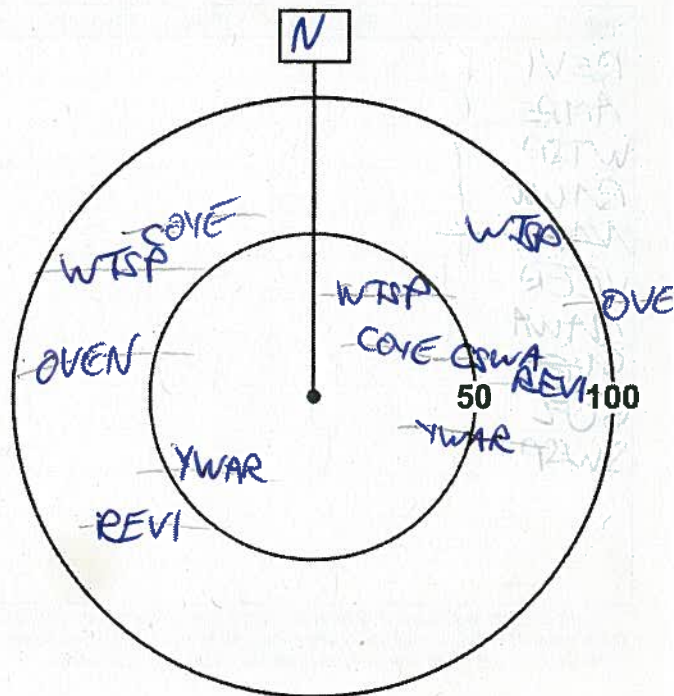
Feature: by Mountain River Road  
 End Time: 8:05

UTM: 538<sup>725</sup>~~117~~ 5069<sup>753</sup>~~000~~  
 Frequent traffic

rock barrens

Species	<50m	50-100m	>100m	Flyovers	Height*
WTSP	1	11			
COYE	1	1			
YWAR	11				
CSWA		1			
REVI		11			
OVEN		1	1		

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Page 6 of 10

Signature: [Signature]  
 (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



Area MTO

Station: TL12

Feature: \_\_\_\_\_

UTM: 539262 5068545

Start Time: 8:10

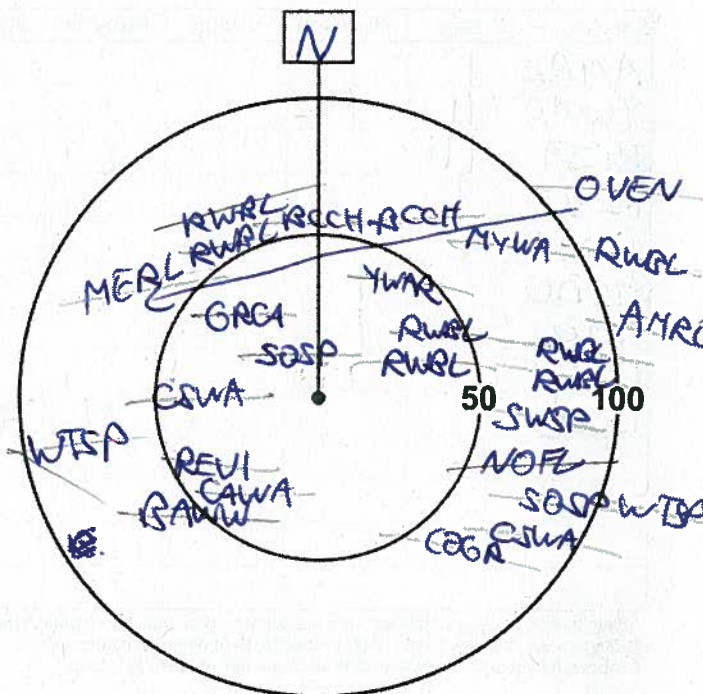
End Time: 8:20

frequent traffic

Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

SWSP

Species	<50m	50-100m	>100m	Flyovers	Height*
SOSP	1	1			
CSWA	1	1			
REVI	1				
CAWA	1				
GRCA	1				
YWAR	1				
RWBL	11	1111	1		
BAWW		1			
ROCH		11			
MYWA		1			
MERL				1	A
WTSP		1	1		
ANRO			1		



\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep; C-Above height of blade sweep; D-Well above height of blade sweep

SWSP

Station: TL12

Feature: Area MTO

UTM: 539804 5066946

Start Time: 8:23

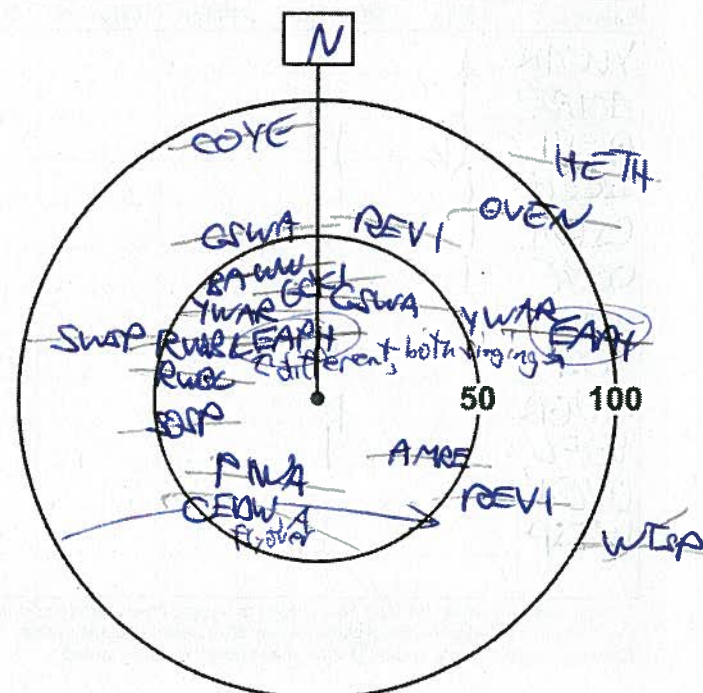
End Time: 8:33

frequent traffic

Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ beaver pond - forest

CEOW

Species	<50m	50-100m	>100m	Flyovers	Height*
EAPH	1	1			
CSWA	1	1			
GCKI	1				
BAWW	1				
YWAR	1				
RWBL	11				
SOSP	1				
PIWA	1				
AMRE	1				
SWSP		1			
COYE		1			
REVI		11			
OVEN		1			



\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep; C-Above height of blade sweep; D-Well above height of blade sweep

HETH

Page 7 of 10

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



Area MTO

Station:

TL14

Feature:

UTM:

540363 5065728  
Frequent traffic

Start Time:

8:38

End Time:

8:48

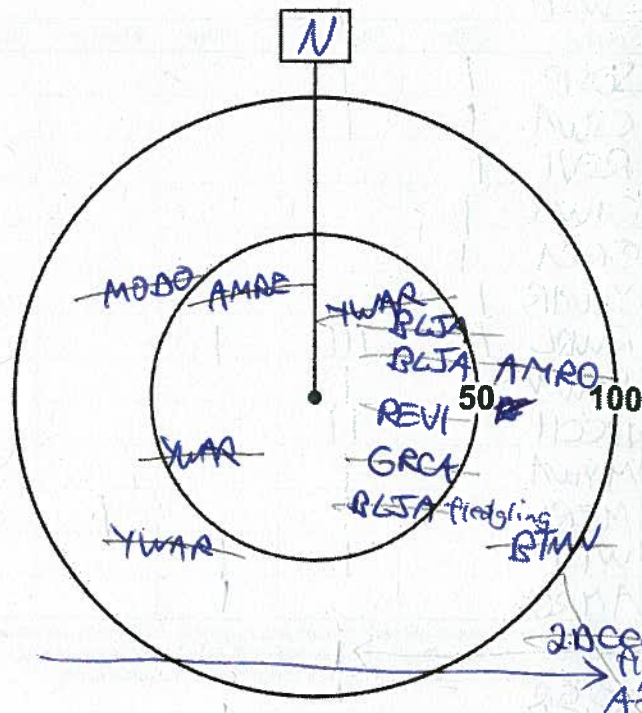
Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Rock barrens

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRE	1				
YWAR	11	1			
BLJA	111				
REVI	1				
GRCA	1				
MODC		1			
AMRO		1			
BTNW		1			
DOCO				11	A+B

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Station:

TL15

Area MTO

Feature:

UTM:

540917 506448  
Frequent traffic

Start Time:

8:51

End Time:

9:01

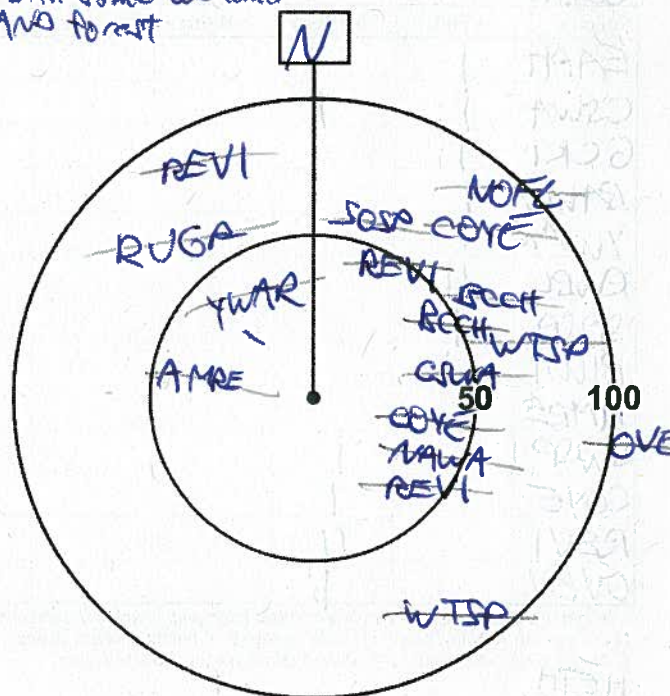
Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Rock barrens,with some wetland  
and forest

Species	<50m	50-100m	>100m	Flyovers	Height*
YWAR	1				
AMRE	1				
REVI	11	1			
GRCA	1	1			
CSWA	1				
COYE	1	1			
NAAW	1				
SOSP		1			
RUGR		1			
NOFL		1			
OVEN			1		
WTSP		11			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Page 8 of 10

Signature:

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-04 / FORM 020



Area MTD

Station: TL16

Feature:

UTM: 541501 5063176Start Time: 9:08End Time: 9:18

frequent/constant traffic

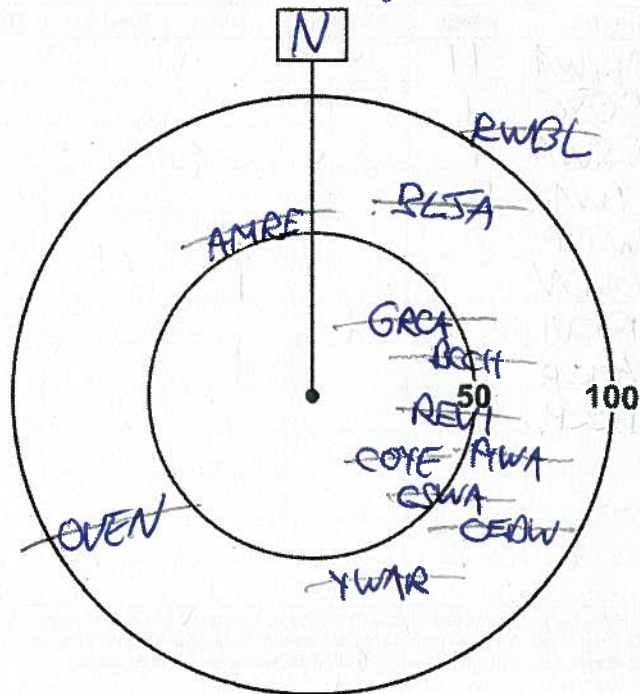
Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Rock barren, some wetland, some bare

Species	<50m	50-100m	>100m	Flyovers	Height*
GRCA	1				
BOCH	1				
REVI	1				
COYE	1				
GSWA	1				
YWAR		1			
OVEN		1			
AMRE		1			
PLJA		1			
RWBL			1		
PIWA		1			
CEOW		1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL17

MTD

Feature:

a pull-off gravel areaUTM: 541923 5061938Start Time: 9:22End Time: 9:32

frequent/constant traffic

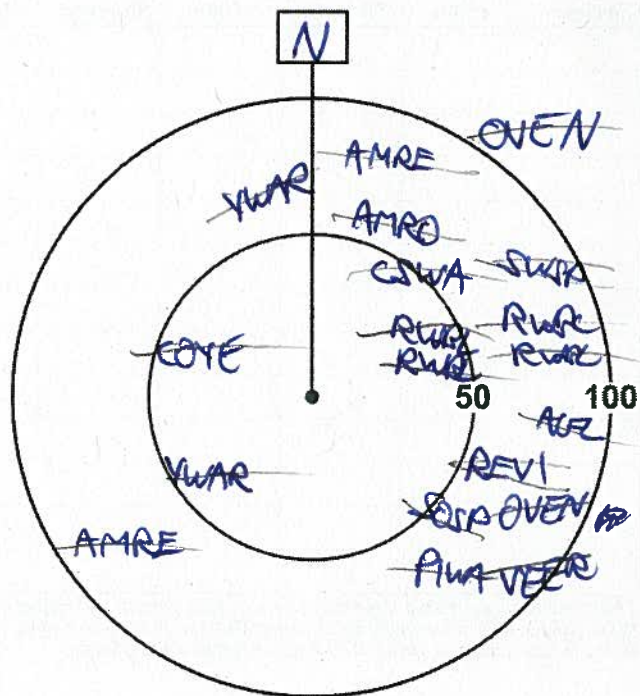
Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
RWBL	11	11			
COYE	1				
YWAR	1	1			
AMRE		11			
PIWA		1			
VEER		1			
SDSP		1			
OVEN		1	1		
REVI		1			
AUFL		1			
SWSP		1			
CSWA		1			
AMRO		1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Page 9 of 10Signature: D. R. E.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020





**Stantec**

**Stantec Consulting Ltd.**  
 1 - 70 Southgate Drive  
 Guelph, ON  
 Canada N1G 4P5  
 Tel: (519) 836-6050  
 Fax: (519) 836-2493

## Birding Point Counts Survey Observation Form

Project Number: 160960824Project Name: Nisig/Heavy InletDate: June 12 Wed 2013Field Personnel: S Richer

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	13	Beauf 0-1	100	Thick fog	Heavy Rain

Area: MTDStation: TL 19

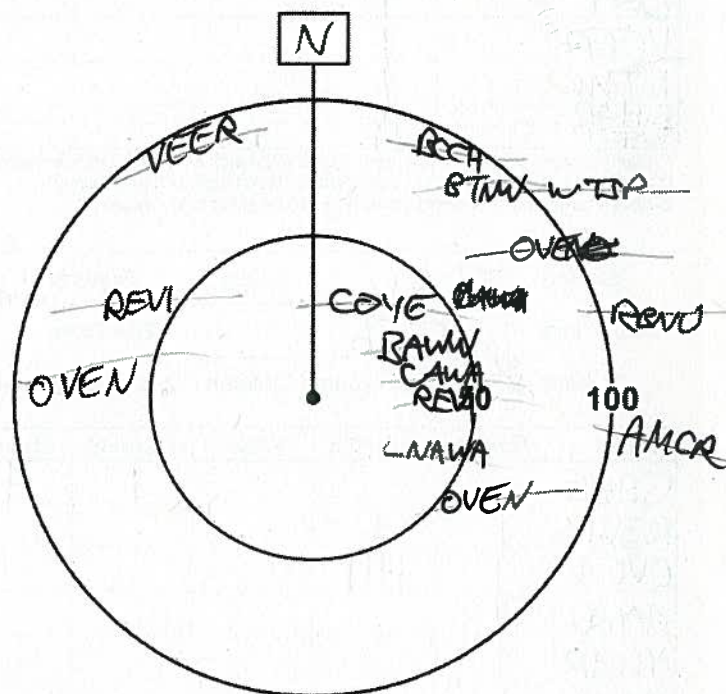
Feature: \_\_\_\_\_

UTM: 543198 5059275Start Time: 5:29End Time: 5:39

irregular traffic

Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Rock barren/forest

Species	<50m	50-100m	>100m	Flyovers	Height*
COYE					
BAWW					
CAWA					
REVI					
NAWA					
OVEN					
VEER					
BOCH					
BTMW					
WTSP					
RGNU					
AMCR					



\* Height of blade sweep varies from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Page 1 of 11Signature: ARil

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

Area MTD

Station: TL20

Feature: north of bridge, east side of road UTM: 544066 505814

Start Time: 5:42

End Time: 5:52

Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

OVER SWAMP

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRE	1				
YWAR	1				
RWBL	HHH	HHH	1		
RTHU	1				
CEOW				1111	A
CORA	1		1		
COYE	1				
CSWA	1				
REVI	1	1			
LEFL		1			
VEER		1			
BTW		1			
CHSP		1			
WTSP		1	1		

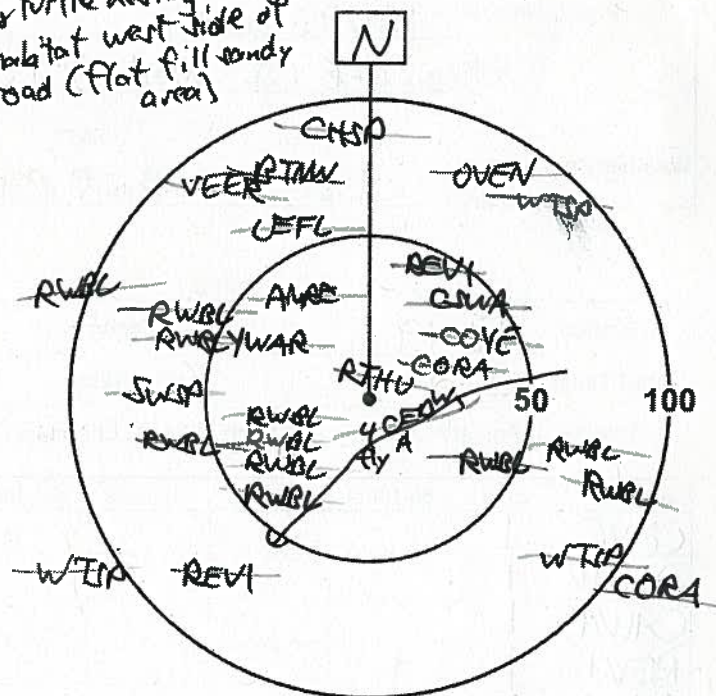
\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

N turtle nesting habitat west side of road (flat fill sandy area)

still thick fog



Station: TL21

MTD

Feature: across from Mac 90km/h sign UTM: 544941 5057268

Start Time: 5:56

End Time: 6:06

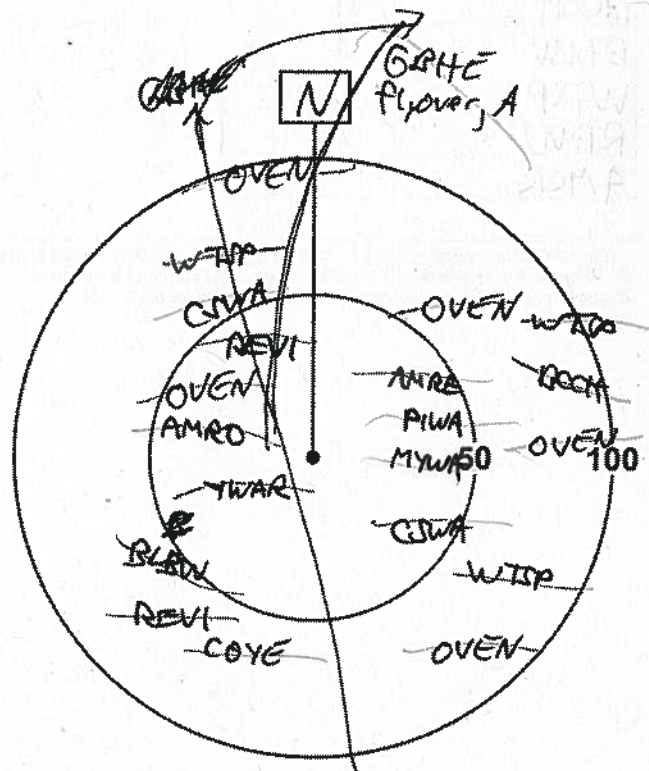
Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
GRHE				1	A
REVI	1	1			
OVEN	1	1111			
AMRO	1				
YWAR	1				
AMRE	1				
PIWA	1				
MYWA	1				
CSWA	1	1			
WTSP		111			
COYE		1			
RCCH		1			
BLRW		1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Page 2 of 11

Signature: A. R. J.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

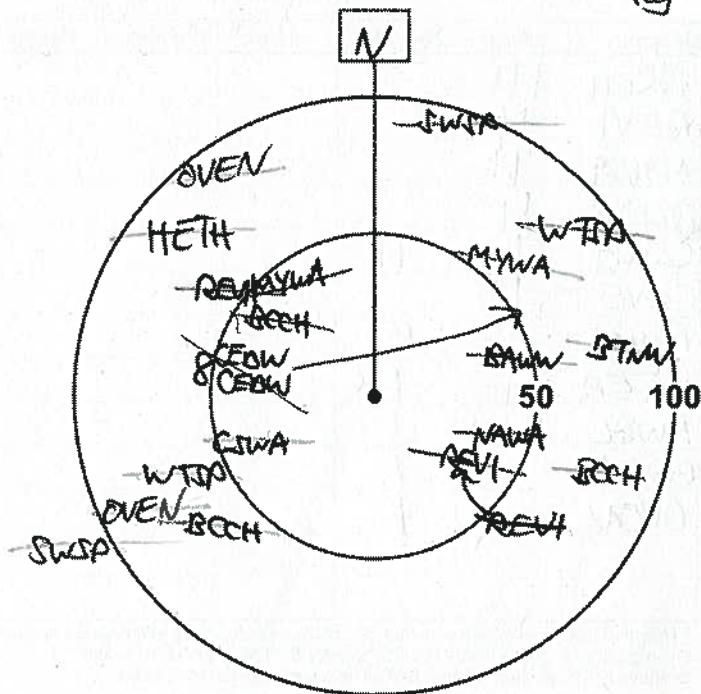


# Area MTD

Station: TL22 Feature: amen or service road on east side UTM: 54943 5056213  
 Start Time: 6:10 End Time: 6:20 regular traffic  
 Habitat: ☒ Forest / ☒ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ trees leatherleaf bog/pen? still thick fog

Species	<50m	50-100m	>100m	Flyovers	Height*
CEOW				8	A
CSWA	1				
BOCH	1	11			
MYWA	1	1			
BAWW	1				
NAWA	1				
REVI	1	1			
BTMW		1			
WTDP		11			
SWSP		1	1		
OVEN		11			
HETH		1			

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

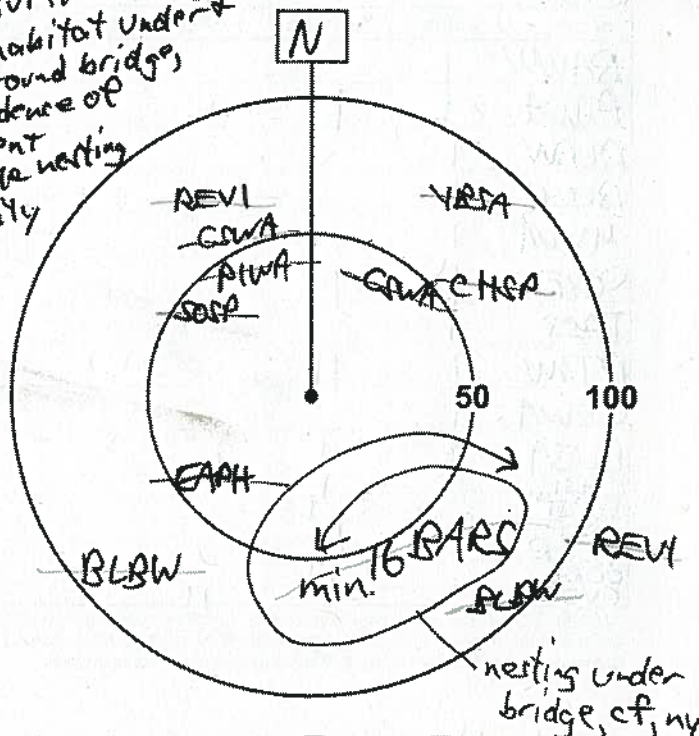


Station: TL23 MTD Feature: Naiscott Lake UTM: 546861 5054959  
 Start Time: 6:23 End Time: 6:33 regular traffic  
 Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Lake

Species	<50m	50-100m	>100m	Flyovers	Height*
BARS	16				A
BLBW		11			
REVI	2	1	1		
YASA		1			
CHSP		1			
CSWA	1	1			
SOOP	1				
PIWA	1				
EAPH	1				

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

turtle nesting  
 habitat under  
 around bridge,  
 evidence of  
 recent  
 turtle nesting  
 activity



Page 3 of 11

Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: [Signature]

(Project Manager)

REV: 2011-05-04 / FORM 020



MTD

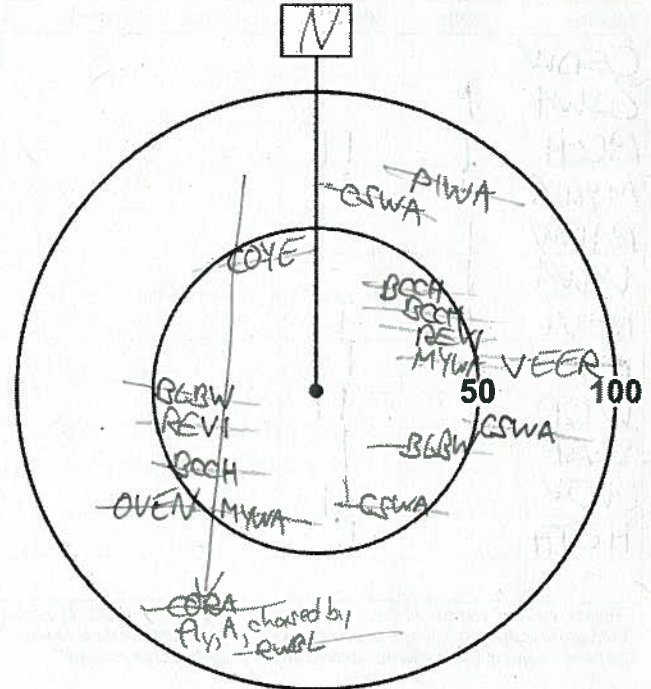
Station: TL24

Feature: \_\_\_\_\_

UTM: 547179 505366Start Time: 6:40End Time: 6:50Habitat: ☒ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop  
*some small marshy area*frequent traffic  
still thick fog

Species	<50m	50-100m	>100m	Flyovers	Height*
BOCH					
REVI					
MYWA					
BLBW					
CSWA					
COYE					
PIWA		1			
VEER		1			
RWAL		1			
CORA		1			
OVEN		1			

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL25

MTD

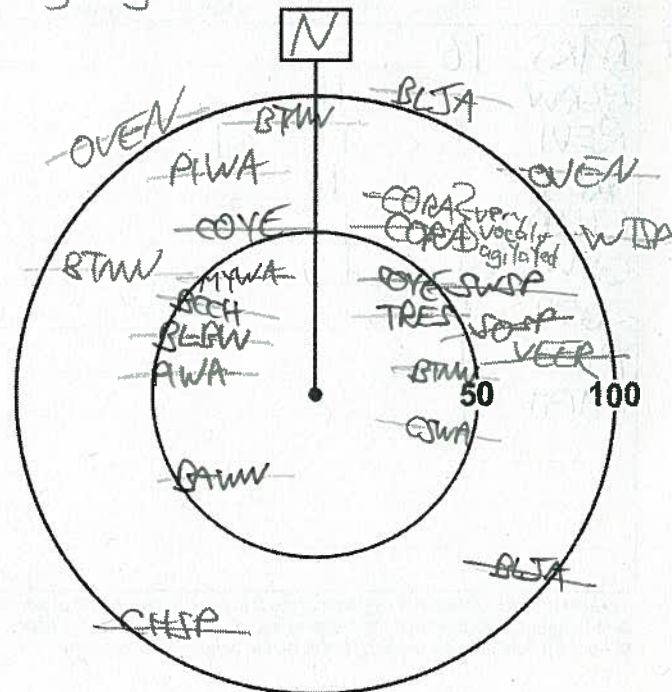
Feature: \_\_\_\_\_

UTM: 547588 505252Start Time: 6:56End Time: 7:06Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Cropfrequent traffic  
still thick fog

WTSP

Species	<50m	50-100m	>100m	Flyovers	Height*
BAWW					
PIWA		1			
BLBW					
BOCH					
MYWA					
COYE		1			
TRES					
BTBW	1				
CSWA	1				
BLJA		1	1		
CHSP		1			
SWSP		1			
SOSE		1			
VEER					
CORA					
OVEN					

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Page 4 of 11

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



MTD

Station: TL26

Feature: by Moose Lake Trading Post

UTM: 548249 5051210

Start Time: 7:10

End Time: 7:20

frequent traffic  
still thick fog

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

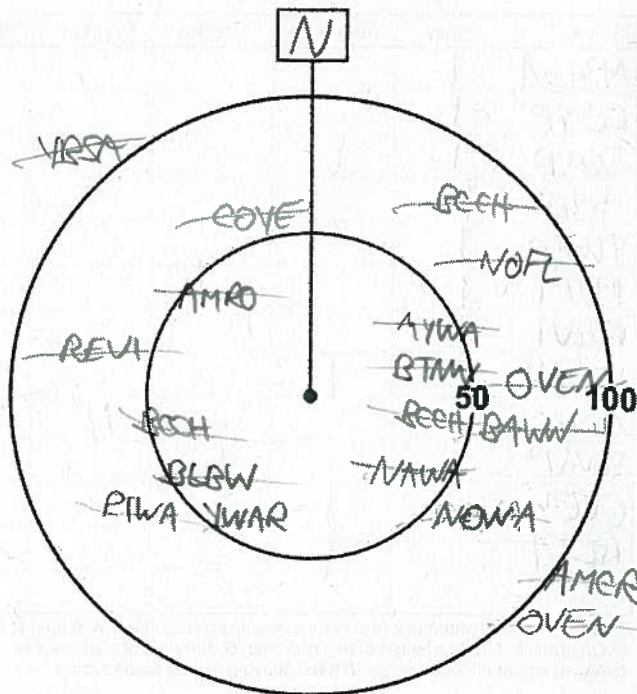
PIWA

Species	<50m	50-100m	>100m	Flyovers	Height*
MYWA					
BTMW					
BCCH					
NAWA					
YWAR					
BLBW					
AMRO					
COYE					
REVI					
YBSA					
NOFL					
OVEN					
BAWW					
NOVA					
AMCA					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Station: TL27 MTD

Feature: just N of Poulin

UTM: 548537 5050090

Start Time: 7:24

End Time: 7:34

frequent traffic  
house on east side

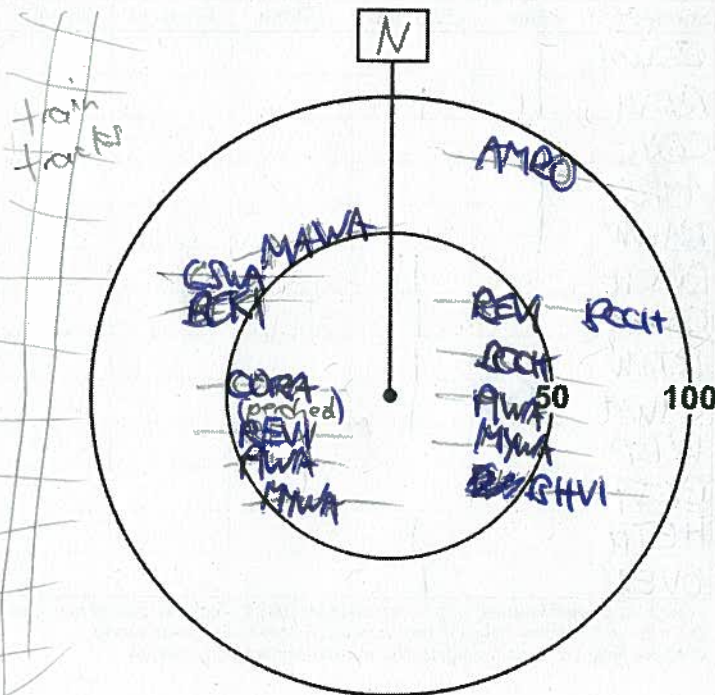
Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ cultural meadow

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRO					
BCCH					
MAWA					
CSWA					
REVI					
BHVI					
CORA					
REVI					
PIWA					
MYWA					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Page 5 of 11

Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: [Signature]

(Project Manager)

REV: 2011-05-04 / FORM 020



MTD

Station:

T28

Feature:

house south of point, east side

UTM:

549682 5048337

Start Time:

7:43

End Time:

7:53

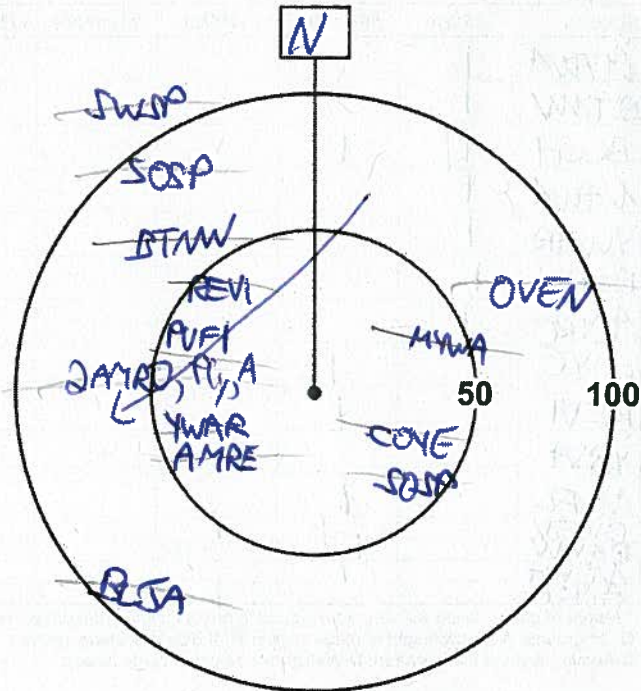
Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Cropfrequent traffic  
still thick fog

Species	<50m	50-100m	>100m	Flyovers	Height*
MYWA	1				
COYE	1				
SOCP	1	1			
AMRE	1				
YWAR	1				
PVFI	1				
REVI	1				
BTAW		1			
AMRO				11	4
SWDP			1		
OVEN		1			
BLJA					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Station:

T29

MTD

Feature:

UTM:

550511 5047371

Start Time:

7:56

End Time:

8:06

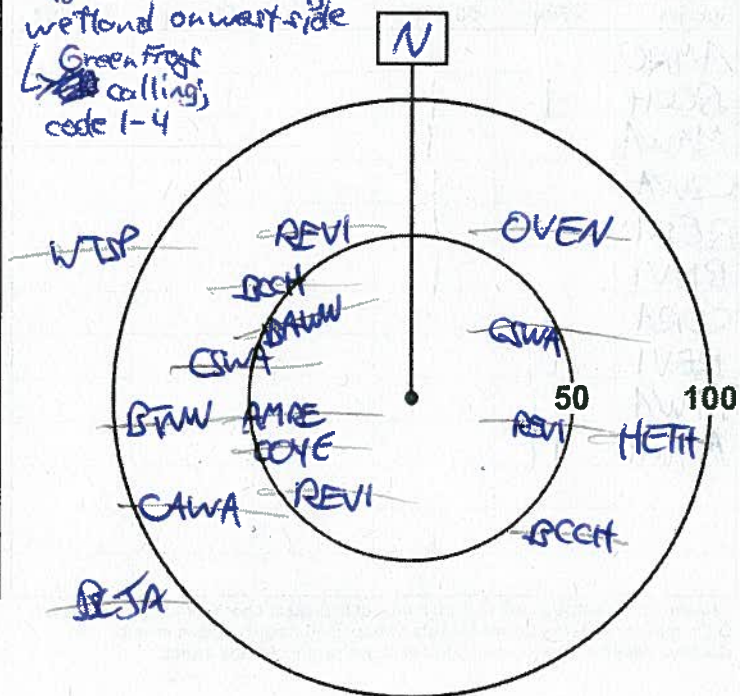
Habitat: ☒ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Cropfrequent traffic  
still foggy

Species	<50m	50-100m	>100m	Flyovers	Height*
CSWA	1				
REVI	11	1			
COYE	1				
AMRE	1				
BTAW	1				
BCCH		11			
CSWA		1			
BTAW		1			
CAWA	1				
WTSP			1		
BLJA			1		
HETH		1			
OVEN		1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

forest on east side  
wetland on west side  
Green Frog  
calling;  
code 1-4

Page 6 of 11

Signature:

A. R. J.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-04 / FORM 020



REV: 2011-05-04 / FORM 020



MTD

Station: TL32

Feature: \_\_\_\_\_

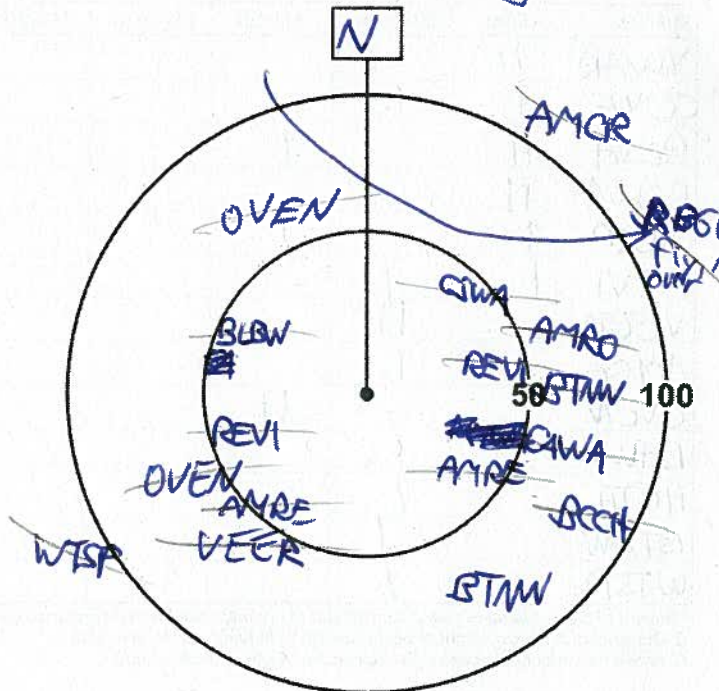
UTM: 554042 508549Start Time: 8:39End Time: 8:49Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
CSWA	1				
REVI	11				
AMRE	1	1			
BLW	1				
VEER			1		
OVEN		11			
WTSP			1		
AMOR			1		
RGCU				1	A
AMRO		1			
BTW		1			
CAWA		1			
RCCH		1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL33

MTD

Feature: \_\_\_\_\_

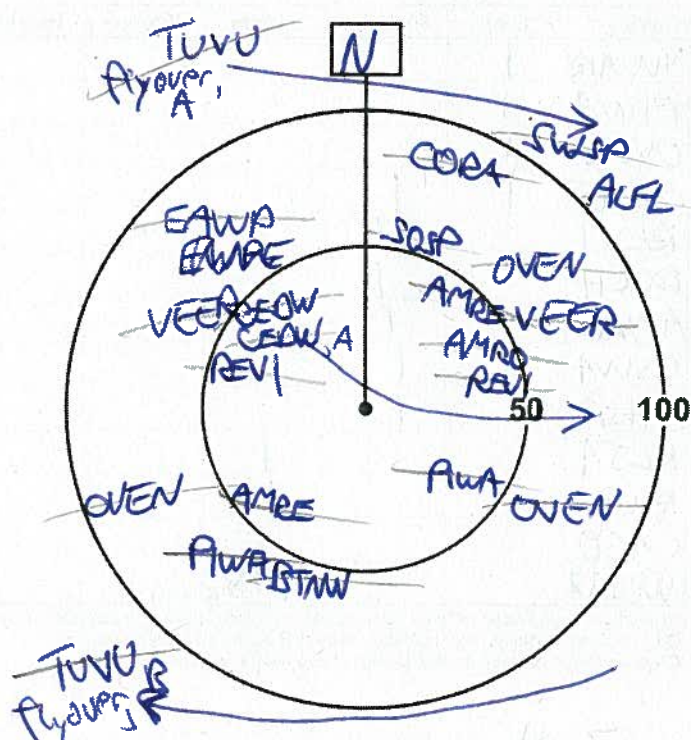
UTM: 55293 5044758Start Time: 8:53End Time: 9:03Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRE	11				
AMRO	1				
REVI	11				
PIWA	1	1			
CEOW	11				
VEER	1	1			
FAWP		1	1		
SWSP			1		
CORA			1		
ALZ			1		
OVEN			111		
BTW		1			
TUVU				11	

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Page 8 of 11

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

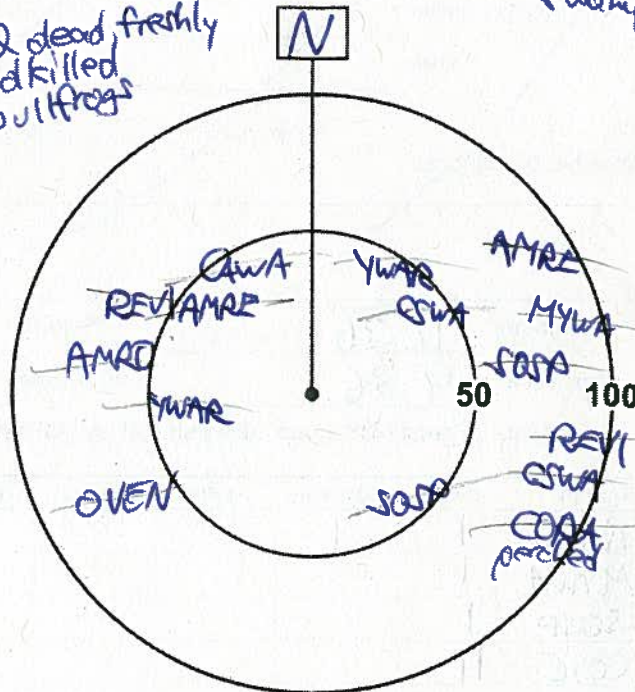
REV: 2011-05-04 / FORM 020



Station: TL34 MTD Feature: South of Shownanga Gass UTM: 556389 504327  
 Start Time: 9:06 End Time: 9:16 Rocky / Vg rich, frequent traffic  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop lake & forest edges w/ leather-leaf shrub

Species	<50m	50-100m	>100m	Flyovers	Height*
YWAR	11				
CSWA	1	1			
SOSP	1	1			
AMRE	1	1			
CAWA	1				
REVI		11			
AMRO		1			
OVEN		1			
MYWA		1			
CORA		1			

2 dead, freshly  
road killed  
bullfrogs

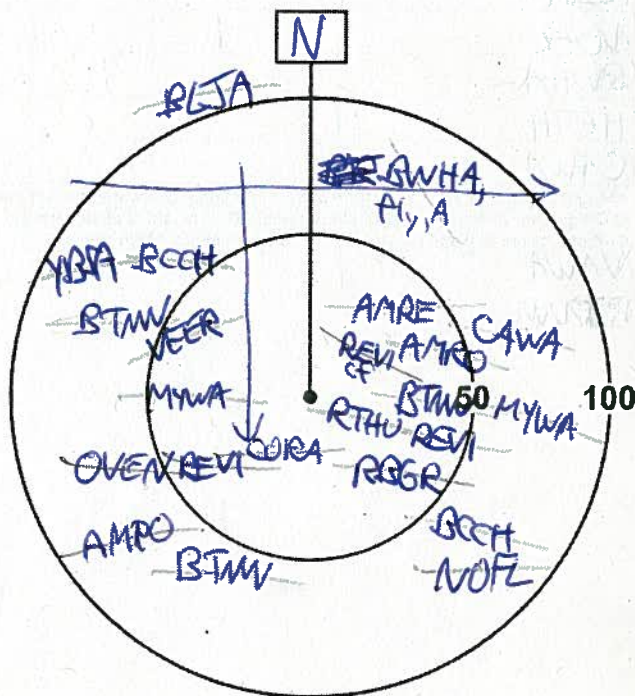


\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL35 MTD Feature: Bah Bah Gim Road, Shownanga UTM: 557486 5043000  
 Start Time: 9:20 End Time: 9:30 frequent traffic  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRE	1				
AMRO	1	1			
REVI	111				
BTMV	1	11			
RTTU	1				
RGGR	1				
MYWA	1	1			
VEER	1				
BOCH		11			
YBTA		1			
OVEN		1			
BLJA			1		
BWHA				1	A

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



MOFL  
CORA  
9 of 11

Page 9 of 11  
 Signature: [Signature]  
 (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_  
 (Project Manager)





**Stantec Consulting Ltd.**  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

**Stantec**

## Birding Point Counts Survey Observation Form

Project Number: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date: \_\_\_\_\_

Field Personnel: \_\_\_\_\_

Weather Conditions:

TEMP (°C): \_\_\_\_\_

WIND: \_\_\_\_\_

CLOUD: \_\_\_\_\_

PPT: \_\_\_\_\_

PPT (in last 24 hrs): \_\_\_\_\_

Station: TL36 MTD

Feature: \_\_\_\_\_

UTM: 558569 5041932

Start Time: 9:36

End Time: 9:46

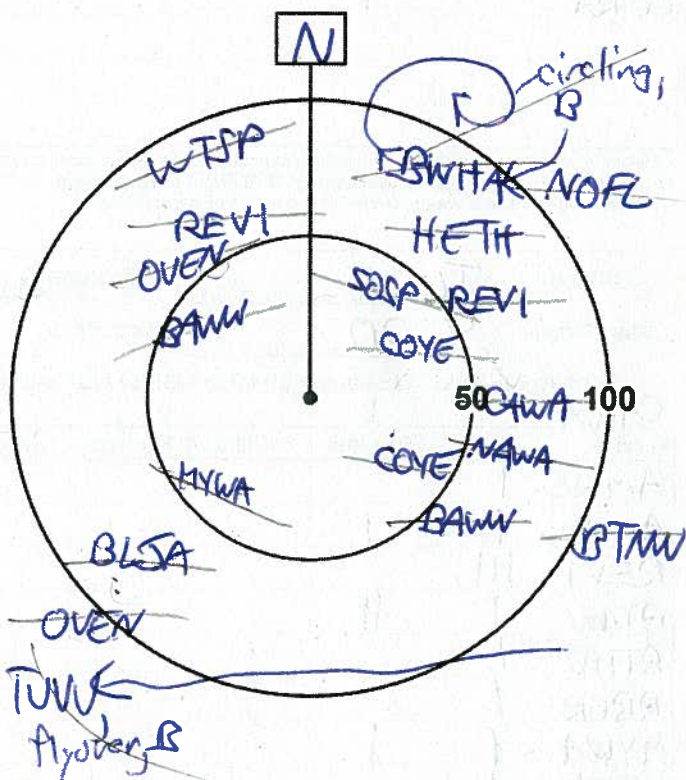
Frequently to the  
constant

Habitat: ☐ Forest / ☒ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
BAWW	1	1			
MYWA	1				
SOSP	1				
COYE	11				
BLJA		1			
OVEN		1	1		
TUVU				1	B
WTSP		1			
REVI		11			
NOFL			1		
BWHA				1	B
HETH		1			
CAWA		1			

\* Height of blade sweep varies from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep

NAWA  
BTAW



Page 10 of 11

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

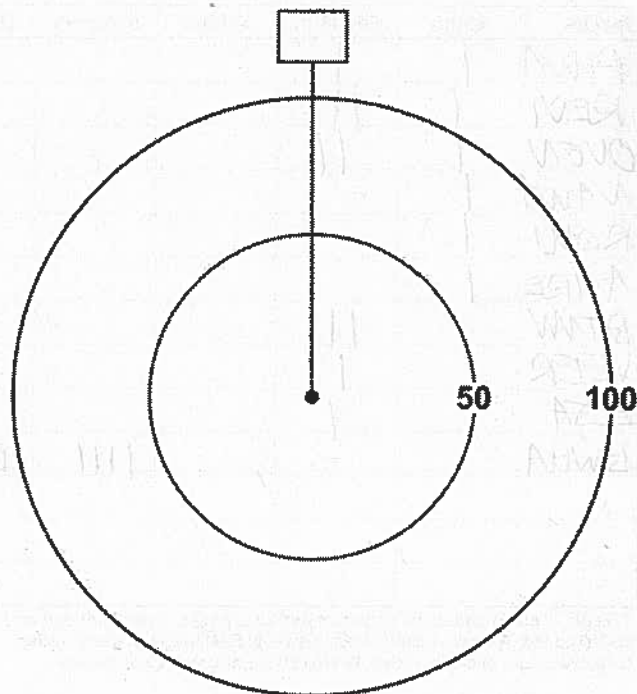
REV: 2011-05-04 / FORM 020



**UTM:**

**End Time:**[illegible]

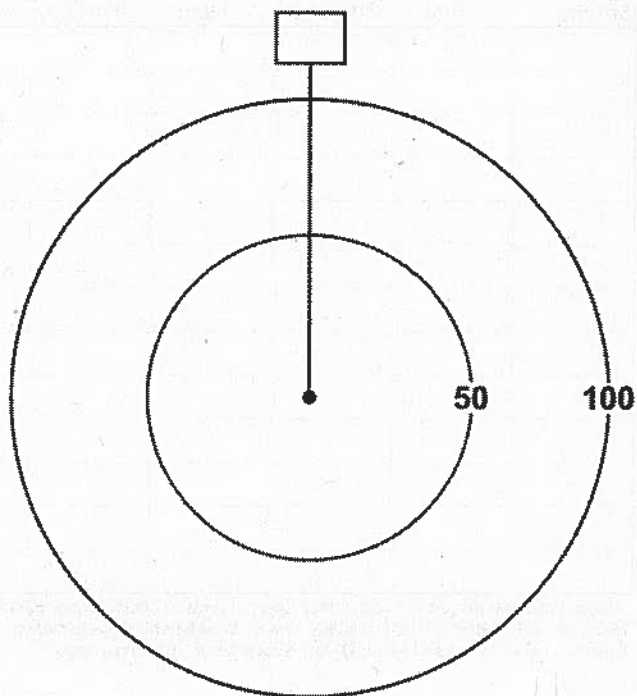
**O**-On ground; **A**-Below height of blade sweep; **B**-At height of blade sweep; **C**-Above height of blade sweep; **D**-Well above height of blade sweep



UTM:

**End Time:**[illegible]

O-On ground; A-Below height of blade sweep; B-At height of blade sweep; C-Above height of blade sweep; D-Well above height of blade sweep



**Signature:**

**Signature:**

REV: 2011-05-04 / FORM 020



**Stantec Consulting Ltd.**  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Birding Point Counts Survey Observation Form

Project Number: 160960824

Project Name: Nigib/Henvey

Date: June 13 2013

Field Personnel: *S. Richer*

**Weather Conditions:**

TEMP (°C):

WIND:

CLOUD:

PPT:

PPT (in last 24 hrs):

14

Part 1

100 + Piggy

5

## Heavy Rain

Area mto

Station: TL38

### Feature:

UTM: 560672 5039756

Start Time: 5:29

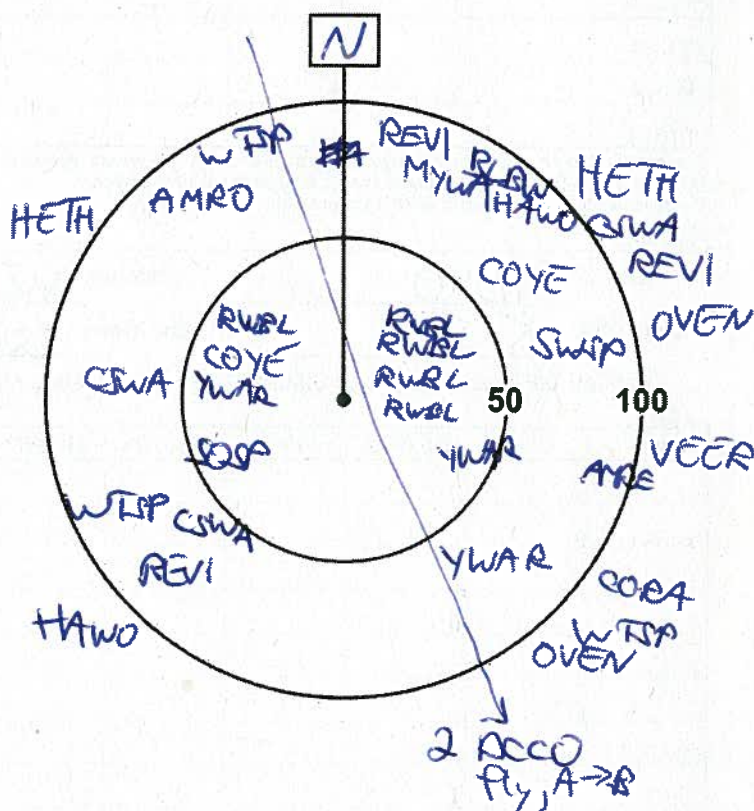
End Time: 5:39

Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop Marsh Meadow?

Species	<50m	50-100m	>100m	Flyovers	Height*
PWBL	HH				
SOSP	1				
COHF	1	1			
LEWAR	1	1			
CSWA	11	11			
WTSP		11	1		
REVI		11	1		
AMRD		1			
MYWA		1			
RLRW		1			
HAWO		1	1		
SWSP		1			
AMRE		1			

\* Height of blade sweep varies from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep

OVEN  
HETH  
ORWA  
VEER  
CORA  
DCCO



**Signature:**

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

(Project Manager)

REV: 2011-05-04 / FORM 020



MTD

Station: TL39Feature: BUTM: 561721 503569  
frequent trafficStart Time: 5:42End Time: 5:52Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

VEER

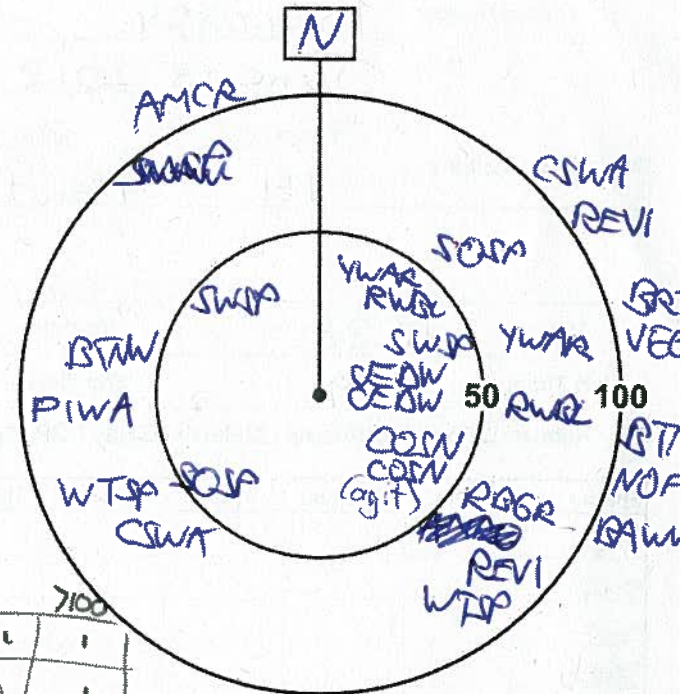
Species	<50m	50-100m	>100m	Flyovers	Height*
CEDW	II				
COSN	II				
WSP	II				
SOSP	I	I			
RWBL	I	I			
YNAR	I	I			
RBGR		I			
REVI		I	I		
WTSP		II			
CSWA		I	I		
PIWA		I			
BTNW		I	I		
AMCR			I		

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

BRTH

Station: TL40Feature: Woods RdUTM: 562680 503784  
frequent trafficStart Time: 5:56End Time: 6:06Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop + some cultural meadow

WTWR

Species	<50m	50-100m	>100m	Flyovers	Height*
REVI	II				
AMRE	II				
YNAR	I				
COYE	I	II			
BLBW	I				
GRCA	I				
CHSP		I			
SOSP		I			
INBU		I			
BLWA		I			
CSWA		I			
OVEN		I			
BTBW		I			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

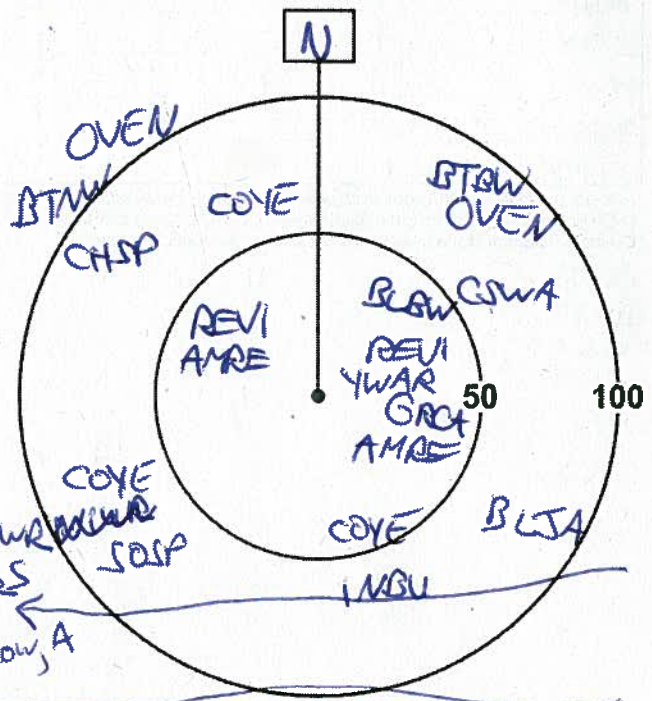
BTBW

GBHE

Page 2 of 8

Signature: A. Kie

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



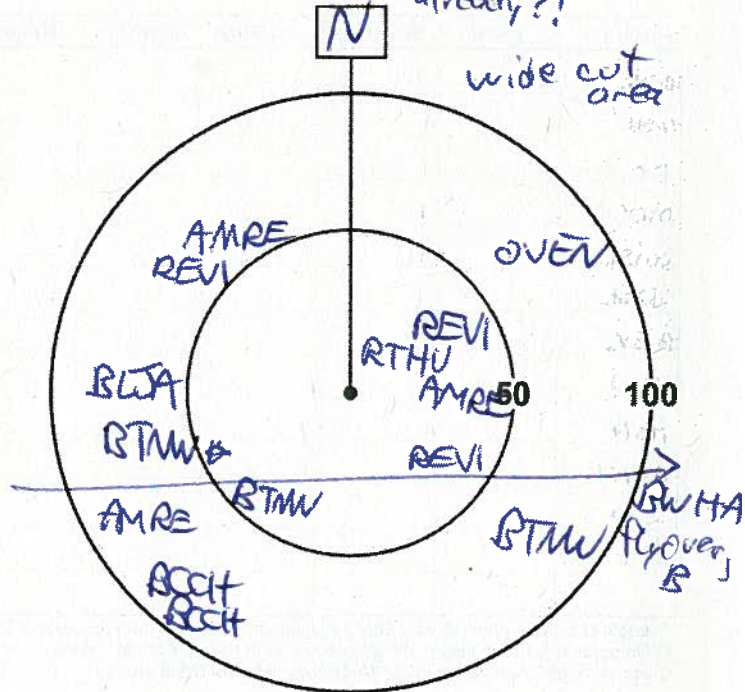
MTD

Station: TL 41 Feature: \_\_\_\_\_  
Start Time: 6:09 End Time: 6:19  
Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

UTM: 502686 5026949  
 frequent traffic  
 (near constant)  
 already?!

Species	<50m	50-100m	>100m	Flyovers	Height*
BOCH		11			
BLWA		1			
REVI	11	1			
RTHU	1				
OVEN		1			
AMRE	1	1			
RTNW	1	11			
SWHA				1	

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep



Station: TL42 MT0 Feature: \_\_\_\_\_  
Start Time: 6:22 End Time: 6:32  
Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

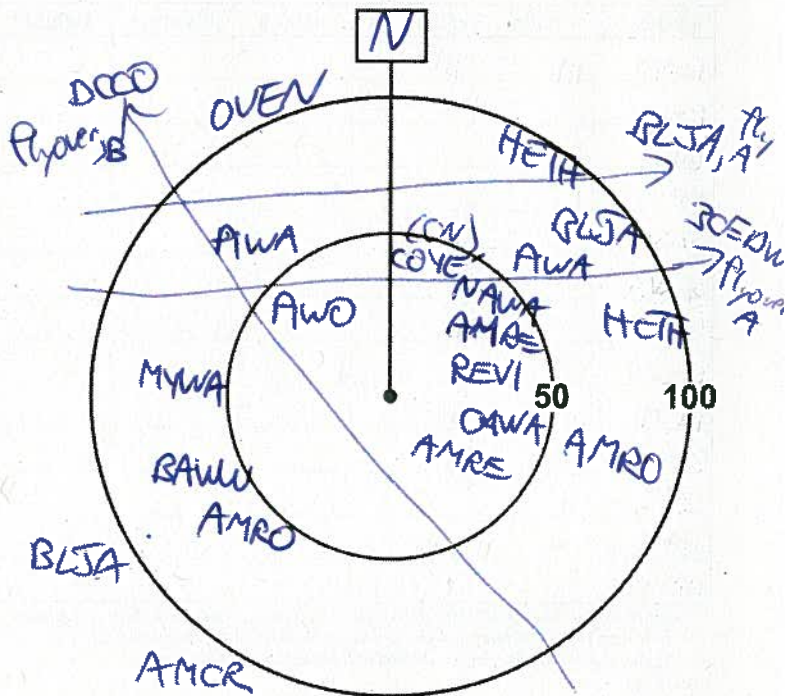
UTM: 564664 5025972

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
REVE	1				
AMRO		11			
HETH		11			
RLJA		1	1	1	
CEDW				111	
DCCO				1	
BAWW		1			
MYWA		1			
COYE	1				
CAWA	1				
AMRE	11				
PIWA	1	11			
NAWA	1				

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep

6VEN



Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

(Project Manager)

REV: 2011-05-04 / FORM 020

**Signature:**

(Field Personnel)







MTD

Station:

TL45

Feature:

UTM:

573208 5029393

Start Time:

7:16

End Time:

7:26

Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

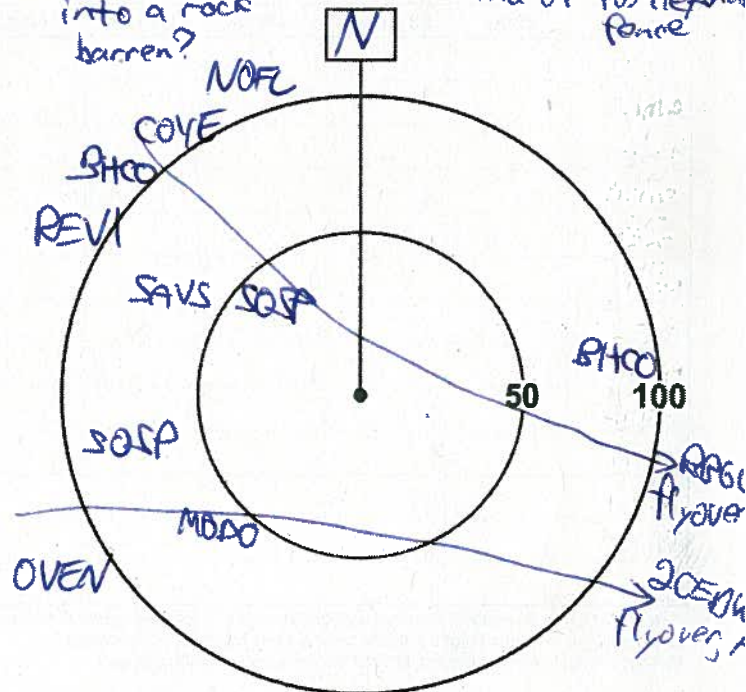
forest cleared into a rock barren?

Constant traffic

point is near end of turtle/hoax fence

Species	<50m	50-100m	>100m	Flyovers	Height*
NOFL			1		
COYE			1		
BHCO			1		
REVI			1		
OVEN			1		
RBGU				1	
CEW				11	
SAVS		1			
SOSP	1	1			
MODO		1			

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Station:

TL46

MTD

Feature:

UTM:

572989 5029419

Start Time:

7:35

End Time:

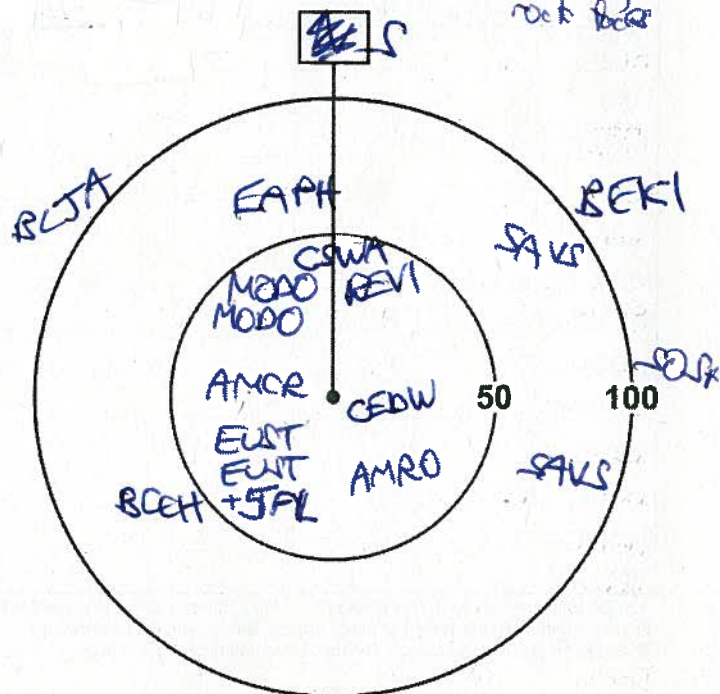
7:45

Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

highway area, near forest "cleared" to "rock barren"; rock bars

Species	<50m	50-100m	>100m	Flyovers	Height*
MODO	11				
EUST	11				
AMCR	1				
AMRO	1				
CEW	1				
REVI	1				
CSWA	1				
BCCH		1			
SAVS		11			
EAPH		1			
BEKI			1		
SOSP			1		
BLJA			1		

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Page 5 of 8

Signature:

*A. Kie*  
 (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-04 / FORM 020



MTD

Station: TL 47

Feature: on east side, Hwy 69N

UTM: 568664 502192

Start Time: 8:10

End Time: 8:20

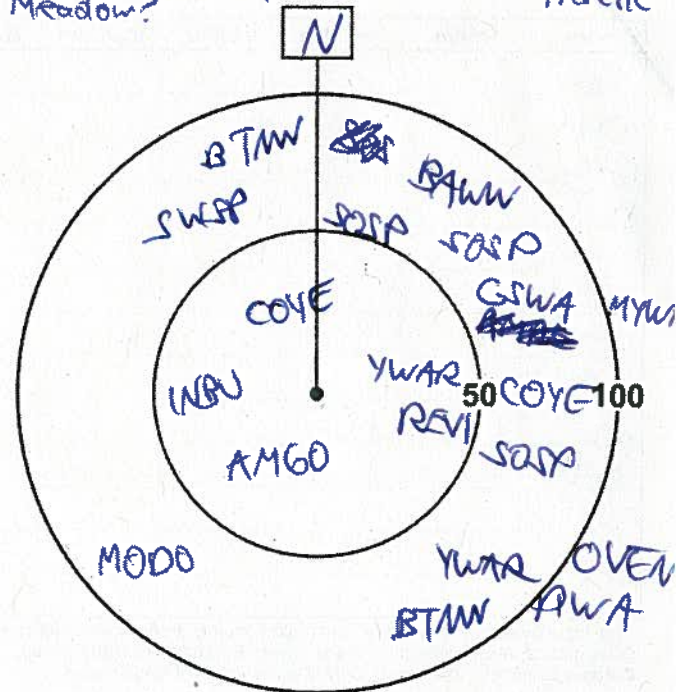
loud crickets  
constant traffic

Habitat: ☒ Forest / ☒ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Treed Marshy Swamp  
Meadow?

Species	<50m	50-100m	>100m	Flyovers	Height*
REVI	1				
AMGO	1				
INBU	1				
SWSP		1			
SOSP		111			
PIWA			1		
OVEN			1		
INWA			1		
CSWA		1			
PAWW		1			
BTNW		11			
YWAR	1	1			
COYE	1	1			

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep



Station: TL 48

MTD

Feature: \_\_\_\_\_

UTM: 564173 502649

Start Time: 8:26

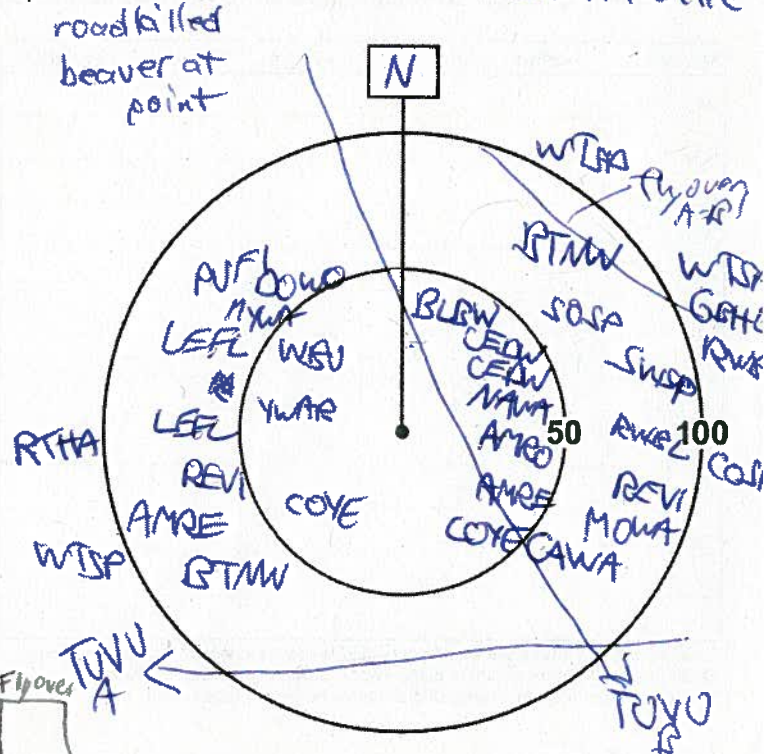
End Time: 8:36

east side of road  
constant traffic

Habitat: ☒ Forest / ☒ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
CAWA		1			
BLBW	1				
NAWA	1				
MYWA		1			
AMRE	1	1			
COYE	11				
YWAR	1				
BTNW		11			
REVI		11			
RWBL		1			
SWSP		1			
SOSP		1			
INBU	1				
AMRO	1				
CEW	11				

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep



Signature: \_\_\_\_\_  
(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.  
Signature: \_\_\_\_\_  
(Project Manager)



MTD

Station: TL49

Feature: \_\_\_\_\_

UTM: 561024 5039420Start Time: 8:42End Time: 8:52Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ rock barren wetland

east side of road

LISP

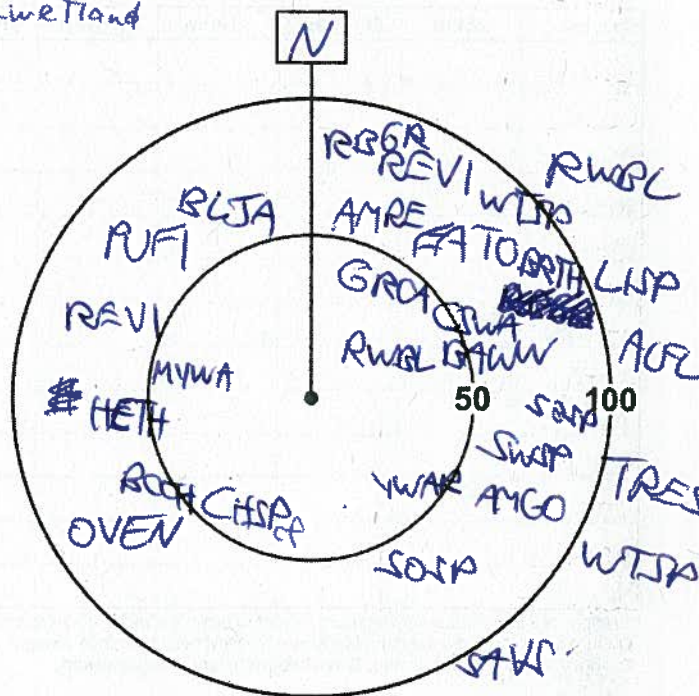
Species	<50m	50-100m	>100m	Flyovers	Height*
WTSP					
CHSP					
HETH					
GRCH					
PUFI					
RWBL					
RGR					
BCCH					
BLJA					
REVI					
ALFL					
EATO					
AMGO					
BTH					
SWSP					
SOSP					
SAVS					
CSWA					
AMRE					
OVEN					
VWAR					
MYWA					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

TRES

Station: TL50

MTD

Feature: \_\_\_\_\_

UTM: 558024 5042490Start Time: 9:05End Time: 9:15Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ rock/rock pile barren

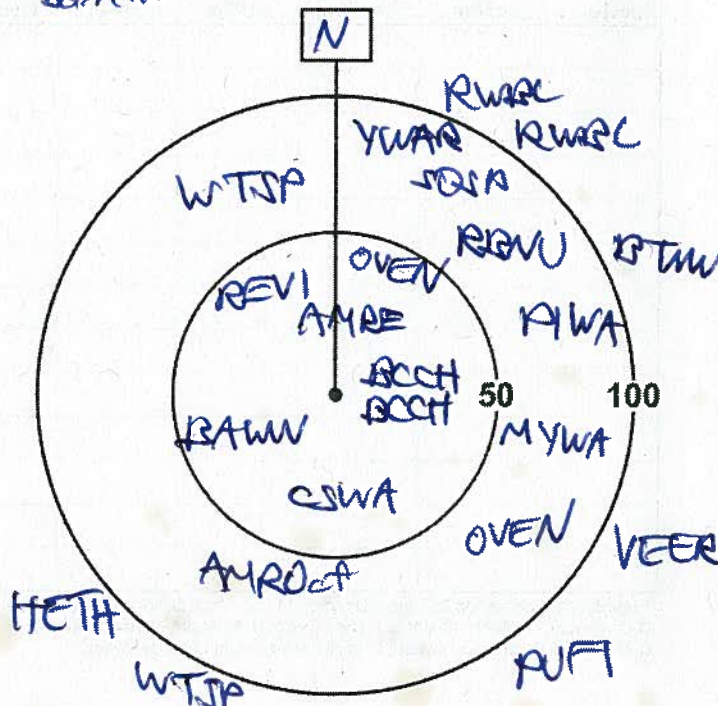
HETH

Species	<50m	50-100m	>100m	Flyovers	Height*
BCCH					
REVI					
JOSP					
WTSP					
RANU					
AMRO					
PUFI					
RWBL					
VEER					
BTNW					
PIWA					
MYWA					
VWAR					
CSWA					
BAWW					
OVEN					
AMRE					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Page 7 of 8

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020







Stantec

Stantec Consulting Ltd.  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

# Birding Point Counts Survey Observation Form

Project Number: 160960824

Project Name: Nigig/Henvey Inlet

Date: June 14 2019

Field Personnel: J. Richer

Weather Conditions:	TEMP (°C): <u>15</u>	WIND: <u>B2-3</u>	CLOUD: <u>0</u>	PPT: <u>None</u>	PPT (in last 24 hrs): <u>Light Rain</u>
---------------------	-------------------------	----------------------	--------------------	---------------------	--

Area MTD

Station: TL52

Feature:

UTM: 572659  
5030346

Start Time: 6:05

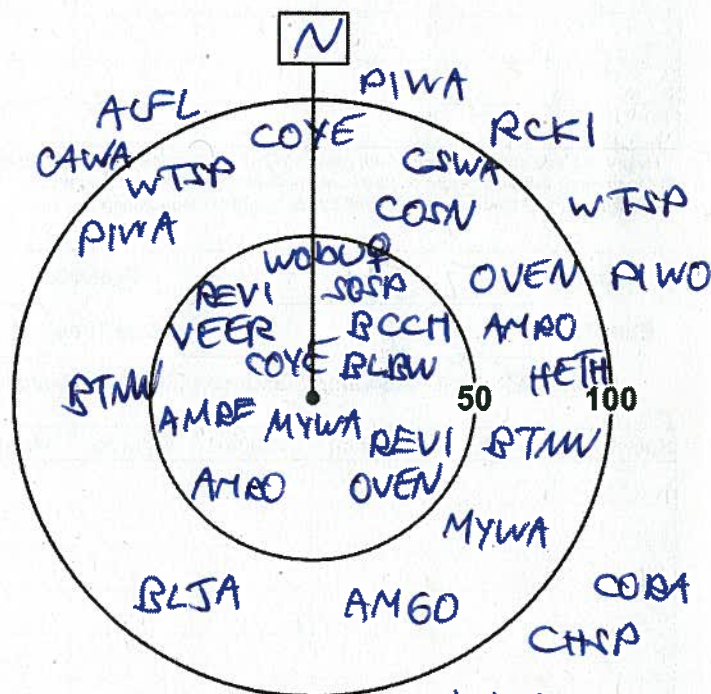
End Time: 6:15

Habitat: ☒ Forest / ☒ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Beaver Pond

Species	<50m	50-100m	>100m	Flyovers	Height*
HETH					
AMRO					
KILL					
REVI					
ALFL					
VEER					
BCCH					
WODU					
WTSP					
SOSP					
CORA					
BLJA					
RCKI					
AMGO					
PIWO					
COSN					
CHSP					
COYE					
CAWA					
BLBW					
PIWA					
MYWA					
CSWA					
AMBE					
BTNW					
OVEN					

\* Height of blade sweep varies from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep



KILL  
Nest = 4 eggs

Page 1 of 5

Signature: J. Richer

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



Station: TL53 MTD

Feature: \_\_\_\_\_

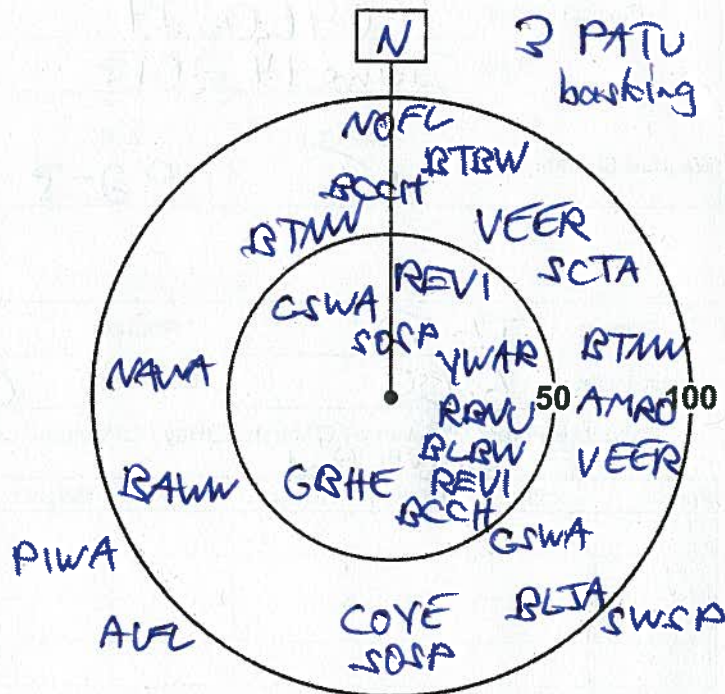
UTM: 578307  
5022423Start Time: 6:31End Time: 6:41Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRO					
RBNU					
REVI					
BLSA					
BCHH					
GBHE					
SWSP					
SOSP					
VEER					
SCTA					
ALFL					
NAWA					
PIWA					
BLWW					
COVE					
CSWA					
BTBW					
BLBW					
BTNW					
YWAR					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL54 MTD

Feature: \_\_\_\_\_

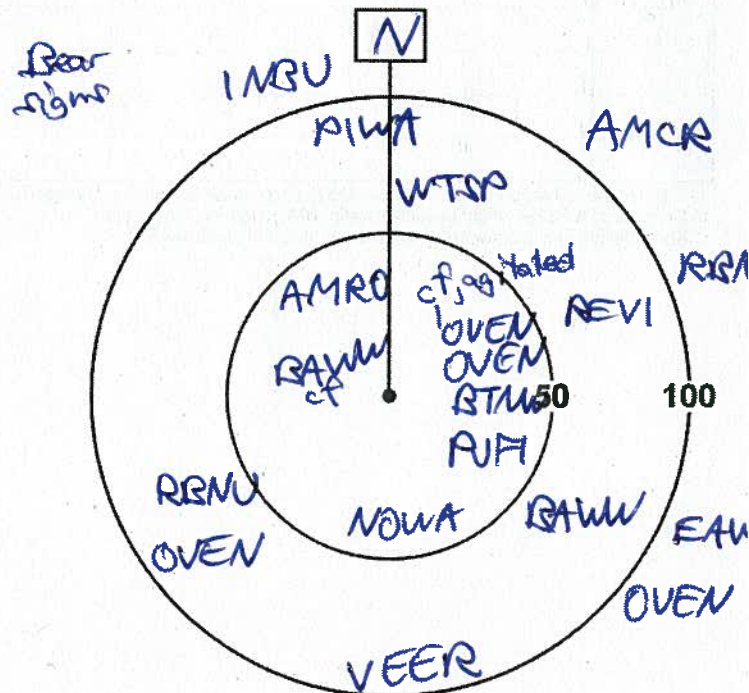
UTM: 581614  
5020363Start Time: 6:51End Time: 7:01Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRO					
PUFI					
VEER					
RBNU					
WTSP					
REVI					
INBU					
AMCR					
PIWA					
NOWA					
BTNW					
OVEN					
BLWW					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Page 25 of 25

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



MTD

Station: TL55

Feature: \_\_\_\_\_

UTM: 58 1561Start Time: 7:12End Time: 7:225020624Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRO					
MODO					
GOFL					
WIWR					
BLJA					
SOSP					
RTHU					
VEER					
PIEVI					
BTNW					
AMRE					
PIWA					
MYWA					
COYE					
BLBW					
OVEN					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL56

MTD

Feature: \_\_\_\_\_

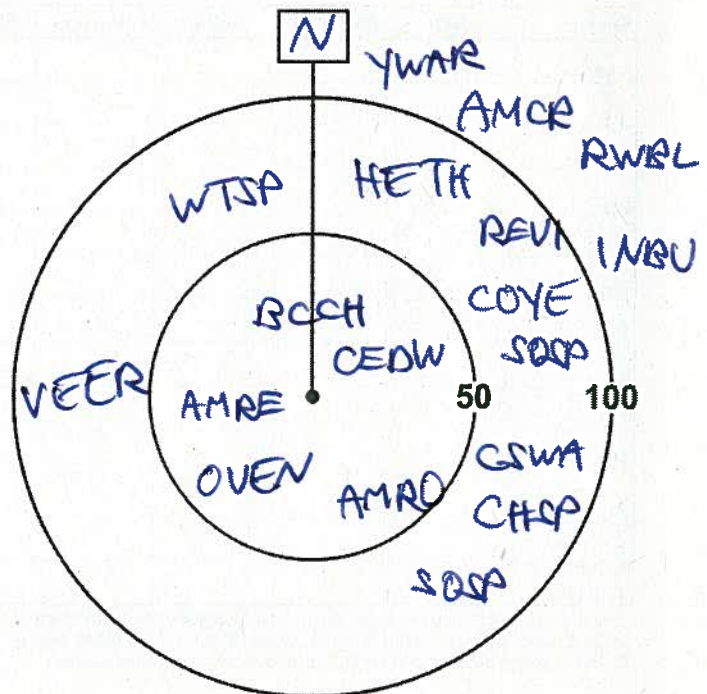
UTM: 582693 5018280Start Time: 7:33End Time: 7:43Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
BOCH					
CEDW					
AMCR					
AMRO					
VEER					
WTSP					
HETH					
REVI					
CHSP					
SOSP					
BLBW					
INBU					
CSCJA					
COYE					
AMRE					
OVEN					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Page 3 of 5

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



MTO

Station:

TL57

Feature:

UTM:

582226

Start Time:

7:46

End Time:

7:56

Habitat:

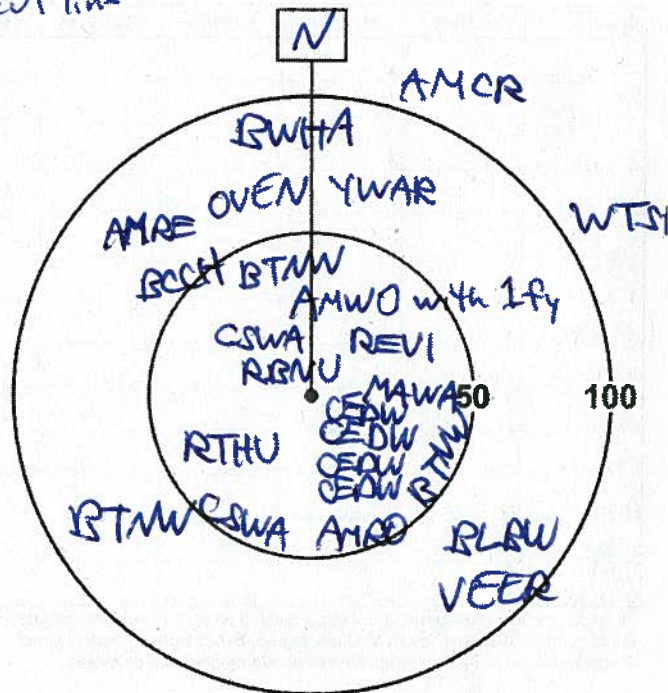
☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop a telephone line cut line

Species	<50m	50-100m	>100m	Flyovers	Height*
BCH					
CEW					
AMWO					
WTSP					
RBNV					
RTHU					
AMCR					
AMRO					
REVI					
VEER					
BWA					
OVEN					
YWAR					
AMRE					
BLBW					
MAWA					
CSWA					
BTNW					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Station:

TL58

MTO

Feature:

UTM:

582508

Start Time:

8:04

End Time:

8:14

Habitat:

☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

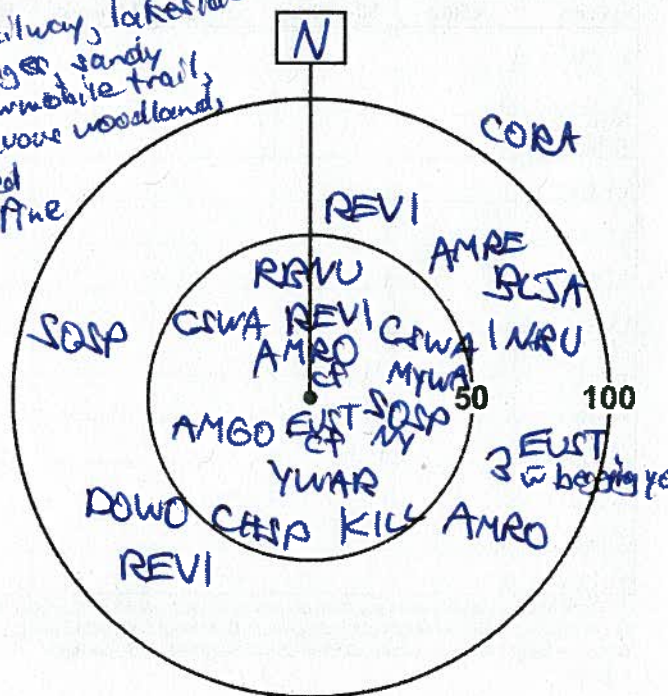
Species	<50m	50-100m	>100m	Flyovers	Height*
CORA					
REVI					
BLJA					
INBU					
EUST					
AMRO					
DOWA					
CSWA					
KILL					
CHSP					
RBNV					
AMGO					
MYWA					
CSWA					
YWAR					
AMRE					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

portland like;  
via railway, lakeside  
cottages, sandy  
snowmobile trail,  
deciduous woodland,  
planted  
Scot Pine



Page

4 of 5

Signature:

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-04 / FORM 020



MTU

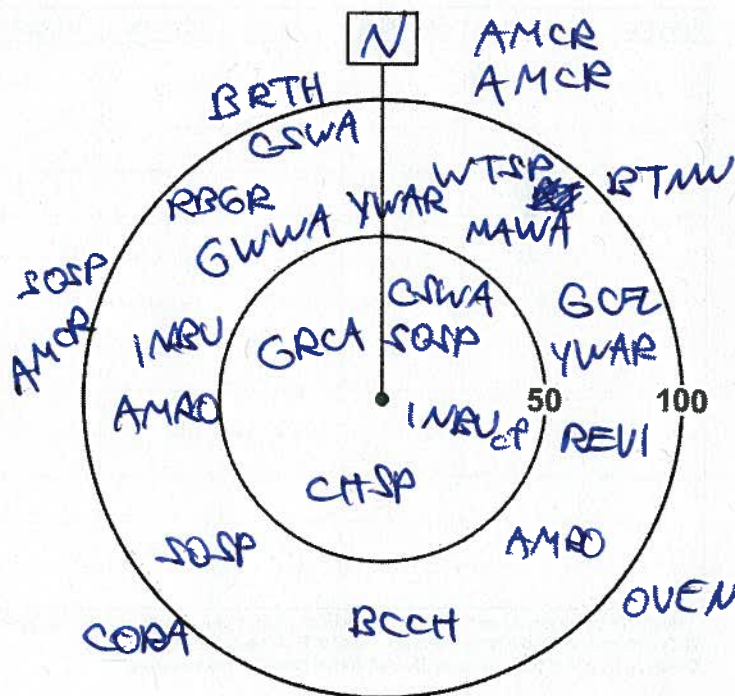
Station: TL59

Feature: \_\_\_\_\_

UTM: 583330Start Time: 8:26End Time: 8:365016881Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ hydro cut

Species	<50m	50-100m	>100m	Flyovers	Height*
GRCA					
CHSP					
SOSP					
RBGR					
INBU					
BRTH					
AMRO					
WTSP					
GCFL					
REVI					
BCCH					
AMCR					
CORA					
BTNW					
MAWA					
OVEN					
YWAR					
GWAA					
CSWA					

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL60

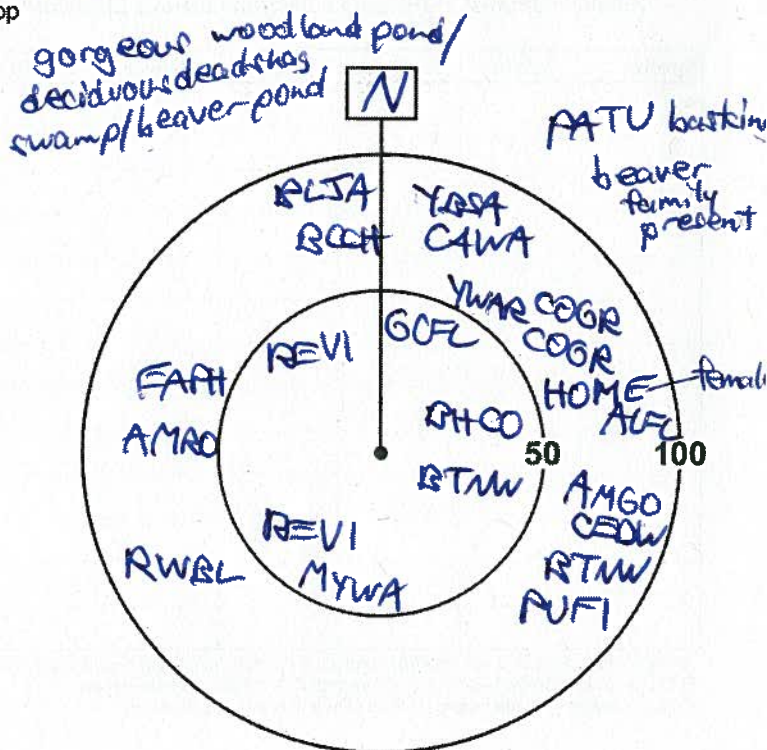
MTU

Feature: \_\_\_\_\_

UTM: 582287Start Time: 8:59End Time: 9:095018595Habitat: ☒ Forest / ☒ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
REVI					
ALFL					
GCFL					
PUPF					
BHCO					
AMGO					
RWBL					
CEOW					
AMRO					
EAPH					
BCCH					
BLWA					
HOME					
COGR					
YWAR					
CAWA					
MYWA					
RTNW					

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Page 55 of 55

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



**UTM:**

**End Time:**

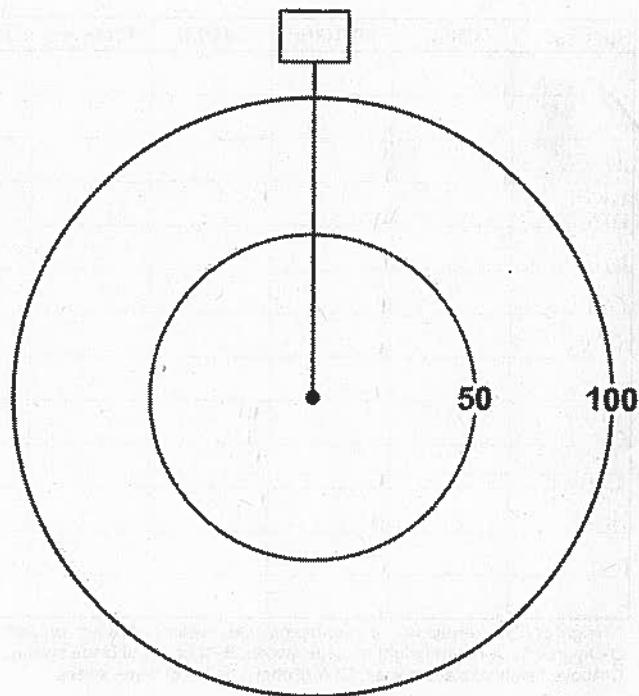
**Habitat:** ☐Forest / ☐Swamp / ☐Marsh / ☐Hay / ☐Pasture / ☐Crop

[illegible]

**O-On ground; A-Below height of blade sweep; B-At height of blade sweep;**

**O-On ground; A-Below height of blade sweep; B-At height of blade sweep;**

C-On ground; A-Below height of blade sweep; B-At height of blade sweep  
C-Above height of blade sweep; D-Well above height of blade sweep



UTM:

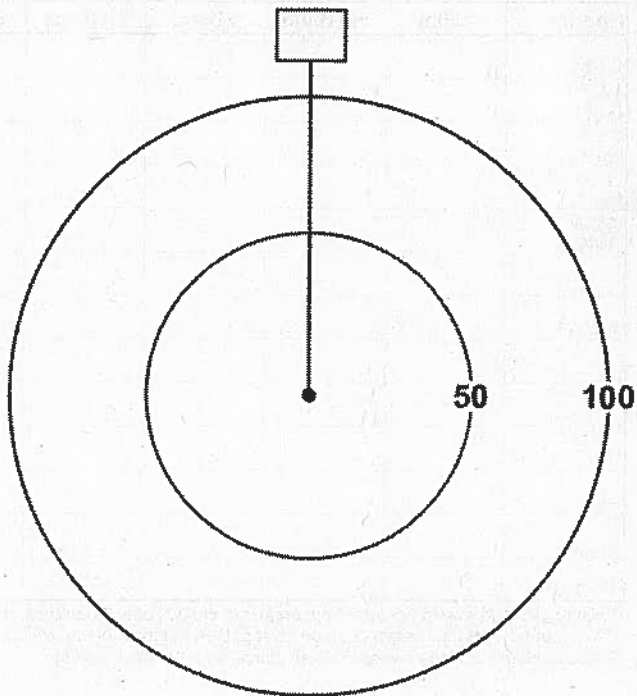
**End Time:**

**Habitat:** ☐Forest / ☐Swamp / ☐Marsh / ☐Hay / ☐Pasture / ☐Crop

[illegible]

**O**-On ground; **A**-Below height of blade sweep; **B**-At height of blade sweep;

C-On ground; A-Below height of blade sweep; B-At height of blade sweep; D-Above height of blade sweep; E-Well above height of blade sweep



Quality Control: This form is complete ☒ & legible ☒.

**Signature:**

(Project Manager)

REV: 2011-05-04 / FORM 020



**Stantec Consulting Ltd.**  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

**Stantec**

# Birding Point Counts Survey Observation Form

Project Number: 160960824

Project Name: Ninig Henvey Inlet

Date: July 1 2013

Field Personnel: J Richer

Weather Conditions: TEMP (°C): 15 WIND: Beau 1-2 CLOUD: 0 PPT: None PPT (in last 24 hrs): None

Area MTD

Station: TL16

Feature: \_\_\_\_\_

UTM: 541501 5063176

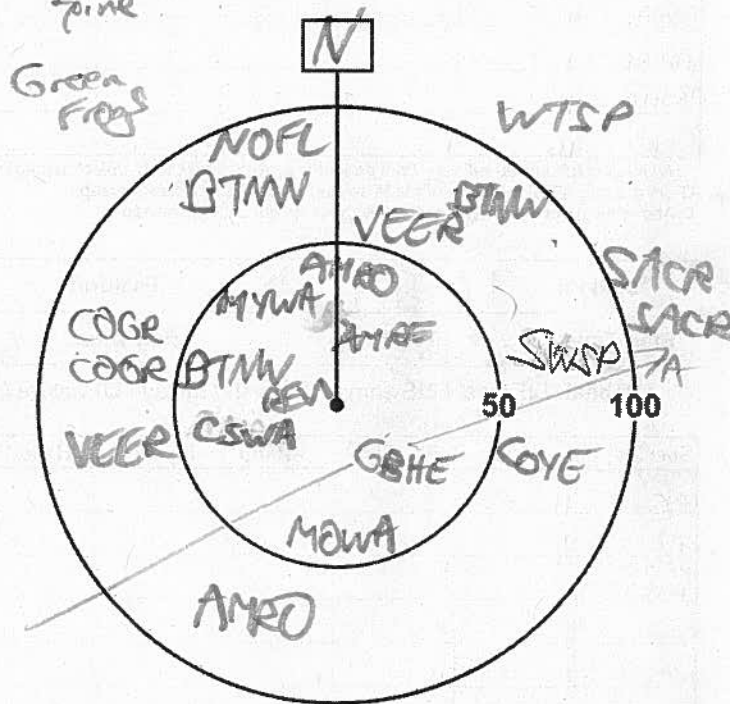
Start Time: 5:32

End Time: 5:42

Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop rock barrens

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRO	1	1			
SACR			11		
NOFL		1			
VEER		11			
REVI	1				
GRHE			1		
COGR		11			
WTSP		1			
SWSP					
MOWA	1				
CSWA	1				
BTNW	1	11			
AMRE	1				
COYE		1			
MYWA	1				

\* Height of blade sweep varies from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep



Page 1 of 7

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

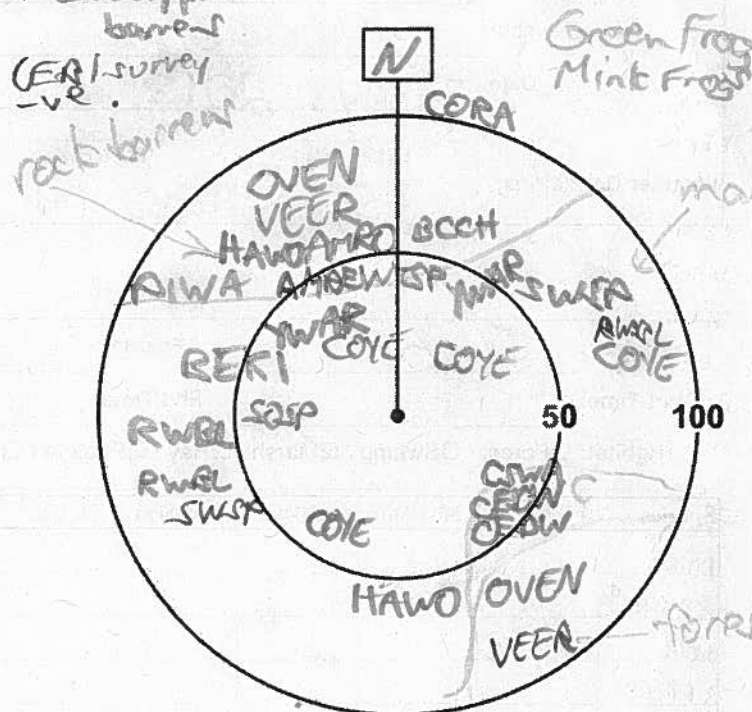
UTM: 541923  
5061938

End Time: 5:59

Habitat: ☒ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Brookside

Species	<50m	50-100m	>100m	Flyovers	Height*
CEDW	III				
HAJO		II			
AMRO		I			
BEKI		I			
VEER		II			
BCCH		I			
WTSP	I				
SOSP	I				
SWSP		II			
RWBL		III			
PEWA		I			
OVEN		II			
CSWA	I				
AMRE	I				
VWAR	II				
QVIF	III	I			

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep



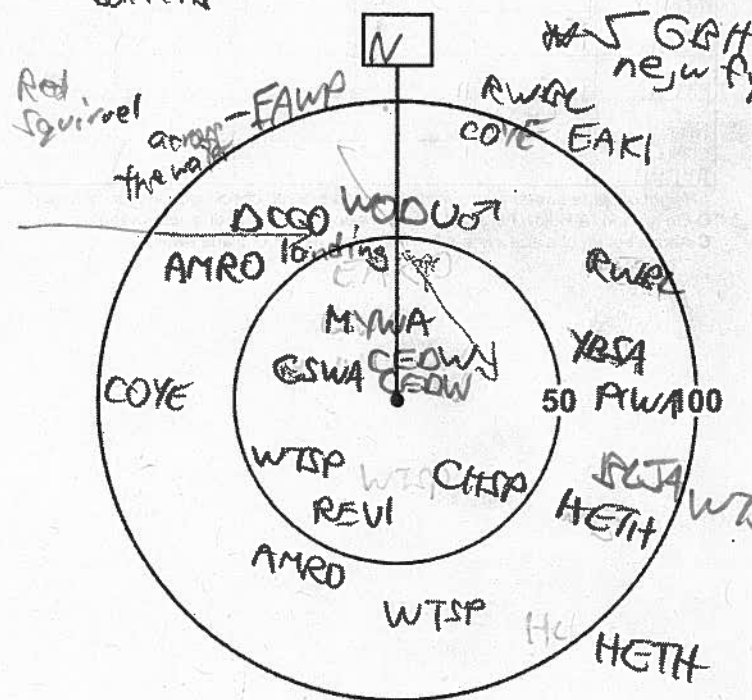
UTM: 542520 5060781

End Time: 6:25

Habitat: ☐ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Grob/pine  
dead tree dead

Species	<50m	50-100m	>100m	Flyovers	Height*
EAKF			1		
CEWU	11				
REVE	1				
WOOD		1			
WCCO		1			
CHSP	1				
WTSP	1	1	1		
RLWL		1	1		
HETH		1	1		
AMRO		11			
EAWP			1		
YBSA		1			
BLJA		1			
PIWA		1			
MYE		11			
OSNA	1				
INWA	1				

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep



**Signature:**

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

(Project Manager)



MTO

Station:

TL19

Feature:

UTM:

543198 5059275

Start Time:

6:46

End Time:

6:56

Habitat:

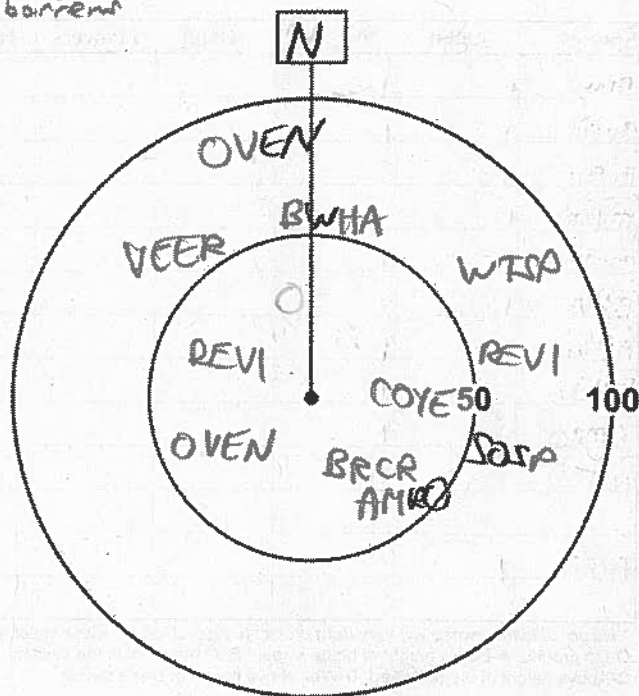
☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop *rock/pine/oak*  
☒ barren

Species	<50m	50-100m	>100m	Flyovers	Height*
REVI	1				
BRCR	1				
AMRO	1				
REVI		1			
OVEN	1	1			
COYE	1				
VEER		1			
BWHA		1			
WTSP		1			
SOSP		1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Station:

TL20

Feature:

UTM:

544066 5058149

Start Time:

7:11

End Time:

7:21

Habitat:

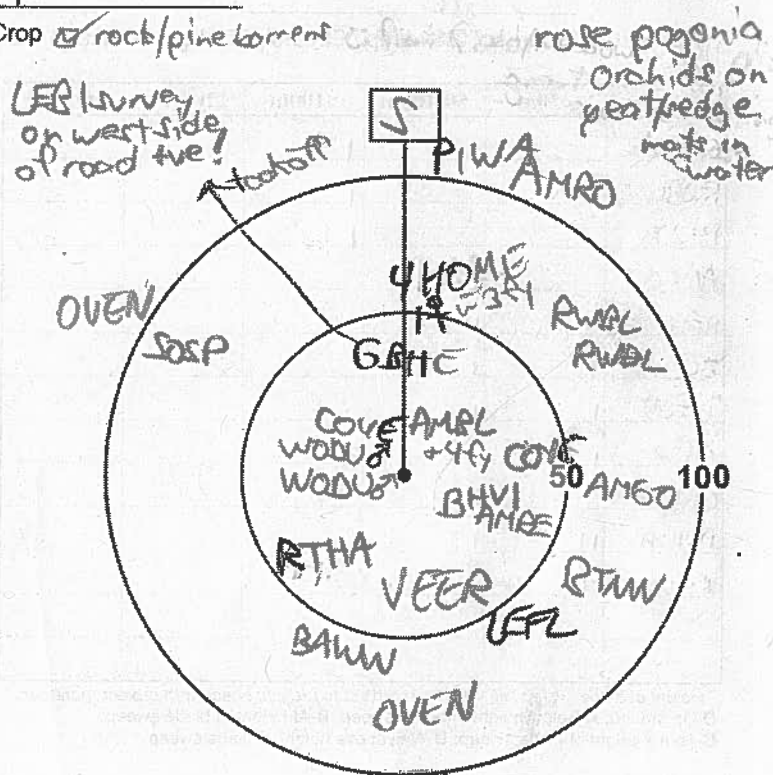
☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop *rock/pine/loam*

Species	<50m	50-100m	>100m	Flyovers	Height*
RTHA	1				
VEER	1				
HOME	1	1111			
QBHE	1				
WODU	1				
BHVE	1				
AMRO			1		
RWBL		1			
AMGO		1			
AMBL	1	1			
LEFL		1			
SOSP		1			
PIWA			1		
OVEN			1		
RTNW		1			
AMRE	1				
BAWU		1			
COYE	1				
OVEN		1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Page 3 of 7

Signature:

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-04 / FORM 020

MTD

Station: TL21

Feature: \_\_\_\_\_

UTM: 544941 505721

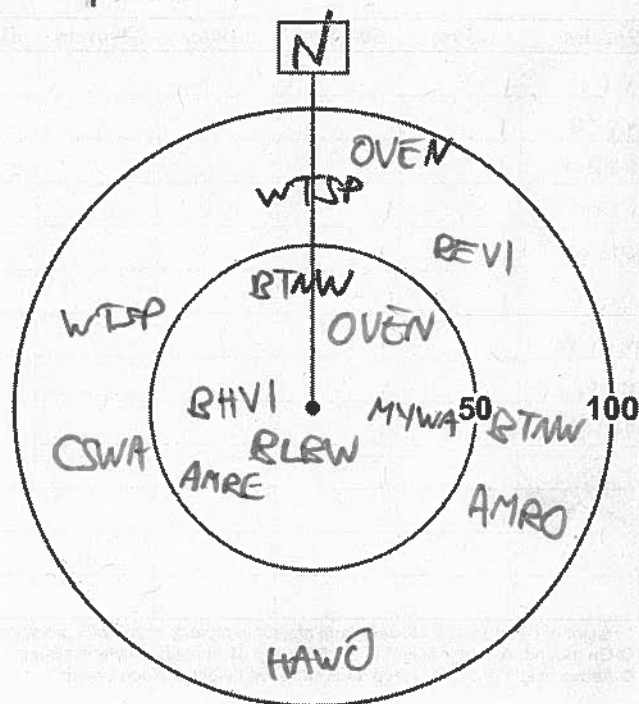
Start Time: 7:31

End Time: 7:41

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop Go rocky areas

Species	<50m	50-100m	>100m	Flyovers	Height*
BTNW	1	1			
OVEN	1	1			
BLBL	1				
MYWA	1				
CSWA		1			
BHVI	1				
BEVI		1			
HAWO		1			
AMRO		1			
WTSP		11			
AMRE	1				

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep



Station: TL22

MTD

Feature: \_\_\_\_\_

UTM: 545943 5056213

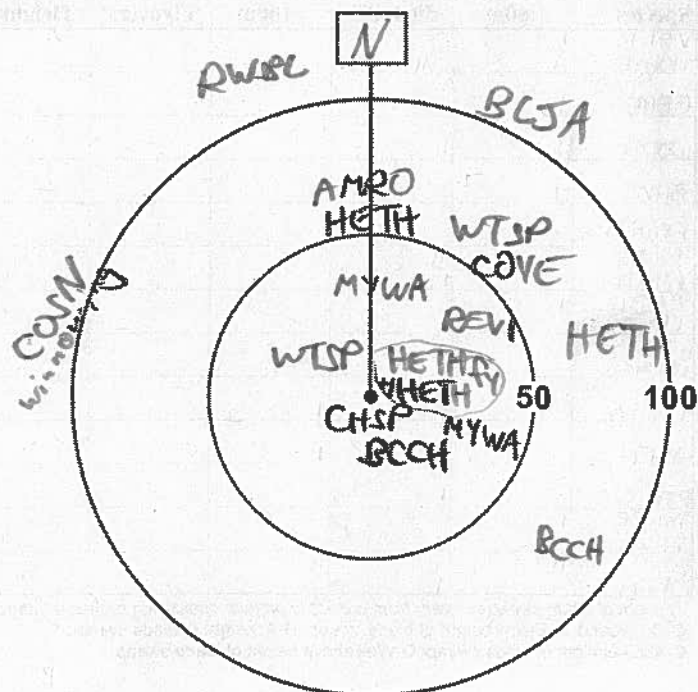
Start Time: 7:46

End Time: 7:56

Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop off a resource road  
brook/pine sand barrens (woody birch/m)

Species	<50m	50-100m	>100m	Flyovers	Height*
COSN			1		
RWBL			1		
BLJA			1		
AMRO		1			
HETH	11	11			
BCCH	1	1			
WTSP	1	1			
CHSP	1				
COYE		1			
MYWA	11	1			
BEVI	1				

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep



Page 4 of 7

Signature: \_\_\_\_\_

AKI  
(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

MTO

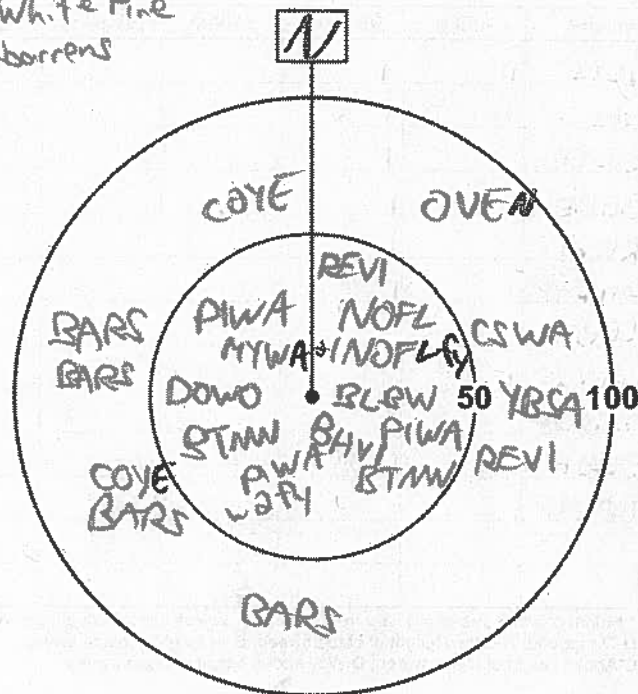
Station: TL23

Feature:

UTM: 546861 5254959Start Time: 8:03End Time: 8:13Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ LakeWhite Pine  
barrensNainoot Lake

Species	<50m	50-100m	>100m	Flyovers	Height*
OVEN		I			
COYE		II			
CSWA		I			
PIWA	III				
MYWA	I				
BLBW	I				
BTNW	II				
BHVE	I				
DOWO	I				
NOFL	II				
REVI	I	I			
YBSA		I			
BARS		III			

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL24

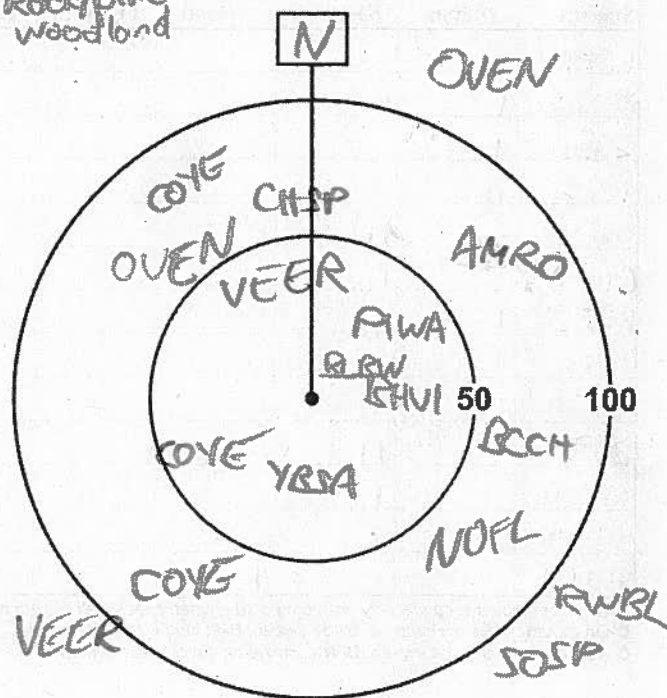
MTO

Feature:

UTM: 547179 5253667Start Time: 8:24End Time: 8:34Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ LakeRock/pine  
woodlandBullfrogs & Green Frogs

Species	<50m	50-100m	>100m	Flyovers	Height*
VEER	I		I		
BHVE	I				
YBSA	I				
NOFL		I			
BCCH		I			
AMRO		I			
CHSP		I			
RWBL			I		
SOSP			I		
OVEN		I	I		
COYE	I	II			
BLBW	I				
PIWA	I				

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Page 57 of 7Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.Signature: [Signature]

(Project Manager)

REV: 2011-05-04 / FORM 020

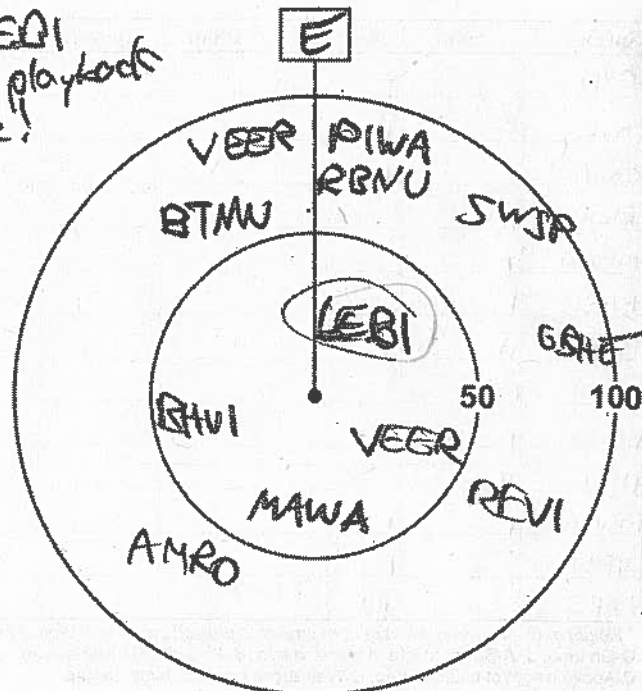


Station: TL25 Feature: \_\_\_\_\_  
 Start Time: 8:47 End Time: 8:57  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

UTM: 547584 505250

Species	<50m	50-100m	>100m	Flyovers	Height*
VEER	1	1			
ABNU		1			
SWSP		1			
GBHE		1			
REVI		1			
AMRO		1			
LEBI	1				
BHVI	1				
BTNW		1			
PIWA		1			
MAWA	1				

\*LEBI  
all playback  
twe!



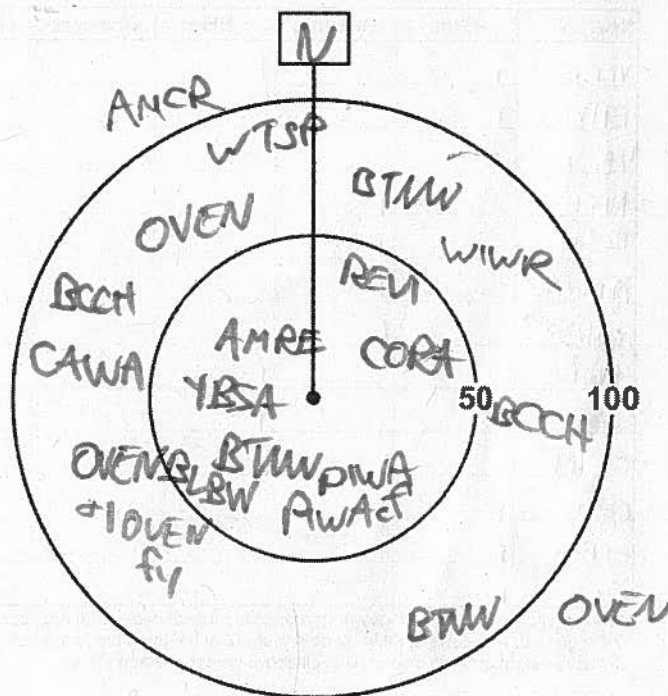
\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL26 INTD Feature: \_\_\_\_\_  
 Start Time: 9:20 End Time: 9:30  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

UTM: 548249 505130

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRE	1				
BTNW	1	11			
BLAW	1				
PIWA	11				
OVEN		11	1		
CAWA		1			
REVI	1				
CORA	1				
YBSA	1				
BCH		11			
WTSP		1			
WIWR		1			
AMCR			1		

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Page 6 of 7

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

Station: TLR7

MTD

### Feature:

UTM: 548537

Start Time: 9:38

End Time: 9:48

5050090

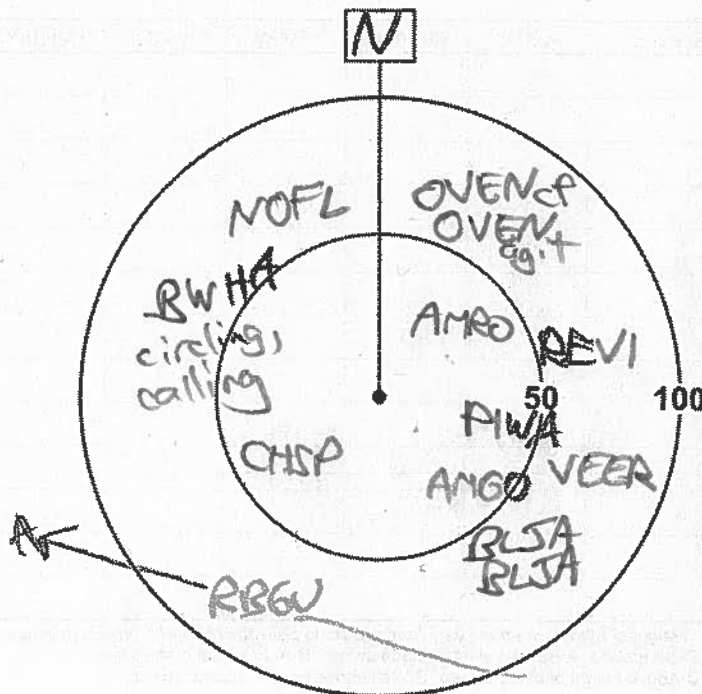
Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ rock/pine/juniper bormens

Species	<50m	50-100m	>100m	Flyovers	Height*
SWEN		11			
PIWA	1	1			
REVI		1			
VEER	1	1			
BLWA		11			
RBCG				1	
BWHA		1			
NOFL		1			
ANRO	1				
AMGO	1				
CHSP	1				

\* Height of blade sweep will vary from project to project; check with project manager.

**C-On ground; A-Below height of blade sweep; B-At height of blade sweep;**

C-Above height of blade sweep; D-Well above height of blade sweep

**Station:**

### Feature:

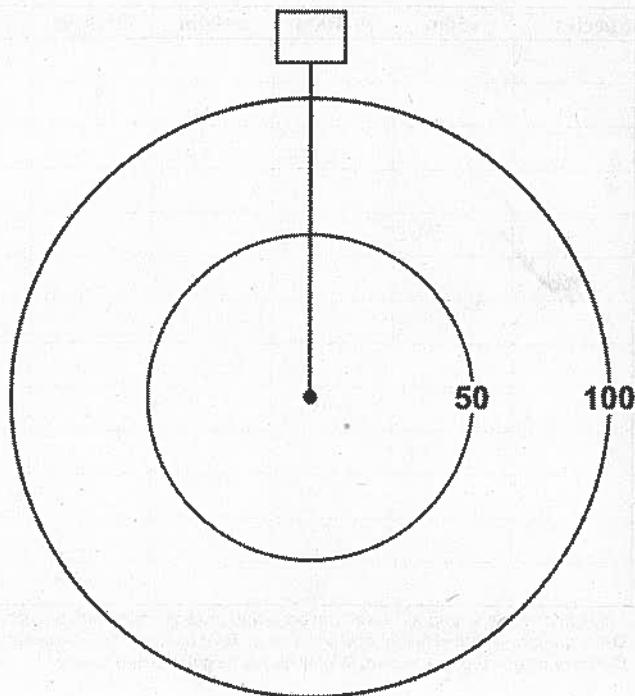
UTM:

**Start Time:****End Time:**Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop[illegible]

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-On ground; A-Below height of blade sweep; B-At height of blade sweep; C-Above height of blade sweep; D-Well above height of blade sweep



**Signature:**

(Field Personnel)

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

(Project Manager)

**UTM:**

**End Time:**[illegible]

**UTM:**

**End Time:**[illegible]

A diagram of a target with two concentric circles. A vertical line passes through the center, with a small square at the top. The inner circle is labeled '50' and the outer circle is labeled '100' on the right side.



**Stantec**

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Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Birding Point Counts Survey Observation Form

Project Number: 160960824Project Name: Nigig/Henvey 1/1/14Date: July 2 2013Field Personnel: J. Richer

Weather Conditions:

TEMP (°C):

12

WIND:

Beaufort 1-0

CLOUD:

100

PPT:

None

PPT (in last 24 hrs):

None

MTD

Station: TL28

Feature: \_\_\_\_\_

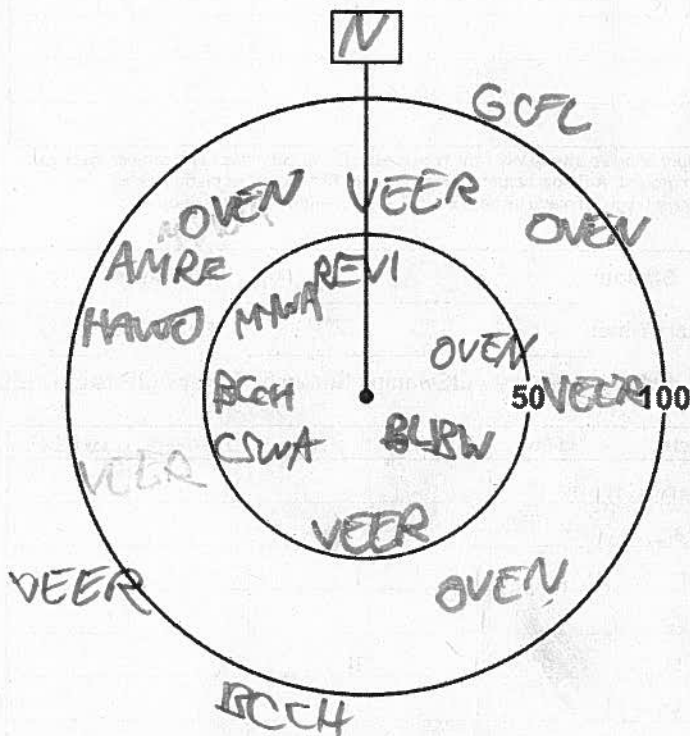
UTM: 549690Start Time: 7:00End Time: 7:105048337Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
MNWA	1				
CSWA	1				
BLBW	1				
OVEN	1	III			
AMRE		I			
VEER	1	II	I		
HAHO		I			
BOCH	1		I		
GOFL			I		
REVI	1				

\* Height of blade sweep varies from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Page 1 of 6Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

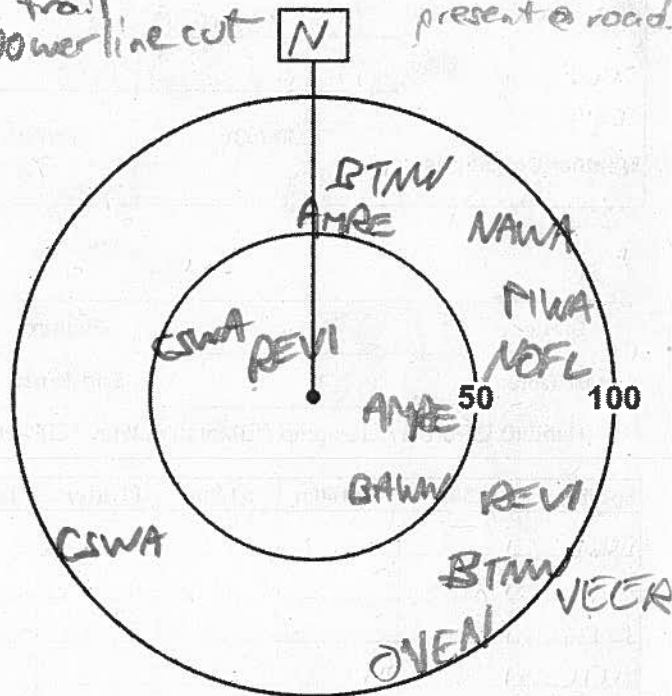
(Project Manager)

REV: 2011-05-04 / FORM 020

Station: TL29 MTD Feature: \_\_\_\_\_ UTM: 550511  
 Start Time: 7:17 End Time: 7:27  
 Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop + snowmobile trail  
power line cut Yellow flag in present @ road.

Species	<50m	50-100m	>100m	Flyovers	Height*
CSWA	1	1			
AMRE	1	1			
BAWA	1				
BTNW		11			
NAWA		1			
PIWA		1			
OVEN		1			
REVI	1	1			
NOFL		1			
VEER			1		

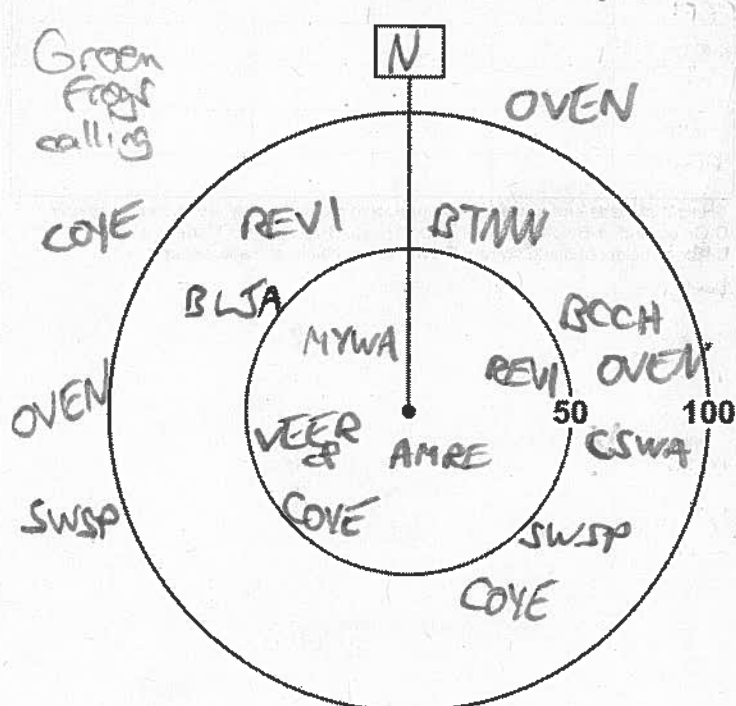
\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Station: TL30 MTD Feature: \_\_\_\_\_ UTM: 551719 5046617  
 Start Time: 7:36 End Time: 7:46  
 Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop rock/pine barrens w oak + maple  
Meadow?

Species	<50m	50-100m	>100m	Flyovers	Height*
MYWA	1				
AMRE	1				
COYE	1	1	1		
BTNW		1			
OVEN		1	11		
CSWA		1			
VEER	1				
REVI	1	1			
BLJA		1			
BOCH		1			
SWSP		1	1		

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Page 2 of 6

Signature: \_\_\_\_\_

D. R. O.  
 (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

Station: TL31 MTD

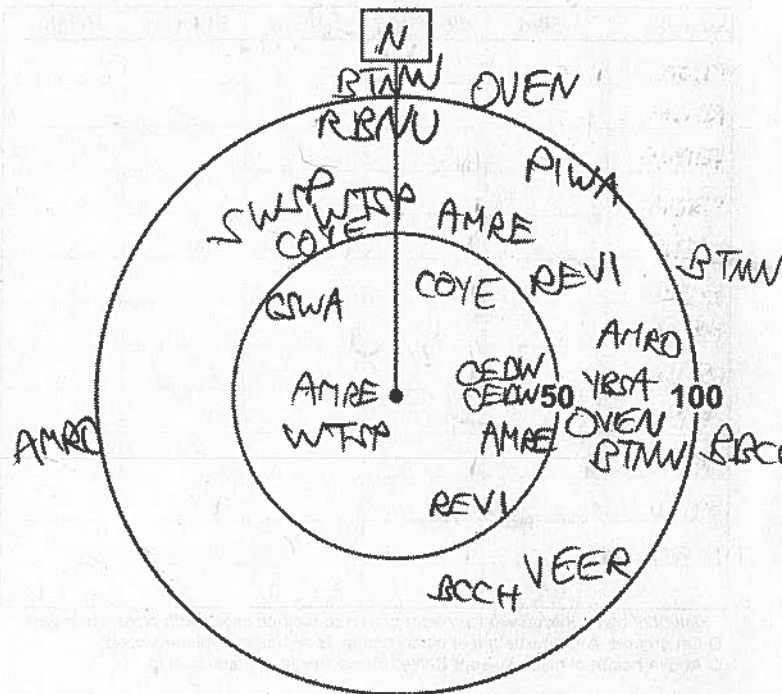
Feature: \_\_\_\_\_

UTM: 552821 5046119Start Time: 7:55End Time: 8:03Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Rock/pine barrens/woodland

BBCU

Edge Meadow/Marsh

Species	<50m	50-100m	>100m	Flyovers	Height*
CEDW	11				
REVI	1	1			
WTSP	1	1			
BOCH		1			
VEER		1			
YBSA		1			
AMRO		1	1		
RBNU		1			
SWSP		1	1		
RTNW		1	11		
OVEN		1			
COYE	1	1			
PIWA		1			
AMRE	11	1			
CSWA	1				



\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL32 MTD

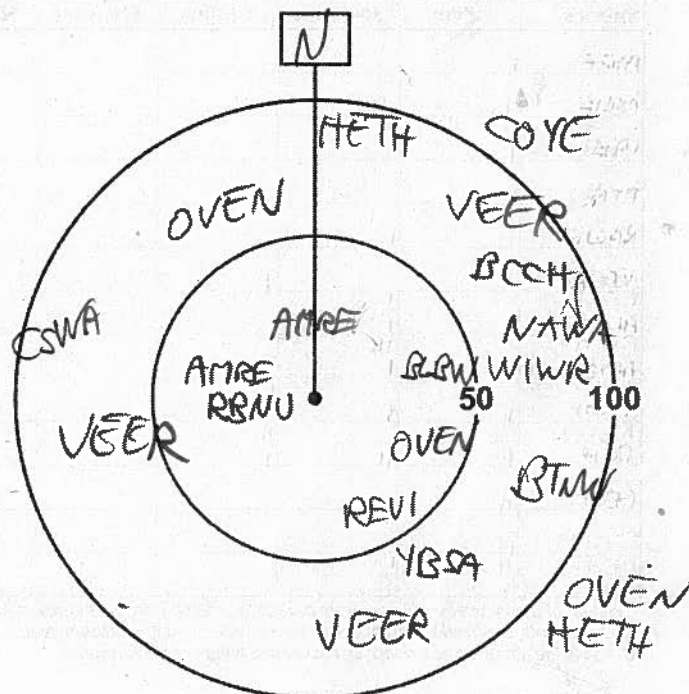
Feature: \_\_\_\_\_

UTM: 554042 5045491Start Time: 8:10End Time: 8:20Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Mixed

Edge Meadow/Marsh

Species	<50m	50-100m	>100m	Flyovers	Height*
COYE					
AMRE	11				
BLBW	1				
OVEN	1	1	1		
CSWA		1			
NAWA		1			
RTNW		1			
HETH		1	1		
VEER		111			
BOCH		1			
YBSA		1			
WIWR		1			
REVI	1				
RBNU	1				



\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Page 3 of 6

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



Station: TL32 MTD

Feature:

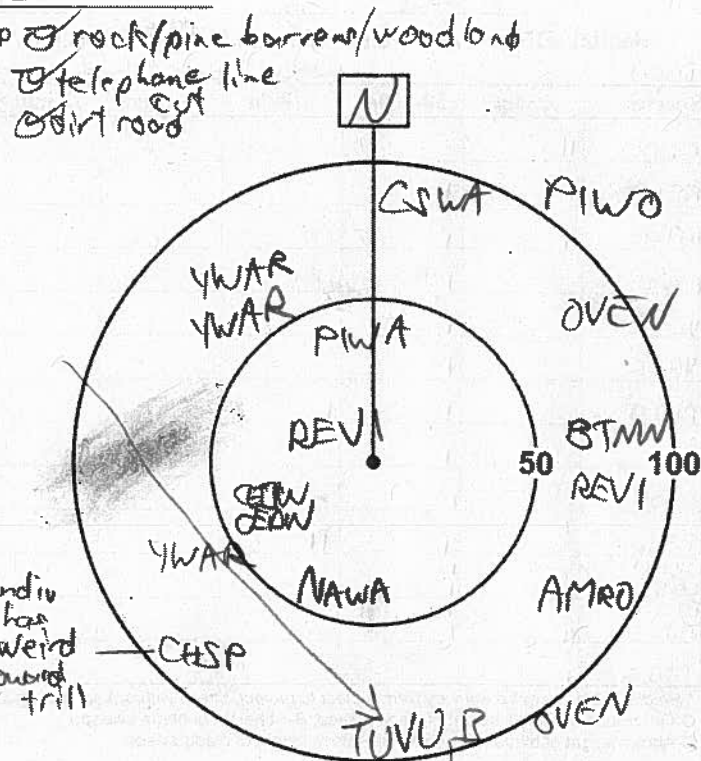
UTM: 55293 504428Start Time: 8:28End Time: 8:38Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ rock/pine barren/woodland

Species	<50m	50-100m	>100m	Flyovers	Height*
PIWA	I				
NAWA	I				
YWAR		III			
CSWA		I			
OVEN		I	I		
BTNW		I			
PIWO			I		
REVI	I	I			
CEOW	II	I			
CHSP		I			
TUVU				I	
AMRO		I			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

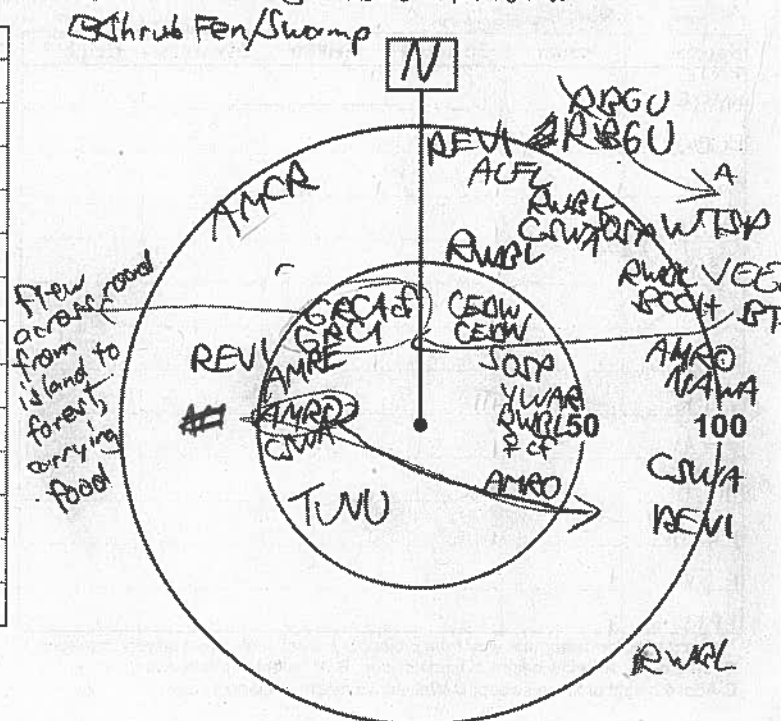
Station: TL34 MTDFeature: Rock Island LakeUTM: 55629 504392Start Time: 8:44End Time: 8:54Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Lake w large island in 100m

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRE	I				
CSWA	I	II			
YWAR	I				
BTNW	I				
NAWA		I			
VEER			I		
BCCH					
ALFL		III			
REVI		I			
AMRO			I		
WTSP					
SSD	I	I			
RBGU	I	II	II		
RWBL					
CEOW	II				
GRCA	II				
AMRO					
TUVU	I				

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Page 4 of 6Signature: DR

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

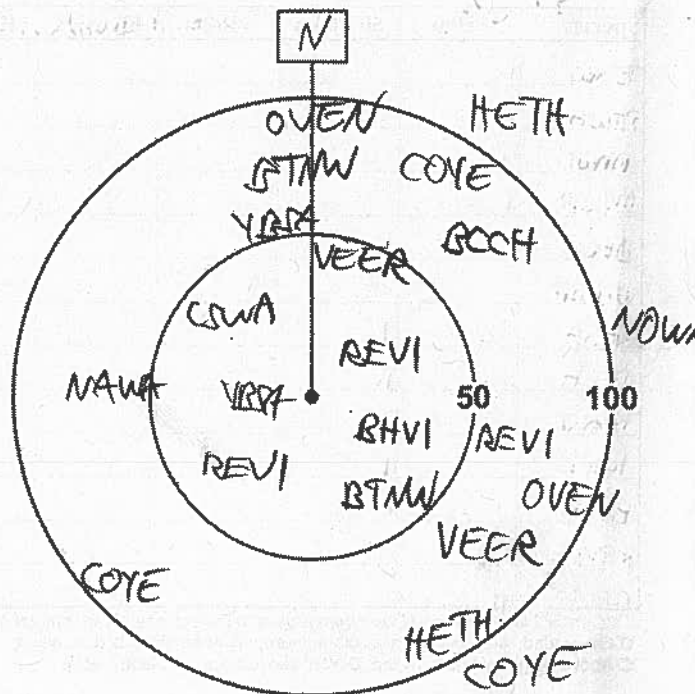
(Project Manager)

REV: 2011-05-04 / FORM 020

Station: TL35A MTDFeature: Bah Dah Gin RdUTM: 57486 5042000Start Time: 9:00End Time: 9:10Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ CropMixed

Species	<50m	50-100m	>100m	Flyovers	Height*
REVI	11	1			
BHVI	1				
YBSA	1	1			
VEER	1	1			
HETH		1	1		
BCCH		1			
NOVA			1		
NAWA		1			
OVEN		11			
COYE		11	1		
BTNW	1	1			
CSWA	1				

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL36 MTD

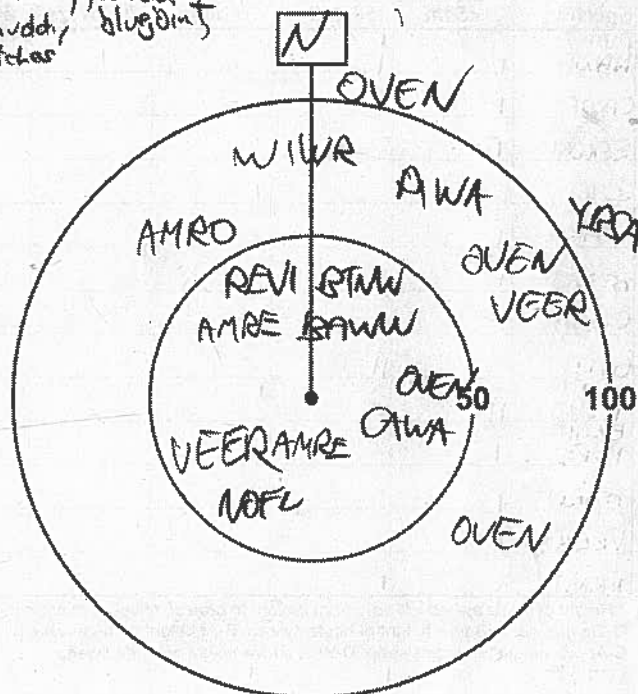
Feature: \_\_\_\_\_

UTM: 57570 5041932Start Time: 9:15End Time: 9:25Habitat: ☒ Forest / ☒ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Mixed forested Swamp Characteristics; winterberry, Canada  
low muddy, boggy

Species	<50m	50-100m	>100m	Flyovers	Height*
BTNW	1				
BAWA	1				
AMRE	11				
OVEN	1	11	1		
CAWA	1				
PIWA		1			
REVI	1				
VEER	1	1			
NOFL	1				
AMCO		1			
WITWR		1			
YBSA			1		

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Page 5 of 6Signature: A. R. E.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

Station: TL37 MTD

Feature: \_\_\_\_\_

UTM: 559620 50408Start Time: 9:34End Time: 9:44Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

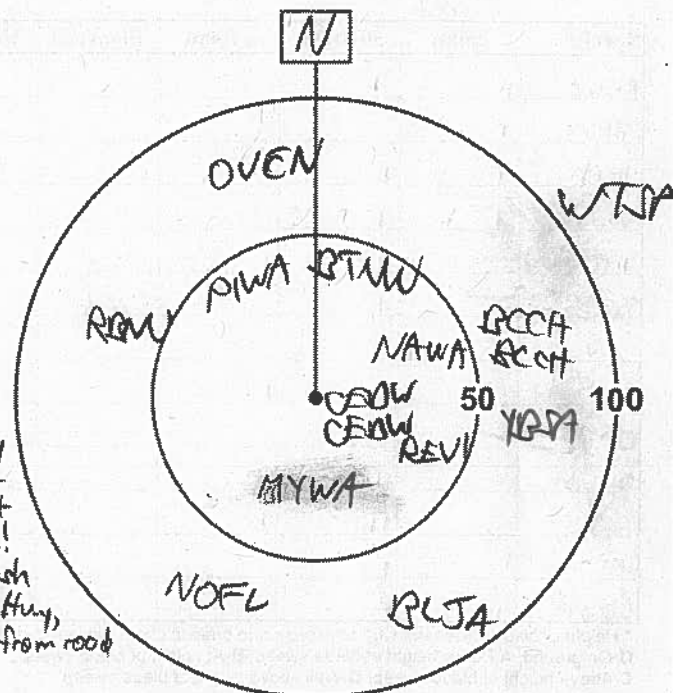
Species	<50m	50-100m	>100m	Flyovers	Height*
BTNW	1				
PTWA	1				
NAWA	1				
MYWA	1				
OVEN		1			
WTSP			1		
UBSA		1			
ROCH		11			
RBNV		1			
NOFL		1			
BLJA		1			
REVI	1				
CEPW	11				

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

MASV  
adult  
didn't  
rattle!  
in slash  
along Hwy,  
30m from road

Station: TL38 MTDFeature: just south of Moore Lake Trailing UTM: 560671 504928Start Time: 9:55End Time: 10:05 Part of Round Lake PPHabitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ rock/pine barren

Species	<50m	50-100m	>100m	Flyovers	Height*
MAWA	1				
NAWA	1				
CAWA	1				
BAWA	1				
COYE	1		1		
AMRE	1				
BTNW	1				
CSWA		1			
OVEN		11			
GCFL			1		
REVI	11				
BWHA	1				
PUFI	1				
AMRO	1				
GBHE	1				
VEER	1				
RBNV		1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

WTSP

CHSP

Page 6 of 6

Signature: [Signature]

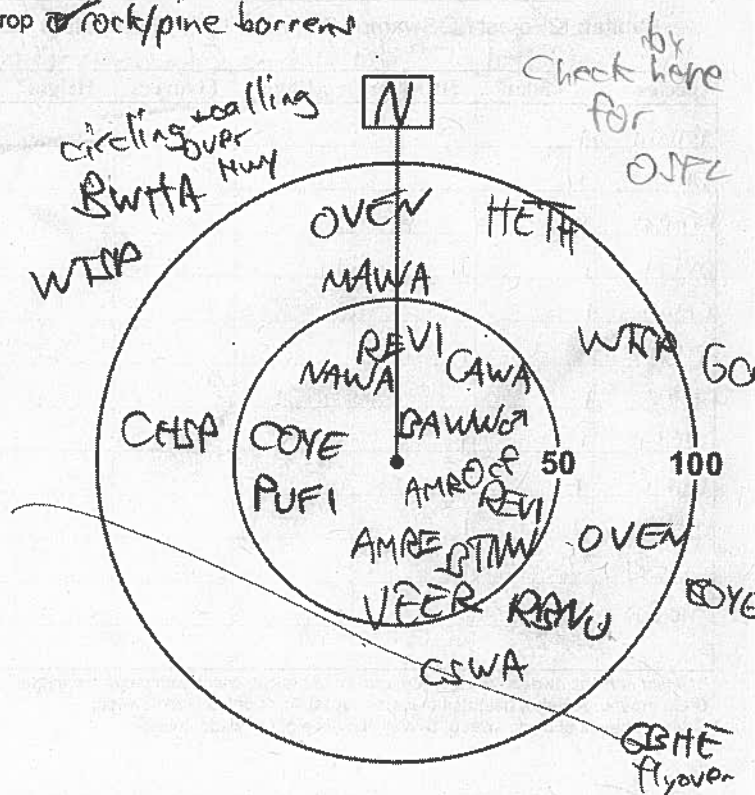
(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020





**Stantec**

**Stantec Consulting Ltd.**  
 1 - 70 Southgate Drive  
 Guelph, ON  
 Canada N1G 4P5  
 Tel: (519) 836-6050  
 Fax: (519) 836-2493

## Birding Point Counts Survey Observation Form

Project Number: 160960824  
 Date: July 3 2013 Wed

Project Name: Mig/Henvey  
 Field Personnel: J. Richer

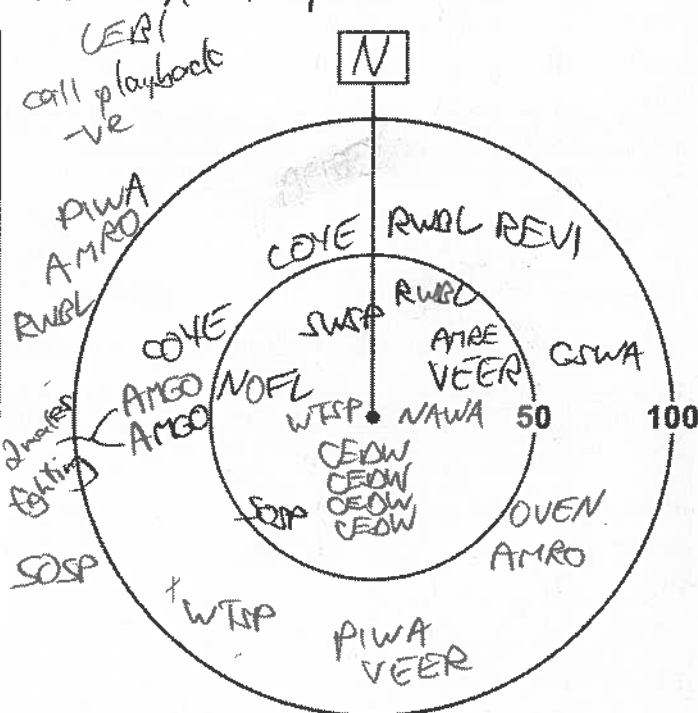
Weather Conditions: TEMP (°C): 15 WIND: Brauf 1 CLOUD: 50 PPT: None PPT (in last 24 hrs): None

GPS #: T 17

Station: TL39 MTD Feature: \_\_\_\_\_ UTM: 561721 5038699  
 Start Time: 6:45 End Time: 6:55 open  
 Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Shrub/pine/oak/barrens

Species	<50m	50-100m	>100m	Flyovers	Height*
CEOW					
SWSP					
SOPO					
WTSP					
NOFL					
RWBL					
REVI					
VEER					
AMRO					
AMRE					
NAWA					
COVE					
PIWA					
OVEN					
CSWA					
AMGO					

\* Height of blade sweep varies from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep



Page 1 of 1

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

MTD

Station: TL 40

Feature: \_\_\_\_\_

UTM: 562680 503784Start Time: 7:03End Time: 7:13Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

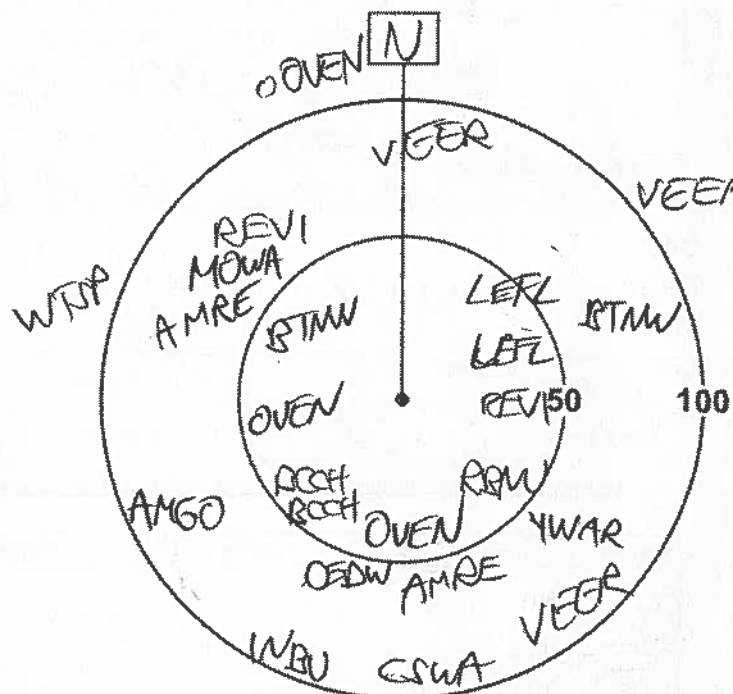
WTSP

Species	<50m	50-100m	>100m	Flyovers	Height*
LEFL	11				
BCH	11				
RBNU	1				
REVE	1	1			
VEER		11	1		
CEW		1			
INBU		1			
AMGO		1			
MOWA		1			
CSWA		1			
AMRE		11			
YWAR		1			
OVEN	11		1		
BTNW	1	1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL 41Feature: Right near Great gap w/ granaryUTM: 562686 503694Start Time: 7:20End Time: 7:30Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

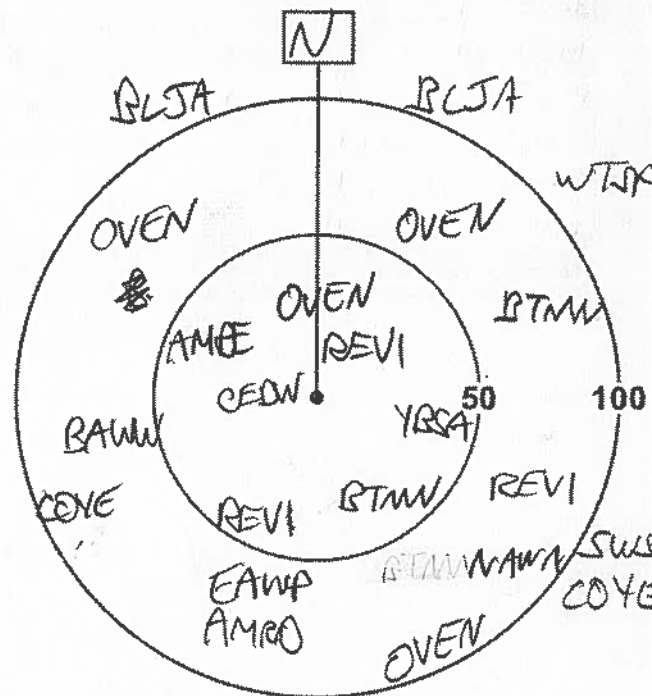
Mixed

Species	<50m	50-100m	>100m	Flyovers	Height*
YBSA	1		11		
BLJA			11		
WTSP			1		
SWSP			1		
REVI	11	1			
AMRO		1			
FAWP		1			
CEW	1				
AMRE	1				
BAWW		1			
NAWA		1			
BTNW	1	1			
OVEN	1	11			
COYE			1		

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Page 2 of \_\_\_\_\_

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

Station: TL42

MTD

Feature:

UTM: 564664 5035972

Start Time: 7:39

End Time: 7:49

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Mixed, mostly maple

Species	<50m	50-100m	>100m	Flyovers	Height*
HETH	1	1			
AMRO	1				
NBSA	1				
REVI	1				
VEER	1		1		
RWBL		1	1		
PUII					
EWAP		1			
WOTH		1			
BTNW		1			
NAWA		1			
CSWA		1			
BLSW	1				
MYWA	1				
PIWA	1				
OVEN	1				

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

CHSP

WTSP

SWSP

Station: TL43

MTD

Feature:

UTM: 565706 503922

Start Time: 7:56

End Time: 8:06

Habitat: ☐ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Opine/rock barrens

Species	<50m	50-100m	>100m	Flyovers	Height*
RWBL	1	1			
PUII			1		
COGR		1			
SWSP		1	1		
WTSP		1			
CHSP		1			
AMRO		1			
REVI	1				
CEOW	1				
COYE	1				
BAWW	1				

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Page 3 of

Signature:

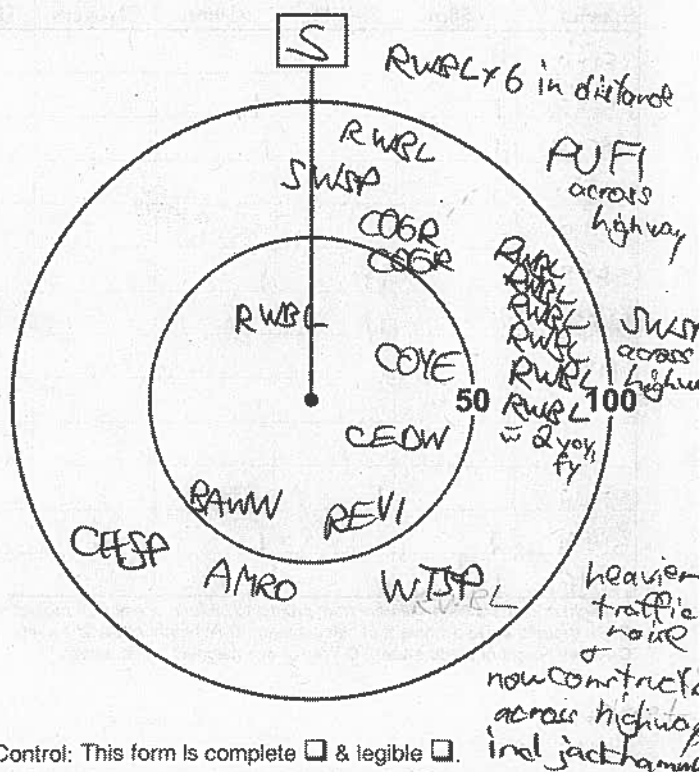
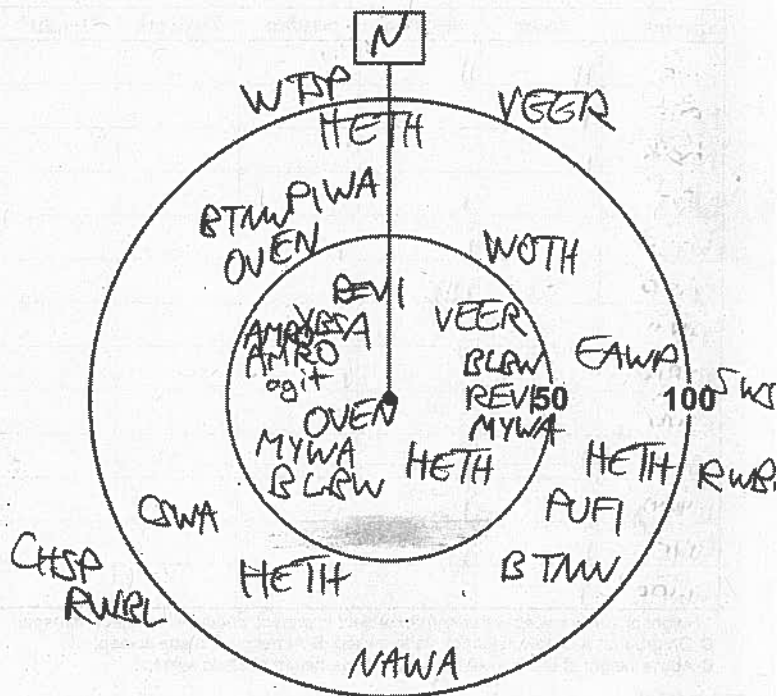
(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-04 / FORM 020







MTD

Station: TL46

Feature:

UTM: 572989 502949

Start Time: 8:54

End Time: 9:09

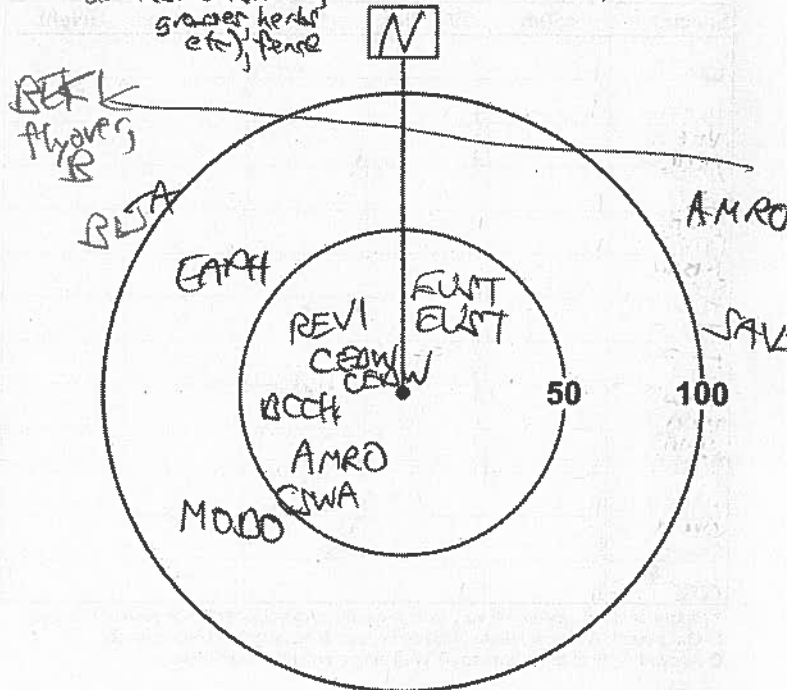
Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ roadside waste

Mixed

roadside waste  
area (small shrubs,  
grasses, herbs  
etc), fence

TUVU flyover

Species	<50m	50-100m	>100m	Flyovers	Height*
EUST	11				
BEVI	1				
CEW	11				
BOCH	1				
AMRO	1		1		
MODD		1			
EAPH		1			
BAJA		1	1		
SALS			1		
CSWA	1				
BEKI				1	



\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Station: TL47

MTD

Feature:

UTM: 568 664

Start Time: 9:13

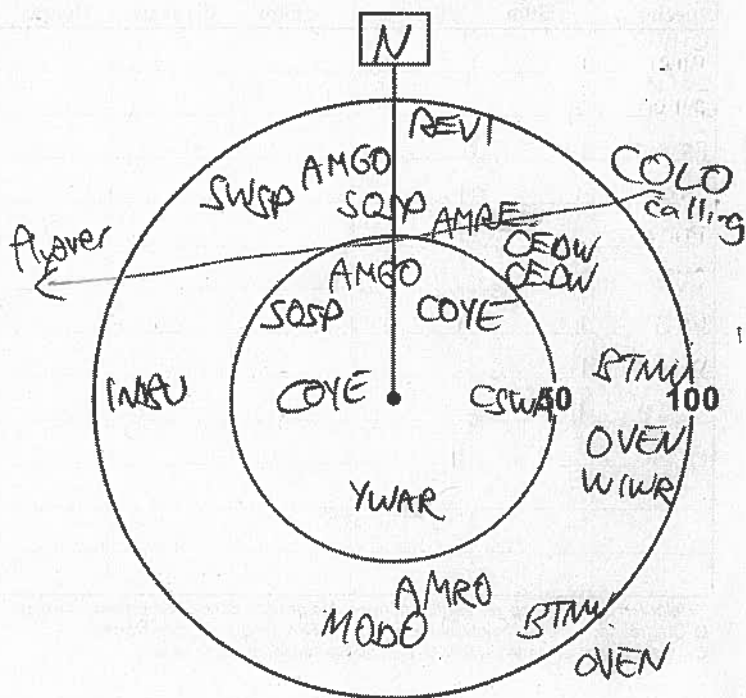
End Time: 9:23

5021923

Habitat: ☒ Forest / ☒ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

+ Shrubland Marsh Meadow

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRO	11	1			
COYE	1				
CSWA	1				
YWAR	1				
BTNW		11			
OVEN		1	1		
AMRO		1			
MODD		1			
AMGO	1	1			
WJAR		1			
CEW		11			
BEVI		1			
SWSP		1			
SSSP	1				



\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

INSU  
COLO

Page \_\_\_\_ of \_\_\_\_

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020

MTD

Station:

TL48

Feature:

UTM:

564173 5028499

Start Time:

9:37

End Time:

9:47

Habitat: ☒ Forest / ☐ Swamp / ☒ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Shrubken narrow leaved emergents

Species	<50m	50-100m	>100m	Flyovers	Height*
CEW	1				
HETH	1	1			
VEER					
AMRO			1		
LESP	1				
RWBL		1			
AMGO	1				
RBNU					
BCCH		1			
TUVU			1		
EAKI					
LEFL		1			
ALFL		1			
CAWA		1			
YWAR		1			
AMRE			1		
BTNW			1		
NAWA	1				
OVEN			1		
CSWA	1				
COYE	1	1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

MERL

Station:

TL49

MTD

Feature:

UTM:

561024 503946

Start Time:

9:59

End Time:

10:09

Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

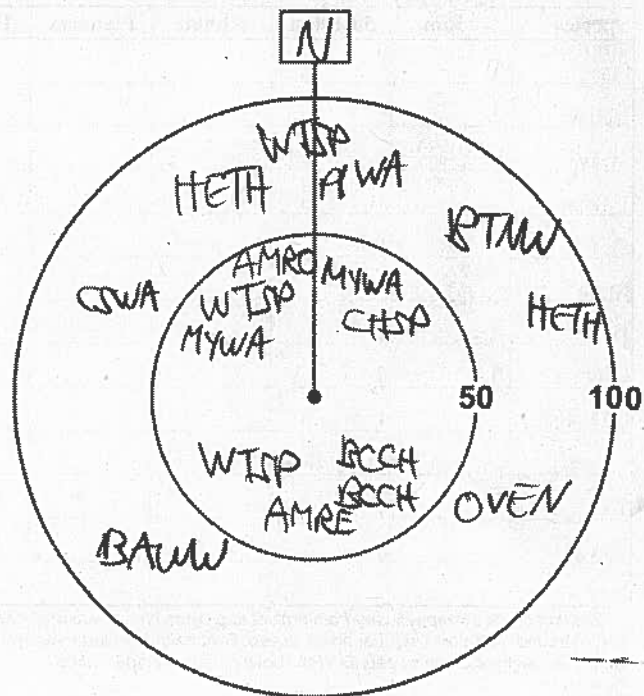
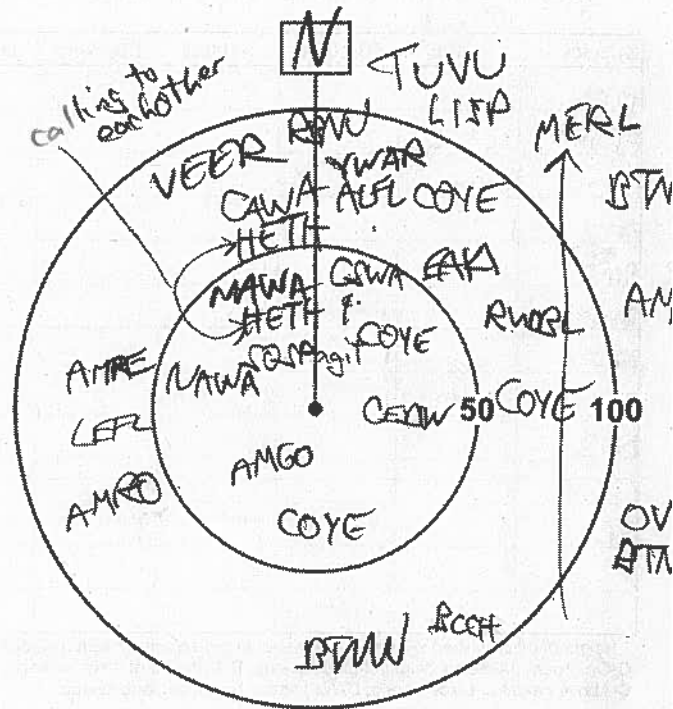
rock/jack pine barren

Species	<50m	50-100m	>100m	Flyovers	Height*
BTNW		1			
AMRE	1				
OVEN		1			
MYWA	1				
BAWW		1			
CSWA		1			
PIWA		1			
CHSP	1				
WTSP	1	1			
AMRO	1				
BCCH	1				
HETH		1			

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Page \_\_\_\_ of \_\_\_\_

Signature:

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-04 / FORM 020



UTM: 558024  
5042490

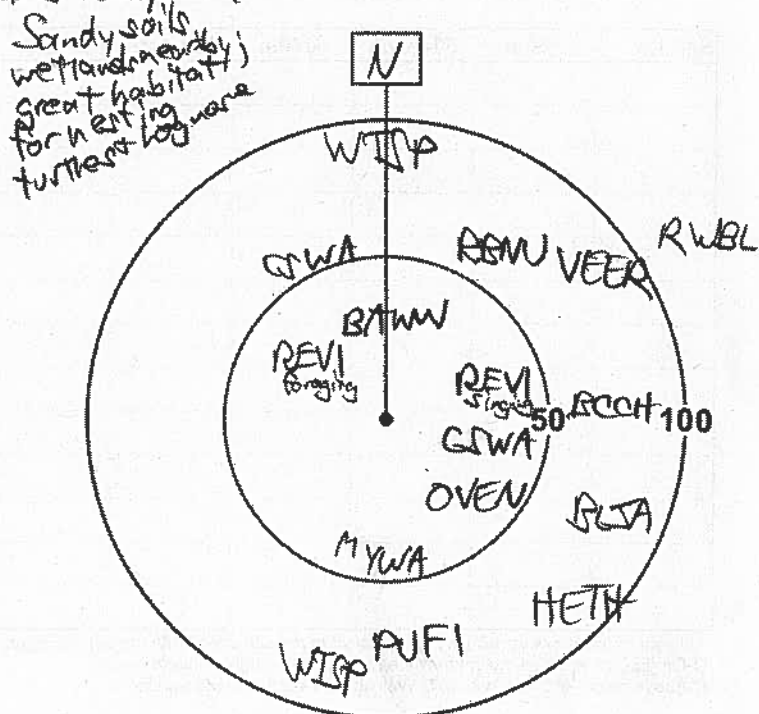
Start Time: 10:16

End Time: 12:26

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ rock/jack pine barren

Species	<50m	50-100m	>100m	Flyovers	Height*
MNWA	11				
CSWA	1	1			
OVEN	1				
BAWW	1				
WTSP		11	1		
RBNU		1			
VEER		1			
REVI	11				
BOCH		1			
BLJA		1			
HETH		1			
PUFI		1			
RWRL		1			

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep

**Station:**

### Feature:

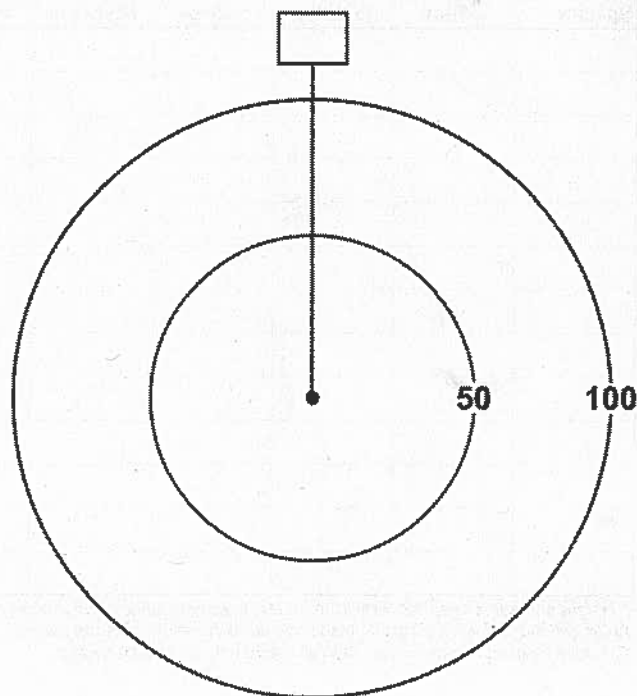
UTM=

**Start Time:**

End Time:

Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop[illegible]

\* Height of blade sweep will vary from project to project; check with project manager.  
O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
C-Above height of blade sweep; D-Well above height of blade sweep

Page        of       

**Signature:**

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

(Project Manager)

REV: 2011-05-04 / FORM 020

**Stantec**

Stantec Consulting Ltd.  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Birding Point Counts Survey Observation Form

Project Number: 160960824Project Name: Henvey / NigigDate: July 4 2013Field Personnel: SEicher

Weather Conditions:

TEMP (°C):

20

WIND:

Rea. 10-1

CLOUD:

100

PPT:

None

PPT (in last 24 hrs):

None

MTD

Station: TZ51Feature: Magnetawan IRUTM: 540651Start Time: 5:50End Time: 6:005065045Habitat: ☐ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop ☒ Rock/Barrens

Species	<50m	50-100m	>100m	Flyovers	Height*
MYWA	11				
NAWA	1				
CSJA		1			
AMRE		1			
CHSP		1	1		
WTSP	1	11			
EATO	1				
REVI	1				
CEOW	11				
BRTH		1			
BCCH		1			
AMRO		1			
AMCR			11		

\* Height of blade sweep varies from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

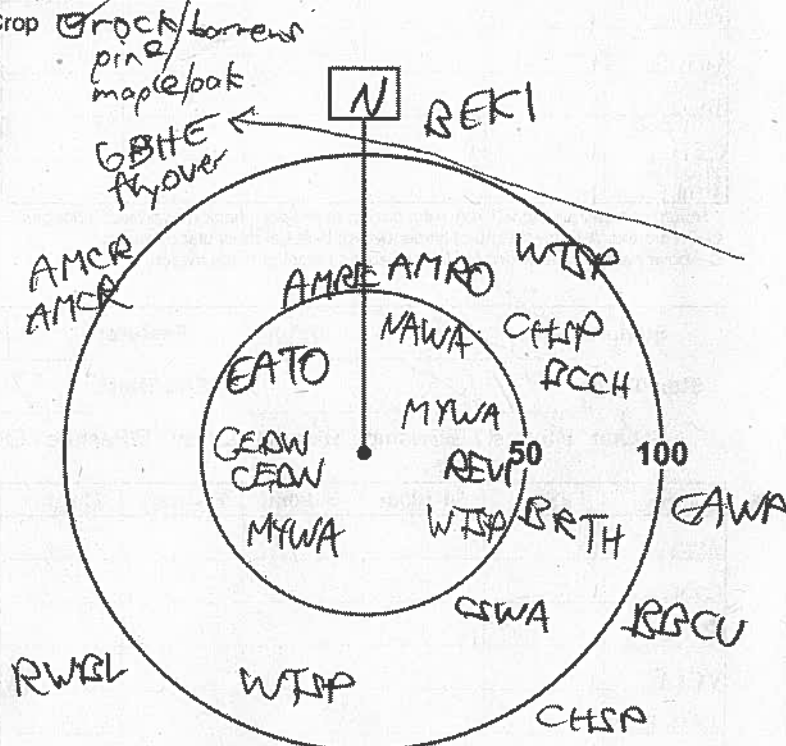
RWBL

PBCU

EAWP

BEKI

BBHE

Page 1 of 6Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.Signature: [Signature]

(Project Manager)

REV: 2011-05-04 / FORM 020

Station: TL52

MTU

Feature: Arrow Arrow Rd

UTM: 572659 503034

Start Time: 7:06

End Time: 7:16

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

narrow leaved emergent - 1/2 woods

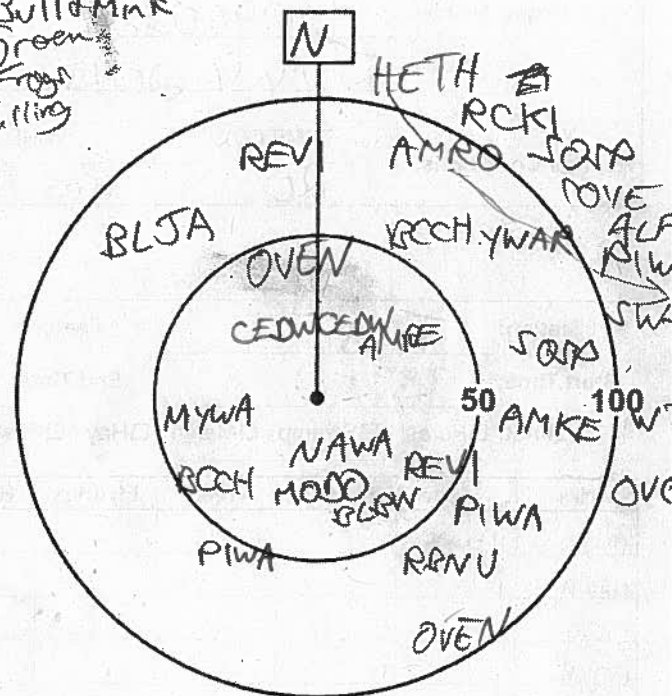
Bullmink  
+ Green  
Frog  
calling

Species	<50m	50-100m	>100m	Flyovers	Height*
RBNV					
CEWJ					
BCCH					
MODD					
REVT					
RCKI					
BLJA					
HETH					
AMRO					
WTSP					
SOSP					
SWSP					
AMKE					
ALFL					
BLBW					
NAWA					
COVE					
MIWA					
PIWA					
OVEN					
UWAR					
AMRE					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Station: TL53

MTU

Feature: McDayall

UTM: 5726307 502242

Start Time: 7:35

End Time: 7:45

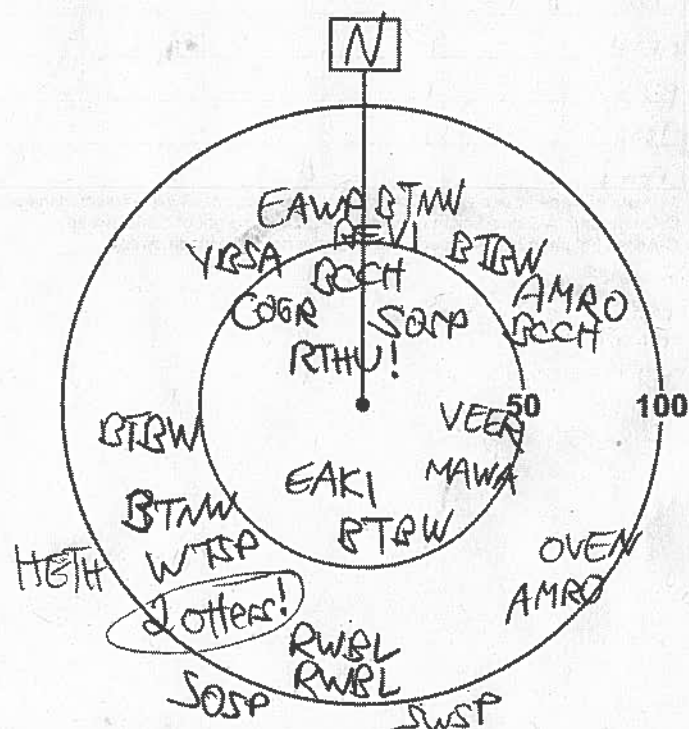
Habitat: ☒ Forest / ☒ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
RTHU					
COGR					
BCCH					
VEER					
EAKI					
RWBL					
AMRO					
WTSP					
SOSP					
EA WP					
REVT					
VB SA					
SWSP					
HETH					
OVEN					
MAWA					
BTNW					
BTBW					

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep



Page 2 of 6

Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-04 / FORM 020



Station: TL54

MTD

Feature: 5785on a trail? bottom of slopeUTM: 581614 5020363Start Time: 7:56End Time: 8:06Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop Grass

Species	<50m	50-100m	>100m	Flyovers	Height*
RBGR	1				
VEER	1				
RBNU		1			
WTSP		1			
REVI		1			
OVEN	1	1	1		
MYWA	1				
PIWA		1			
NOWA		1			
COYE		1			
AMRE		1			
BTNW		1			
PUFI			1		

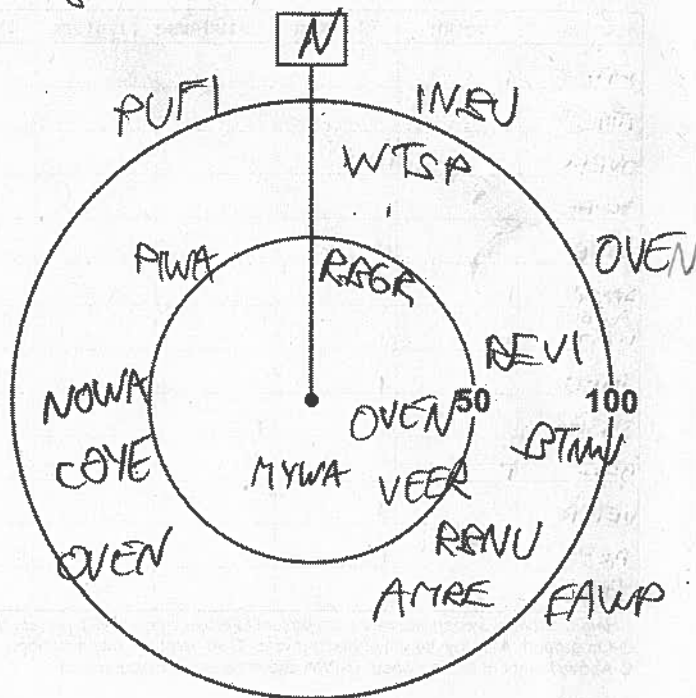
\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

EAWP

INBU

Station: TL55

MTD

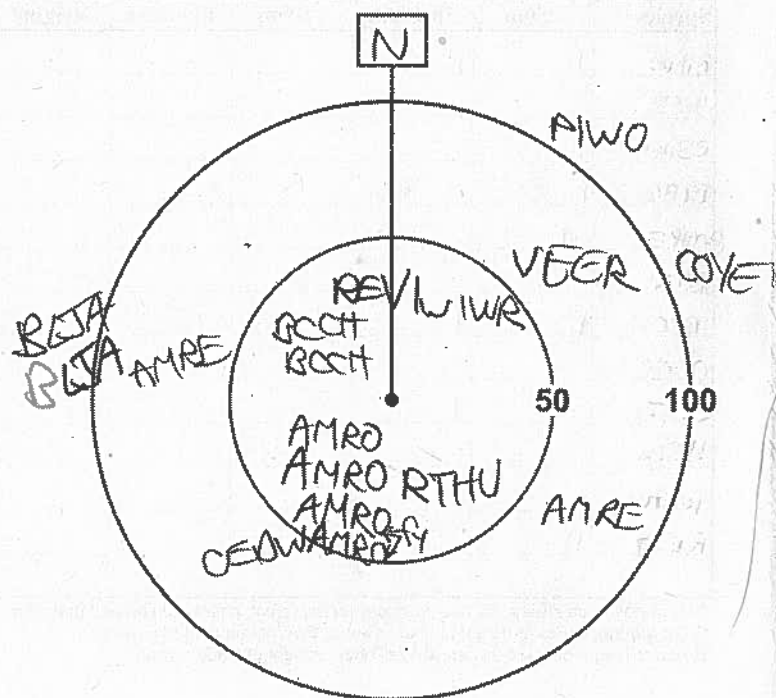
Feature: 57855785UTM: 581561 5020604Start Time: 8:12End Time: 8:22Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop

Species	<50m	50-100m	>100m	Flyovers	Height*
BCCH	11				
AMRO	1111				
REVI	1				
WTWR	1				
RTHU	1				
VEER		1			
CEWU		1			
AMRE		11			
COYE			1		
PIWO			1		
BLA			11		

\* Height of blade sweep will vary from project to project; check with project manager.

O-On ground; A-Below height of blade sweep; B-At height of blade sweep;

C-Above height of blade sweep; D-Well above height of blade sweep

Page 3 of 6Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.Signature: [Signature]

(Project Manager)

REV: 2011-05-04 / FORM 020

Station:

TL56

MTD

Feature:

hydrocut ~~Proctor~~

UTM:

570095 508280

Start Time:

8:27

End Time:

8:37

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop☒ hydrocut

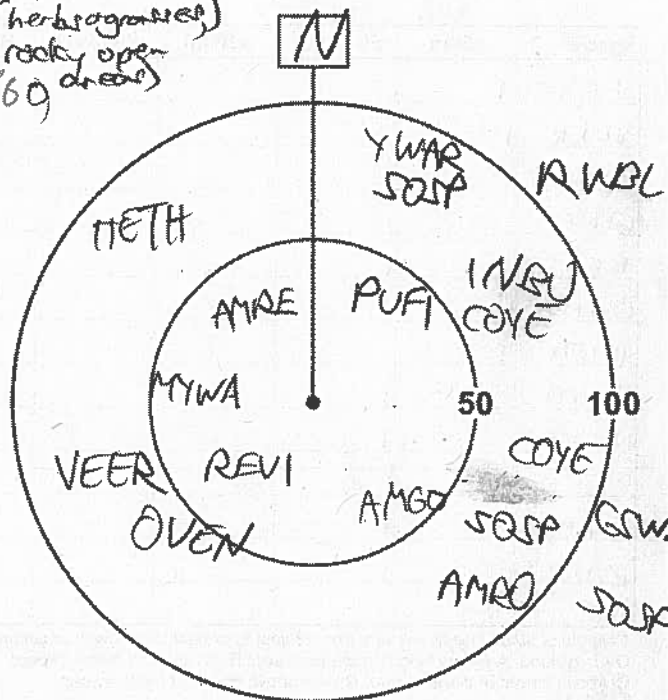
CSWA

(40)

Species	<50m	50-100m	>100m	Flyovers	Height*
AMRE	1				
MYWA	1				
OVEN		1			
YWAR		1			
COYE		11			
AMGO	1				
AWBL	1		1		
PUFI	1				
INBU		1			
SOOP		1	1		
REVI	1				
VEER		1			
HETH		1			
AMRO		1			

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

(herbaceous)  
 rocky open  
 (60 acres)



Station:

TL57

MTD

Feature:

top of ~~Proctor~~

UTM:

570026

5019000

Start Time:

8:39

End Time:

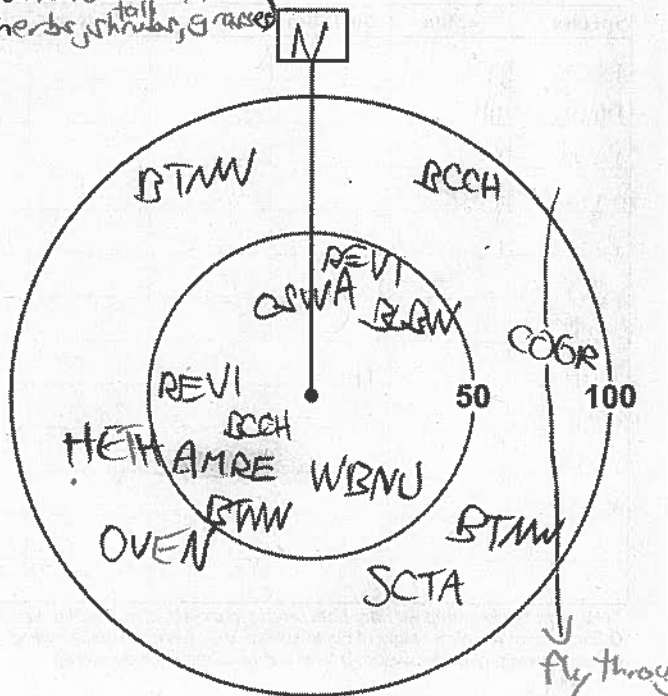
8:49

Habitat: ☒ Forest / ☐ Swamp / ☐ Marsh / ☐ Hay / ☐ Pasture / ☐ Crop☒ hydrocut

Species	<50m	50-100m	>100m	Flyovers	Height*
BTNW	1	11			
OVEN		1			
CSWA	1				
BLBW	1				
AMRE	1				
BCCH	1	1			
COGR			1		
SCTA		1			
HETH		1			
WBNU	1				
REVI	11				

\* Height of blade sweep will vary from project to project; check with project manager.  
 O-On ground; A-Below height of blade sweep; B-At height of blade sweep;  
 C-Above height of blade sweep; D-Well above height of blade sweep

Crock barren-y  
 tall  
 herbs, grasses



Page 4 of 6

Signature:

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-04 / FORM 020

REV: 2011-05-04 / FORM 020







**Stantec Consulting Ltd.**  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Breeding Bird Survey Observation Form

Project Number: 160960824

Project Name: Migra/Henvey Inlet

Date: June 14 2013 Thurs

Field Personnel: J Richer

**Weather Conditions:**

TEMP (°C):

20

WIND:

Grav A2

CLOUD:

A hand-drawn diagram of a kidney. The outer layer is labeled 'Cortex'. The inner part is divided into 'Medulla' and 'Pelvis'.

PPT:

None

PPT (in last 24 hrs):

light rain

[illegible]

**Signature:**

*P. Ri*

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

(Project Manager)

REV: 2011-06-02 / FORM 031

2004-11-18 014



**Record location of all significant species on site map.**

\*\* Endangered, Threatened or Special Concern  
 † Partners In Flight  
 ‡ Area Sensitive Species

Species	Habitats	BE*	Species	Habitats	BE*	Species	Habitats	BE*
Canada Goose	III	FL	Red-headed Wo** †			Blue-wing. Wa. †		
Wood Duck	1 male	H	Red-bellied Wo.			Gold-wing. Wa** †		
Am. Black Duck			Yell-bellied Sap. ‡			Nashville Wa.		
Mallard	11♂, 1♀	P	Downy Wo.	1	H	Yellow Wa.		
Ring-neck. Pheasant			Hairy Wo.			Chestnut-sided Wa.		
Ruffed Grouse ‡	1	H	Northern Flicker †			Magnolia Wa. ‡		
Wild Turkey			Pileated Wo. ‡	1	H	Bl-thr Blue Wa. ‡	11	H
Common Loon ‡	11	P	Ea. Wood-Pewee †**			Yel-rumped Wa. ‡		
Pied-billed Grebe			Alder Fly.			Bl-thr Gr. Wa. ‡		
D. C. Cormorant ‡	1	X	Willow Fly. †			Blackburnian Wa. ‡		
American Bittern			Least Fly.			Pine Wa. ‡		
Least Bittern** ‡			Eastern Phoebe	1	CF	Cerulean Wa** †‡		
Great Blue Heron	1	H	Great Crested Fly.			Bl-and-wh Wa. ‡		
Great Egret			Eastern Kingbird †			Am. Redstart ‡		
Green Heron			Yellow-thr. Vireo ‡			Ovenbird ‡		
Turkey Vulture	###1	H	Blue-headed Vireo ‡			No. Waterthrush ‡		
Osprey			Warbling Vireo			Mourning Wa. ‡	1	S
Northern Harrier †‡			Red-eyed Vireo			Co. Yellowthroat		
Sharp-shin. Hawk ‡			Blue Jay			Hooded Wa †‡		
Coopers Hawk ‡			American Crow			Canada Wa. †‡**	1	S
Red-shou. Hawk †‡			Common Raven			Scarlet Tanager ‡	1	S
Red-tailed Hawk	1	H	Horned Lark			Eastern Towhee †		
Am. Kestrel †			Purple Mart.			Chipping Sp.		
Virginia Rail			Tree Swallow			Clay-colored Sp.		
Sora			No. R. W. Swallow			Field Sp. †		
Sandhill Crane	11	HS	Bank Swallow †**			Vesper Sp. †		
Killdeer	1	NE	Cliff Swallow			Savannah Sp. †	1	S
Spotted Sandpiper	1	H	Barn Swallow**			Grasshopper Sp. †		
Upland Sandpiper ‡			Bl-capped Chickadee			Song Sp.		
Wilson's Snipe			Tufted Titmouse			Swamp Sp.		
American Woodcock			Red-br. Nuthatch			Wh-throated Sp. ‡		
Ring-billed Gull	111	X	Wh-br. Nuthatch			Northern Cardinal		
Herring Gull			Br. Creeper ‡			Rose-br. Grosbeak †		
Caspian Tern			Carolina Wren.			Indigo Bunting	11	S
Black Tern** ‡			House Wren	1	S	Bobolink †**		
Common Tern			Winter Wren ‡			Red-winged Bl.	###141	CF
Rock Dove			Sedge Wren			Ea. Meadowlark †**		
Mourning Dove	1	S	Marsh Wren			Common Grackle		
Yellow-bill. Cuckoo			Golded-cr. Kinglet ‡			Br-headed Cowbird	11	H
Black-bill. Cuckoo †			B. G. Gnatcatcher ‡			Orchard Oriole		
Eastern Screech Owl			Eastern Bluebird			Baltimore Oriole †		
Great Horned Owl			Veery			Purple Finch		
Barred Owl ‡			Hermit Thrush ‡			House Finch		
Long-eared Owl			Wood Thrush †**			Pine Siskin		
N. Saw-whet Owl			American Robin			Am. Goldfinch		
Co. Nighthawk**			Gray Catbird	1	S	House Sparrow		
Whip-poor-will †‡			No. Mockingbird			Other Species ...		
Chimney Swift** †			Brown Thrasher †	1	S	Hooded Merganser	1♀	H
Ruby-thr. Humming.			European Starling	###111	FL			
Belted Kingfisher †			Cedar Waxwing	110	H			

\* Record highest Breeding Evidence (BE) observed over all habitat. Use codes as in Breeding Bird Atlas of Ontario.

Page 2 of 2

Signature: A. K. S.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-06-02 / FORM 031





**Stantec Consulting Ltd.**  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Breeding Bird Survey Observation Form

Project Number: 160960824  
Date: June 13 2013 Thursday

Project Name: Vigil/Henvey Inlet  
Field Personnel: Reicher

Weather Conditions:	TEMP (°C): 15	WIND: Bart 1	CLOUD: 50%	PPT: None	PPT (in last 24 hrs): Heavy Rain
---------------------	------------------	-----------------	---------------	--------------	-------------------------------------

[illegible]

**Signature:**

  
(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

(Project Manager)

REV: 2011-06-02 / FORM 031

(See plan Form 012)

**Record location of all significant species on site map.**

\*\* Endangered, Threatened or Special Concern  
 † Partners In Flight  
 ‡ Area Sensitive Species

Species	Habitats	BE*	Species	Habitats	BE*	Species	Habitats	BE*
Canada Goose	II	H	Red-headed Wo** †			Blue-wing. Wa. †		
Wood Duck			Red-bellied Wo.			Gold-wing. Wa** †		
Am. Black Duck			Yell-bellied Sap. ‡	II	P	Nashville Wa.		
Mallard			Downy Wo.	I	H	Yellow Wa.		
Ring-neck. Pheasant			Hairy Wo.			Chestnut-sided Wa.		
Ruffed Grouse ‡			Northern Flicker †	I	S	Magnolia Wa. ‡		
Wild Turkey			Pileated Wo. ‡			Bl-thr Blue Wa. ‡	I	S
Common Loon ‡	II	NE	Ea. Wood-Pewee †**			Yel-rumped Wa. ‡		
Pied-billed Grebe			Alder Fly.	I	S	Bl-thr Gr. Wa. ‡		
D. C. Cormorant ‡			Willow Fly. †			Blackburnian Wa. ‡		
American Bittern			Least Fly.			Pine Wa. ‡		
Least Bittern** ‡			Eastern Phoebe	II	S	Cerulean Wa** †‡		
Great Blue Heron	III	H	Great Crested Fly.	I	S	Bl-and-wh Wa. ‡		
Great Egret			Eastern Kingbird †	II	S	Am. Redstart ‡		
Green Heron			Yellow-thr. Vireo ‡			Ovenbird ‡		
Turkey Vulture	HH	H	Blue-headed Vireo ‡			No. Waterthrush ‡		
Osprey	I	H	Warbling Vireo			Mourning Wa. ‡	I	S
Northern Harrier †‡			Red-eyed Vireo			Co. Yellowthroat		
Sharp-shin. Hawk ‡			Blue Jay	I	H	Hooded Wa †‡		
Coopers Hawk ‡			American Crow			Canada Wa. †‡**	I, singing	Shedden 95
Red-shou. Hawk †‡			Common Raven	II	H	Scarlet Tanager ‡		
Red-tailed Hawk	I	H	Horned Lark			Eastern Towhee †		
Am. Kestrel †			Purple Mart.			Chipping Sp.		
Virginia Rail			Tree Swallow	II	H	Clay-colored Sp.		
Sora			No. R. W. Swallow			Field Sp. †		
Sandhill Crane			Bank Swallow †**			Vesper Sp. †		
Killdeer			Cliff Swallow			Savannah Sp. †	I	S
Spotted Sandpiper	I	H	Barn Swallow** ONLY 16 at Valscott Lake			Grasshopper Sp. †		
Upland Sandpiper ‡			Bl-capped Chickadee			Song Sp.	II	S
Wilson's Snipe	I	A	Tufted Titmouse			Swamp Sp.		
American Woodcock			Red-br. Nuthatch			Wh-throated Sp. ‡	I	S
Ring-billed Gull			Wh-br. Nuthatch			Northern Cardinal		
Herring Gull			Br. Creeper ‡			Rose-br. Grosbeak †		
Caspian Tern			Carolina Wren.			Indigo Bunting	I	S
Black Tern** ‡			House Wren	I	S	Bobolink †**		
Common Tern			Winter Wren ‡			Red-winged Bl.	III	NEst
Rock Dove			Sedge Wren			Ea. Meadowlark †**		
Mourning Dove	I	H	Marsh Wren			Common Grackle	II	H
Yellow-bill. Cuckoo			Golded-cr. Kinglet ‡			Br-headed Cowbird	III	P
Black-bill. Cuckoo †			B. G. Gnatcatcher ‡			Orchard Oriole		
Eastern Screech Owl			Eastern Bluebird			Baltimore Oriole †		
Great Horned Owl			Veery			Purple Finch		
Barred Owl ‡			Hermit Thrush ‡	I	S	House Finch		
Long-eared Owl			Wood Thrush †**			Pine Siskin		
N. Saw-whet Owl			American Robin	III	CF	Am. Goldfinch	I	S
Co. Nighthawk**			Gray Catbird	I	S	House Sparrow		
Whip-poor-will †‡			No. Mockingbird			Other Species ...		
Chimney Swift** †			Brown Thrasher †					
Ruby-thr. Humming.			European Starling					
Belted Kingfisher †	I	H	Cedar Waxwing					

\* Record highest Breeding Evidence (BE) observed over all habitat. Use codes as in Breeding Bird Atlas of Ontario.

Page 2 of 2

Signature: A. R. Q.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-06-02 / FORM 031





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Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

Transm Line Pts  
19-37

## Breeding Bird Survey Observation Form

Project Number: 160960524

Project Name: Alvin / Henry / 4 / et

Date: June 12 2013 Wed

Field Personnel: *S. Richer*

**Weather Conditions:**

TEMP (°C):

14

WIND:

Leaf 1

CLOUD:

? Full Fog

PP1:

Fig

PPT (in last 24 hrs):

## Heavy Rain

[illegible]

**Signature:**

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒.

**Signature:**

(Project Manager)

REV: 2011-06-02 / FORM 031

(See also Form 013)



**Record location of all significant species on site map.**

\*\* Endangered, Threatened or Special Concern  
 † Partners In Flight  
 ‡ Area Sensitive Species

Species	Habitats	BE*	Species	Habitats	BE*	Species	Habitats	BE*
Canada Goose	I	4F	Red-headed Wo** †			Blue-wing. Wa. †		
Wood Duck	I male H		Red-bellied Wo.			Gold-wing. Wa** †		
Am. Black Duck			Yell-bellied Sap. ‡			Nashville Wa.	III	S
Mallard			Downy Wo.			Yellow Wa.	III	S
Ring-neck. Pheasant			Hairy Wo.			Chestnut-sided Wa.	I	S
Ruffed Grouse ‡			Northern Flicker †			Magnolia Wa. ‡		
Wild Turkey			Pileated Wo. ‡			Bl-thr Blue Wa. ‡	I	S
Common Loon ‡	I	H	Ea. Wood-Pewee †**			Yel-rumped Wa. ‡	III	S
Pied-billed Grebe			Alder Fly.			Bl-thr Gr. Wa. ‡		
D. C. Cormorant ‡	I	H	Willow Fly. †			Blackburnian Wa. ‡		
American Bittern			Least Fly.	I	S	Pine Wa. ‡		
Least Bittern** ‡			Eastern Phoebe	III	NE	Cerulean Wa** †‡		
Great Blue Heron	III	H	Great Crested Fly.			Bl-and-wh Wa. ‡	II	S
Great Egret			Eastern Kingbird †	II	H	Am. Redstart ‡	III	S
Green Heron			Yellow-thr. Vireo ‡			Ovenbird ‡	I	S
Turkey Vulture	IIII	H	Blue-headed Vireo ‡			No. Waterthrush ‡		
Osprey			Warbling Vireo	I	S	Mourning Wa. ‡		
Northern Harrier †‡			Red-eyed Vireo			Co. Yellowthroat		
Sharp-shin. Hawk ‡			Blue Jay			Hooded Wa †‡		
Coopers Hawk ‡			American Crow			Canada Wa. †‡**		
Red-shou. Hawk †‡			Common Raven			Scarlet Tanager ‡	I	Shading
Red-tailed Hawk	II	P	Horned Lark			Eastern Towhee †		
Am. Kestrel †			Purple Mart.			Chipping Sp.		
Virginia Rail			Tree Swallow			Clay-colored Sp.		
Sora			No. R. W. Swallow			Field Sp. †		
Sandhill Crane			Bank Swallow †**			Vesper Sp. †		
Killdeer			Cliff Swallow			Savannah Sp. †		
Spotted Sandpiper	I	H	Barn Swallow**			Grasshopper Sp. †		
Upland Sandpiper ‡			Bl-capped Chickadee			Song Sp.	III	CF
Wilson's Snipe			Tufted Titmouse			Swamp Sp.		
American Woodcock			Red-br. Nuthatch			Wh-throated Sp. ‡		
Ring-billed Gull			Wh-br. Nuthatch			Northern Cardinal	I	S
Herring Gull			Br. Creeper ‡	I	S	Rose-br. Grosbeak †		
Caspian Tern			Carolina Wren.			Indigo Bunting	I	S
Black Tern** ‡			House Wren			Bobolink †**		
Common Tern			Winter Wren ‡			Red-winged Bl.	II	CF
Rock Dove			Sedge Wren			Ea. Meadowlark †**		
Mourning Dove			Marsh Wren			Common Grackle	II	H
Yellow-bill. Cuckoo			Golded-cr. Kinglet ‡			Br-headed Cowbird		
Black-bill. Cuckoo †	Northwest Lake	H	B. G. Gnatcatcher ‡			Orchard Oriole		
Eastern Screech Owl			Eastern Bluebird			Baltimore Oriole †		
Great Horned Owl			Veery			Purple Finch		
Barred Owl ‡			Hermit Thrush ‡			House Finch		
Long-eared Owl			Wood Thrush †**			Pine Siskin		
N. Saw-whet Owl			American Robin	III	CF	Am. Goldfinch	I	S
Co. Nighthawk**			Gray Catbird			House Sparrow		
Whip-poor-will †‡			No. Mockingbird			Other Species ...		
Chimney Swift** †			Brown Thrasher †					
Ruby-thr. Humming.			European Starling	III	CF			
Belted Kingfisher †			Cedar Waxwing					

\* Record highest Breeding Evidence (BE) observed over all habitat. Use codes as in Breeding Bird Atlas of Ontario.

Page 2 of 2

Signature: D. J. C.

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-06-02 / FORM 031



**Stantec Consulting Ltd.**  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

TransmLine Pts  
1-18

## Breeding Bird Survey Observation Form

Project Number: 160960824

Project Name: Nigig/Henvey Inlet

Date: June 10, 2013

Field Personnel: *SRicher*

**Weather Conditions:**

TEMP (°C):

12

WIND:

Beast 1

CLOUD:

75%

PPT:

None

PPT (in last 24 hrs):

No. 4

[illegible]

**Signature:**

*(Signature)*  
(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

(Project Manager)



**Record location of all significant species on site map.**

\*\* Endangered, Threatened or Special Concern  
† Partners In Flight  
‡ Area Sensitive Species

Species	Habitats	BE*	Species	Habitats	BE*	Species	Habitats	BE*
Canada Goose			Red-headed Wo** †			Blue-wing. Wa. †		
Wood Duck	I	H	Red-bellied Wo.			Gold-wing. Wa** †		
Am. Black Duck			Yell-bellied Sap. ‡			Nashville Wa.	II	S
Mallard			Downy Wo.			Yellow Wa.	I	S
Ring-neck. Pheasant			Hairy Wo.			Chestnut-sided Wa.	I	S
Ruffed Grouse ‡			Northern Flicker †	II	S	Magnolia Wa. ‡	I	S
Wild Turkey	I	H	Pileated Wo. ‡	I	H	Bl-thr Blue Wa. ‡	I	S
Common Loon ‡			Ea. Wood-Pewee †**			Yel-rumped Wa. ‡		
Pied-billed Grebe			Alder Fly.			Bl-thr Gr. Wa. ‡	II	S
D. C. Cormorant ‡			Willow Fly. †			Blackburnian Wa. ‡	IIII	S
American Bittern			Least Fly.			Pine Wa. ‡		
Least Bittern** ‡			Eastern Phoebe			Cerulean Wa** †‡		
Great Blue Heron	I	H	Great Crested Fly.			Bl-and-wh Wa. ‡	I	S
Great Egret			Eastern Kingbird †	II	H	Am. Redstart ‡		
Green Heron			Yellow-thr. Vireo ‡			Ovenbird ‡		
Turkey Vulture	IIII	H	Blue-headed Vireo ‡			No. Waterthrush ‡		
Osprey	IIII	P	Warbling Vireo			Mourning Wa. ‡		
Northern Harrier †‡			Red-eyed Vireo			Co. Yellowthroat	IIII	CF
Sharp-shin. Hawk ‡			Blue Jay	IIII	FY	Hooded Wa †‡		
Coopers Hawk ‡			American Crow	IIII	H	Canada Wa. †‡**		
Red-shou. Hawk †‡			Common Raven	IIII	H	Scarlet Tanager ‡		
Red-tailed Hawk	I	H	Horned Lark			Eastern Towhee †		
Am. Kestrel †	I	H	Purple Mart.			Chipping Sp.		
Virginia Rail			Tree Swallow	II	H	Clay-colored Sp.		
Sora			No. R. W. Swallow			Field Sp. †		
Sandhill Crane	II	P	Bank Swallow †**			Vesper Sp. †		
Killdeer	I	H	Cliff Swallow			Savannah Sp. †	I	S
Spotted Sandpiper	I	H	Barn Swallow**	II	H	Grasshopper Sp. †		
Upland Sandpiper ‡			Bl-capped Chickadee			Song Sp.		
Wilson's Snipe			Tufted Titmouse			Swamp Sp.		
American Woodcock			Red-br. Nuthatch			Wh-throated Sp. ‡	II	S
Ring-billed Gull	IIII	X	Wh-br. Nuthatch			Northern Cardinal	I	H
Herring Gull	II	X	Br. Creeper ‡			Rose-br. Grosbeak †		
Caspian Tern			Carolina Wren.			Indigo Bunting	I	S
Black Tern** ‡			House Wren	I	S	Bobolink †**	IIII	P
Common Tern			Winter Wren ‡			Red-winged Bl.	IIII	CF
Rock Dove	IIII	H	Sedge Wren			Ea. Meadowlark †**	II	S
Mourning Dove	I	H	Marsh Wren			Common Grackle	IIII	CF
Yellow-bill. Cuckoo			Golded-cr. Kinglet ‡			Br-headed Cowbird	I	H
Black-bill. Cuckoo †			B. G. Gnatcatcher ‡			Orchard Oriole		
Eastern Screech Owl			Eastern Bluebird			Baltimore Oriole †		
Great Horned Owl			Veery	II	S	Purple Finch		
Barred Owl ‡			Hermit Thrush ‡			House Finch		
Long-eared Owl			Wood Thrush †**			Pine Siskin		
N. Saw-whet Owl			American Robin			Am. Goldfinch		
Co. Nighthawk**			Gray Catbird	I	S	House Sparrow		
Whip-poor-will †‡			No. Mockingbird			Other Species ...		
Chimney Swift** †			Brown Thrasher †			Broadwinged Hawk	I	CF
Ruby-thr. Humming.			European Starling					
Belted Kingfisher †	II	P	Cedar Waxwing					

\* Record highest Breeding Evidence (BE) observed over all habitat. Use codes as in Breeding Bird Atlas of Ontario.

Page 2 of 2

Signature: \_\_\_\_\_

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-06-02 / FORM 031



## Appendix B

Stantec's Terrestrial Survey Work Program (Stantec, 2013)



**2013 TERRESTRIAL SURVEY  
WORK PROGRAM**

File No. 160960770  
March 2013

Prepared for:

**Nigig Power Corp.**  
Henvey Inlet Wind Project

Prepared by:

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Figure 1: Study Area for the proposed Nigig Power Corp. Henvey Inlet Wind Project and Transmission Corridor



## 1.0 Terrestrial Field Program

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Stantec Consulting Ltd. ("Stantec") is providing this work plan to Environment Canada for the terrestrial field investigations for the 300 MW, Feed-In Tariff ("FIT") Contracted, Henvey Inlet Wind Project (the "Project"). The key Project elements include:

- i) *On-Reserve Facilities:* up to 120 wind turbines, a transformer station, operations and maintenance building, access roads, collector lines, and ancillary facilities on Henvey Inlet First Nation Lands (Reserve No. 2); and
- ii) *Off-Reserve Facilities:* approximately 90 km of 230 kV, double circuit overhead transmission line from Reserve No. 2 to the Town of Parry Sound, Ontario where the project will interconnect with the provincial electricity grid at Hydro One Networks Inc.'s ("Hydro One") existing Parry Sound Transformer Station. The transmission line, as presently proposed, would be located within the current and future rights-of-way held by the Ontario Ministry of Transportation for King's Highway 69/400.

Save the Project's transmission line and interconnection works at the Parry Sound Transformer Station, all Project infrastructure will be located on Henvey Inlet First Nation Reserve Lands (Reserve No. 2). Preliminary siting of the wind turbines, collector lines, operations and maintenance building, transformer station, and access roads are in progress and are taking into account important cultural and environmental features as they are identified through field surveys, traditional ecological knowledge studies, and engagement efforts with the Henvey Inlet First Nation community.

For the transmission line, as proposed to be located within the current and future rights-of-way held by the Ontario Ministry of Transportation for King's Highway 69/400, the natural heritage field investigations for the majority of the transmission corridor fall under the requirements of Ontario Regulation 116/01 of Ontario's *Environmental Assessment Act* and will therefore be subject to review and approval by the Ministry of the Environment. However, portions of the highway corridor traverses roughly 35 ha of the Magnetewan First Nation Reserve (No. 1) and about 11 ha of the Shawanaga First Nation Reserve (No. 17), lands which are under federal jurisdiction.

Throughout this document, the wind project component on the Reserve Lands will be referred to as the Project Location and the transmission line corridor will be referred to as the Transmission Line. Collectively, these areas will be referred to as the Study Area for the purpose of the terrestrial survey work program.

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The Project Location and Transmission Line alignment are shown on **Figure 1**. The purpose of the natural environment field program is to collect data relevant to vegetation communities (ecosites), wetlands, wildlife habitat, and Species at Risk. The objective of this work plan is to seek Environment Canada's agreement with the study methodologies and protocols set out herein for terrestrial investigations of the Project during the late winter, spring, summer and fall of 2013.

## **2.0 Field Program Overview**

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The Project Location is within the Henvey Inlet First Nation Reserve along the eastern shore of Georgian Bay, south of French River Provincial Park and directly north of North Georgian Bay Shoreline and Islands Conservation Reserve. Generally, the Project Location has shallow soils, with many rocky outcrops forming longitudinal ridges running on a northwest to southeast axis, and is divided roughly in half by Henvey Inlet. Numerous wetland pockets are located between the ridges and across the Project Location, with upland areas supporting forested areas of poplar and jack pine.

The characteristics of terrestrial habitat and areas of potential significance or sensitivity will first be identified as part of the early-on consultation with Henvey Inlet First Nations and relevant agencies, as well as a review of the available natural heritage information. Information gained through the consultation process and desktop review will be supplemented by general aerial and ground-level (by foot or boat) surveys of the Study Area to fine-tune the field program and assist in siting monitoring stations. Wildlife and vegetation surveys will begin in March, when raptors begin their spring migration and will continue into November, when the final fall migratory waterfowl are expected to move through the Study Area.

### **2.1 ECOSITE CLASSIFICATION AND WETLANDS**

Ecosite classification forms the backbone of wildlife habitat assessment. For the Project, the Ecosites of Ontario classification system (Banton *et al.*, 2009) will be used as it includes forest and non-forest communities as well as wetlands.

A wetland is land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation and various kinds of biological activity which are adapted to a wet environment (The Federal Policy on Wetland Conservation ("FPWC"), Environment Canada, 1991). The protection and conservation of wetlands on federal lands is mandated by the FPWC. Mitigation of adverse environmental effects on wetlands is guided by the FPWC goal of achieving 'no net loss of wetland functions'. The no net loss principal can be achieved by using a hierarchical sequence of mitigation alternatives: avoidance, minimization, and compensation. Wetlands on federal lands can be described using The Canadian Wetland Classification System (National Wetlands Working Group, Second Edition, 1997).

Provincially, the Ontario Wetland Evaluation System (Ministry of Natural Resources, 2002), is used to map and score wetlands based on biological productivity and diversity, human use, hydrologic functions, and unique characteristics such as geographical rarity. It is anticipated that no wetlands have been evaluated using the OWES on the Henvey Inlet First Nation Reserve Lands.



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## 2.2 WILDLIFE HABITAT

Wildlife habitat is defined as an area where plants, animals and other organisms live, including areas where species concentrate at a vulnerable point in their life cycle and that are important to migratory and non-migratory species. The work program has been designed to capture those wildlife species and their habitats which may occur in the Study Area and may be influenced by the Project.

## 2.3 ENDANGERED, THREATENED AND SPECIAL CONCERN SPECIES

A desktop review of the MNR Natural Heritage Information Centre (NHIC) database, as well as provincial atlases for breeding birds, mammals, reptiles and amphibians, was conducted to identify species of conservation concern in the vicinity of the Study Area. Twenty-seven terrestrial species listed as endangered, threatened or special concern at the provincial and federal level have the potential to occur within the Study Area (Table 1). Several of these species were recorded within the Project Location during previous terrestrial field investigations by LGL Limited. Site investigations in the proposed 2013 terrestrial work program will assess the presence and identify preferred habitat of these species.

**Table 1: Endangered, threatened and special concern terrestrial wildlife species potentially present within the Study Area**

Type	Common Name	Scientific Name	S - Rank	COSSARO	COSEWIC
Reptile	Stinkpot / Eastern Musk Turtle	<i>Sternotherus odoratus</i>	S3	THR	THR
Reptile	Blanding's Turtle	<i>Emydoidea blandingii</i>	S3	THR	THR
Reptile	Snapping Turtle	<i>Chelydra serpentina</i>	S3	SC	SC
Reptile	Northern Map Turtle	<i>Graptemys geographica</i>	S3	SC	SC
Reptile	Eastern Hog-nosed Snake	<i>Heterodon platirhinos</i>	S3	THR	THR
Reptile	Eastern Foxsnake (Georgian Bay)	<i>Pantherophis gloydi</i>	S3	THR	END
Reptile	Eastern Massasauga (Great Lakes/ St Lawrence)	<i>Sistrurus catenatus catenatus</i>	S3	THR	THR
Reptile	Eastern Ribbonsnake	<i>Thamnophis sauritus</i>	S3	SC	SC
Reptile	Milksnake	<i>Lampropeltis triangulum</i>	S3	SC	SC
Reptile	Five-lined Skink (Southern Shield population)	<i>Plestiodon fasciatus</i>	S3	SC	SC
Bird	Least Bittern	<i>Ixobrychus exilis</i>	S4B	THR	THR
Bird	Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	S4B	THR	THR
Bird	Chimney Swift	<i>Chaetura pelagica</i>	S4B, S4N	THR	THR
Bird	Barn Swallow	<i>Hirundo rustica</i>	S4B	THR	THR (NS)
Bird	Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	THR	THR (NS)
Bird	Eastern Meadowlark	<i>Sturnella magna</i>	S4B	THR	THR (NS)
Bird	Bald Eagle	<i>Haliaeetus leucocephalus</i>	S4B, S2N	SC	SC
Bird	Common Nighthawk	<i>Chordeiles minor</i>	S4B	SC	THR
Bird	Olive-sided Flycatcher	<i>Contopus borealis</i>	S4B	SC	THR
Bird	Eastern Wood-Pewee	<i>Contopus virens</i>	S4B	-	SC (NS)
Bird	Wood Thrush	<i>Hylocichla mustelina</i>	S4B	-	THR (NS)

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**Table 1: Endangered, threatened and special concern terrestrial wildlife species potentially present within the Study Area**

Type	Common Name	Scientific Name	S - Rank	COSSARO	COSEWIC
Bird	Golden-winged Warbler	<i>Vermivora chrysoptera</i>	S4B	SC	THR
Bird	Canada Warbler	<i>Wilsonia canadensis</i>	S4B	SC	THR
Mammal	Little Brown Myotis	<i>Myotis lucifugus</i>	S5	END	END (NS)
Mammal	Northern Myotis	<i>Myotis septentrionalis</i>	S3?	END	END (NS)
Mammal	Tri-coloured Bat	<i>Perimyotis subflavus</i>	S3?	-	END (NS)

COSSARO: Committee on the Status of Species at Risk in Ontario

COSEWIC: Committee on the Status of Endangered Species in Canada

S2 – Imperiled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.

S3: Vulnerable—Vulnerable in the province, relatively few populations (often 80 or fewer)

S4: Apparently Secure—Uncommon but not rare

S5: Secure—Common, widespread, and abundant in the province

S#B: Breeding status rank

S#N – Non-breeding status rank

S? – Rank Uncertain

NAR: Not At Risk

END: Endangered

THR: Threatened

SC: Special Concern

N/A: not applicable

NS: Not on Species at Risk Act Schedule

### **3.0 Proposed Field Work Program**

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Due to the known presence of Species at Risk, the project is considered to have “Very High” site sensitivity and would be ranked as “Category 4” by Environment Canada’s “Wind Turbines and Birds: A Guidance Document for Environmental Assessment” (2007a). Projects in this category usually require comprehensive baseline surveys; a requirement that has been considered in the development of this work program.

The survey protocols are consistent with Environment Canada’s “Recommended Protocols for Monitoring Impacts on Wind Turbines on Birds” (Environment Canada, 2007b) and on Environment Canada’s comments on LGL Limited’s 2011 workplan for the Project. Recommended protocols for species at risk are based on Stantec’s technical expertise and on experience with the Ministry of Natural Resources species-specific surveys requirements.

Detailed protocols of each survey type are outlined below. The suite of surveys proposed along the Transmission Line differs slightly than those within the Project Location, due to differences in potential environmental effects. For example, migratory bird surveys are not proposed along the Transmission Line. **Table 4** provides a summary of all proposed surveys, including a breakdown of which surveys are to be conducted within the Project Location and those to be conducted along the Transmission Line.

#### **3.1 GENERAL RECONNAISSANCE (EARLY APRIL)**

Given the limited access in and around the Project Location and the relatively rugged topography and abundance of wetlands in the Study Area, multi-purpose broad-scale surveys will be completed to obtain an overall understanding of the landscape, and to put the detailed field study locations in context.

An aerial survey by helicopter will be conducted in early April to observe the landscape without leaf cover and at a time of pronounced hydrological activity (i.e. spring melt). Leaf-off conditions will also allow a search for habitat features such as stick nests and wetland types. A reconnaissance survey of the Project Location by boat and foot will be undertaken in early April, guided by local members of the Henvey Inlet First Nations. The purpose of the reconnaissance survey will be to gain a better understanding of site access and points of interest, including locations of rare species, based in local knowledge.

#### **3.2 SPRING MIGRATORY BIRD SURVEYS**

##### **3.2.1 Spring raptor migration (Ten surveys, early March to end of April):**

Monitoring will consist of ten surveys throughout the spring migration period (March to end of April) to record presence of diurnal migrant raptors. Surveys will be comprised of six-hour point counts starting at 9:00 am, conducted by two observers stationed at two appropriate vantage



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points within the Project Location. When site access allows, surveys stations will be situated in the east and west portions of the Project Location. However, during times of year when site access is limited (i.e. late winter, early spring) alternative locations may be used with efforts to maximize spatial coverage.

All raptors observed during the surveys will be recorded and mapped. Behaviour of the raptors will be noted with emphasis on flight height and determining which individuals were actively migrating as opposed to staging (e.g. hunting, perching, etc.). For actively migrating raptors, flight paths will be mapped.

**3.2.2 Spring passerine migration (Eight surveys, early April to late May):**

Natural habitat located in close proximity to the Georgian Bay shoreline provides stopover habitat for migrating passerine birds. Eight weekly surveys are proposed in April and May. Monitoring will consist of ten, 500m long transects distributed throughout the Project Location. Transects will be placed in different habitat types (i.e. woodland, rock barren and wetland). Given the variable nature of vegetation communities within the Project Location, it is likely most 500m transects will include more than one habitat type. A description of the habitat along each of the 10 transects will be recorded.

Surveys will be conducted in the morning, between dawn and approximately 10:00 am. A tally of all species observed will be recorded on each transect. These surveys will include characterizing the abundance and diversity of passerines within the Project Location.

**3.2.3 Spring waterfowl migration (Four surveys, April to late May):**

Spring monitoring for migrating waterfowl will be focused along Henvey Inlet and will consist of four bi-weekly surveys undertaken by boat in April and May. Surveys will include waterfowl counts to record species and number of individuals observed along the inlet, as well as characteristics of the wetlands to support migrating waterfowl (e.g. size, vegetation, permanence, etc.).

The use of scattered wetlands and ponds throughout the Project Location by staging waterfowl will be assessed through the spring passerine surveys.

**3.3 BREEDING BIRD SURVEYS****3.3.1 Daytime breeding birds (Two surveys, late May to early July):**

Two rounds of breeding bird surveys will be conducted in each major habitat type with the Study Area (woodland, rock barren and wetland). Surveys will consist of ten-minute point counts, in conjunction with area searches (wandering transects) between point count locations. The area searches will allow for collection a comprehensive species list, whereas point counts will provide information on species density.

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Surveys would take place starting 30 minutes before sunrise and continue until approximately 10:00 am. As per Environment Canada guidance, a minimum of 20 point counts will be sited in each major habitat type. However, given the variability of habitat types that occur within the Study Area, it is anticipated that many point counts may cover more than one habitat type.

In marsh habitat, play-back call surveys for marsh breeding birds will be conducted following the ten-minute point count, to assist in detection of more secretive marsh bird species, specifically, the threatened Least Bittern.

Location of all species at risk observations will be geo-referenced using a hand-held GPS unit, mapped and compared to ecosite classification to develop habitat mapping for each species.

**3.3.2 Crepuscular breeding birds (Two surveys, May and June):**

Eastern Whip-poor-will surveys will be conducted in suitable open habitat within forested areas. Surveys will be conducted in May and June and will consist of six-minute point counts at stations spaced within the Project Location and Transmission Line corridor. Due to the remote location of much of the Study Area, survey locations may be selected with consideration to access and surveyor safety.

Surveys will begin approximately 30 minutes after sunset within appropriate weather conditions (not in high winds, persistent rain or an overcast sky) and will, if possible, coincide with the full moon. All individuals heard will be recorded, with an estimated direction and distance from the observer.

**3.3.3 Owls (One survey, April):**

Given the difficulty in detecting owl species, the use of playback calls to elicit a response will be used. A single survey in April is proposed, and will include various stations throughout the Project Location. Due to the remote location of much of the Study Area, survey locations may be selected based on facility of access and surveyor safety.

Surveys will begin approximately 30 minutes after dark and will consist of 10 minute point counts incorporating playback and periods of silent listening. All individual heard will be recorded, with an estimated direction and distance from the observer.

**3.3.4 Raptor and colonial nesting birds (Two surveys, April and June):**

Searches for large stick nests or “nest bowls” in trees, typically exhibiting a DBH (diameter at breast height) of >50 cm, will be conducted during the aerial reconnaissance prior to leaf-out. Searches will target trees along watercourses, with special attention afforded to large white pines, and swamps along large bodies of water, as well as other appropriate habitat within the Study Area. If present, nests will be surveyed for activity concurrent with breeding bird point counts and area searches in June.

### **3.4 AMPHIBIAN AND REPTILE SURVEYS**

#### **3.4.1 Western Chorus Frog and Salamanders (April):**

Western Chorus Frog surveys will consist of 3-minute call counts at potential breeding habitat conducted in April, during appropriate weather conditions. This species breeds in small or shallow aquatic habitats associated with moist, open terrestrial habitat (COSEWIC, 2008c). Males call from the water and are typically active when air temperatures are above 5°C, although calls have been detected at air temperatures as low as -1°C (COSEWIC, 2008c).

Unlike many anurans, Western Chorus Frogs are generally very active throughout the day. As such, daytime survey will be used to cover larger portions of the Study Area than evening call surveys would permit.

Surveys for amphibian egg masses will take place concurrent with calling surveys. These will consist of perimeter surveys of suitable breeding ponds by trained field personnel. Egg masses of different species are often characteristic based on features such as where they are laid, how many eggs are in the mass, density of the egg mass, and whether or not the eggs are encased in jelly.

### **3.5 REPTILE HABITAT AND TARGETED SURVEYS (MAY AND JUNE):**

Reptile habitat and targeted species surveys will take place in three stages.

Preliminary surveys for reptiles will also take place throughout the migratory and breeding bird survey periods. Field biologists familiar with reptile species identification will be conducting area searches and wandering transect surveys in a variety of areas providing habitat for reptiles at both the Project Location, weekly from early April until early July, and along the Transmission Line, weekly from late May until early July. Any incidental observations of turtles, snakes or lizards, including shed skins or shells, will be recorded on survey forms and used to refine the field survey program proposed for June.

Potential snake or turtle habitat within the Study Area will also be identified during Ecosite surveys, beginning in May. The habitat assessment will involve identification of potential reptile habitat features, including:

- Turtle overwintering habitat and snake/skink hibernacula;
- Nesting sites; and,
- Foraging habitats.

Targeted field surveys for reptile species at risk will occur in June. Timing of these surveys will coincide with a period of high activity for reptiles (nesting and foraging), but also when air temperatures encourage basking behavior. Surveys for snake species at risk and Five-lined Skink will consist of wandering transects through all appropriate habitat types (**Table 2**).



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Additional survey effort will be directed toward areas with previous observations of these species which may indicate high quality or limited habitat. To the extent possible, surveys will be conducted on sunny days when air temperatures are a minimum of 15°C (ideally 20°C). Surveys for turtles will consist of daytime basking surveys from land or boat in suitable wetland and open water habitat (Table 2), and evening nesting surveys in potential upland nesting sites identified during Ecosite surveys. Basking surveys will be conducted on sunny days when air temperatures are a minimum of 15°C (ideally 20°C). Nesting surveys will take place on warm evenings (daytime air temperature >20°C), ideally before or after rainfall. All surveys will record species, number, location and behaviour of observed reptiles.

The purpose of the targeted surveys is to confirm habitat used by the various reptile species at risk within the Study Area and provide information on general abundance and distribution. Survey results will be used to produce detailed mapping of reptile habitat features which will be used to guide the siting layout process and maximize avoidance of sensitive features.

Table 2: General Habitat Description and Use by Reptile Species at Risk

Common Name	General Habitat and Use*
<b>Turtles</b>	
Blanding's Turtle	Lakes, ponds and wetlands with clear shallow water and muck bottoms. Will move between habitats within active season; aerial basking; nesting in late May to early July, in open sandy soil up to 2.5km from primary wetland, but typically within 400m of water; overwinter in marsh, bog or fen with >0.5m water depth.
Stinkpot	Shallow water in rivers, lakes and ponds with slow current and soft bottom; aquatic basking, often under floating vegetation; nesting in June, in shallow soil near water, occasionally in or under leaf litter; overwinter in primary habitat with muck bottom.
Northern Map Turtle	Large rivers and lakes with soft bottom; aerial basking; nesting June and July in sandy soil; overwinter in general habitat in areas with >5m water depth.
Snapping Turtle	All aquatic habitats, but rarely in moving water, prefer large water bodies associated with marsh and/or swamp; aquatic basking
<b>Snakes and Lizard</b>	
Eastern Hog-nosed Snake	Open forest and forest edges with sandy soil in proximity to water; egg-laying in late June and July in nests excavated in sandy soil, often under cover objects; hibernation in mammal burrows.
Eastern Foxsnake	Georgian Bay populations inhabit rock barrens with sparse trees and shrubs in close proximity to shoreline; basking under or near rocks or in rock crevices; egg-laying late June to July in rock crevices or decaying vegetation; communal hibernation in rock crevices near shoreline.
Eastern Massasauga	Georgian Bay populations use rock barrens, wetlands and shorelines; viviparous, bearing young in late summer; communal gestation under rock cover; hibernation in rock crevices or animal burrows where water level is close to surface.
Eastern Ribbonsnake	Wetland edges with low vegetation and open basking areas; often seen swimming; viviparous, bearing young in late summer; hibernation in rock crevices and mammal burrows.

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**Table 2: General Habitat Description and Use by Reptile Species at Risk**

Common Name	General Habitat and Use*
Milksnake	Forest edges and open meadow; bask under cover objects; egg-laying May to July in loose soil, decomposing wood or vegetation; hibernation in rock crevices and mammal burrows, often communally and with other species.
Five-lined Skink	Open forest and rock barren; abundance of cover objects (rocks and woody debris) is important, longer/larger cover is preferred; nesting in shallow soil under cover objects.

\* Habitat description and use data obtained from COSEWIC assessment and status reports.

**3.6 BAT SURVEYS (TWO SURVEYS, JUNE):**

Bat surveys will be conducted in conjunction with Whip-poor-will surveys. A portable, hand-held broad band acoustic monitor will be used to detect bat calls. Recorded bat calls will be analysed to guild or species, where possible, following completion of the field program. The goal of the bat surveys will be to determine the presence and relative abundance of bat species at risk.

**3.7 ECOSITE, WETLAND AND VEGETATION SURVEYS****3.7.1 Ecosite Classification, including Wetlands (May to July):**

Vegetation communities within the Study Area will be delineated on aerial photographs and confirmed during field investigations. Community characterizations will be based on the Ecosites of Ontario system (Banton et al., 2009) and will be identified to the Vegetation Type unit level.

The Ecosites of Ontario classification system includes wetlands. Searches for wetlands not previously identified within the Study Area will be conducted as part of the Ecosite surveys. If encountered, previously unidentified wetlands will be recorded through field notes, photographs and geo-referenced using handheld GPS units.

**3.7.2 Rare flora (May to July):**

Searches for rare plants and habitat supporting these plants will be conducted concurrent with Ecosite surveys, where possible, but may also require spring assessments for ephemeral species or mid-summer assessments for species where identification is dependent on the flowering period of the species. If encountered, rare plants or habitat will be recorded through field notes, photographs and geo-referenced using handheld GPS units.

A review of the MNR Natural Heritage Information Centre (NHIC) database (NHIC, 2012) indicates that two provincially rare vegetation communities are known to occur within the Study Area:

- Atlantic Coastal Plain Shallow Marsh Type; and,
- Buttonbush Organic Thicket Swamp Type

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The following rare plant species (Table 3) may also be encountered in the Study Area:

<b>Table 3: Rare Plant Species and Flowering Period</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Flowering Period</b>
<b>Flowering Plants</b>		
St. Lawrence Grape Fern	<i>Botrychium rugulosum</i>	Mid-Spring
Thread-like Naiad	<i>Najas gracillima</i>	Summer to Fall, seeds important to ID so survey at end of period
Large Round-leaved Orchid	<i>Plantathera macrophylla</i>	June to August
Snailseed Pondweed	<i>Potamogeton bicupulatus</i>	Early Summer to Fall, seeds important to ID so survey at end of period
Alga Pondweed	<i>Potamogeton confervoides</i>	Summer, seeds important to ID so survey at end of period
Twin-stemmed Bladderwort	<i>Utricularia geminiscapa</i>	July to August
<b>Liverworts</b>		
Liverwort sp.		Unknown, best period for general identification is June-August

### 3.8 FALL MIGRATORY BIRD SURVEYS

#### 3.8.1 Fall passerine migration (Eight surveys, end of August to mid October)

Natural habitat located in close proximity to shorelines provides stopover habitat for migrating birds. Eight weekly surveys are proposed between the end of August and mid October. Monitoring will consist of ten, 500 m long transects distributed throughout the Project Location. The same transects will be used as in the Spring Passerine Migration surveys.

Survey will be conducted in the morning, between dawn and approximately 10:00 am. A tally of all species observed will be recorded on each transect. These surveys will include characterizing the abundance and diversity of passerines within the Project Location.

#### 3.8.2 Fall waterfowl migration (Six surveys, September to October):

Fall monitoring for migrating waterfowl will be focused along Henvey Inlet and will consist of four bi-weekly surveys undertaken by boat in September through October. Surveys will include waterfowl counts to record species and number of individuals observed along the inlet, as well as characteristics of the wetlands to support migrating waterfowl (e.g. size, vegetation, permanence, etc.).

The use of scattered wetlands and ponds throughout the Project Location by staging waterfowl will be assessed through the Fall Passerine surveys.



**2013 TERRESTRIAL SURVEY****WORK PROGRAM**

Proposed Field Work Program

March 2013

**3.8.3 Fall raptor migration (Ten surveys, September to October):**

Monitoring will consist of ten surveys throughout the fall migration period (September to October) to record presence of diurnal migrant raptors. Surveys will be comprised of six-hour point counts starting at 9:00 am, conducted by two observers stationed at two appropriate vantage points within the Project Location. When site access allows, surveys stations will be situated in the east and west portions of the Project Location.

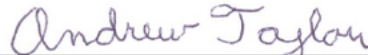
All raptors observed during the survey will be recorded and mapped. Behaviour of the raptors will be noted with emphasis on flight height and determining which individuals were actively migrating as opposed to staging (e.g. hunting, perching, etc.). For actively migrating raptors, flight paths will be mapped.

**3.9 INCIDENTAL OBSERVATIONS**

In addition to targeted wildlife surveys described above, all incidental observations of terrestrial wildlife or other significant sightings made during surveys throughout the 2013 field season will be recorded. Notes will be taken on the species, number of individuals, locations and behavior. Observations made early in the field season may be used to refine the remainder of the field program.

**STANTEC CONSULTING LTD.**

Melissa Cameron, MSc, MLA  
Ecologist / Landscape Architect



Andrew Taylor  
Terrestrial Ecologist

## 2013 TERRESTRIAL SURVEY

## WORK PROGRAM

Proposed Field Work Program

March 2013

Table 4: Summary of Natural Environment Field Program

Study	Mode	Frequency	Timing	Study Area
<b>General Reconnaissance</b>				
Aerial survey	Helicopter	Once	early April, prior to leaf-out	PL
Ground survey	Foot / boat survey with Henvey Inlet First Nations	Once	early April	PL
<b>Bird Surveys</b>				
<b>Spring Migration</b>				
Passerines	Ten, 500m long transects	Once per week, each transect (8 surveys)	Early April to late May	PL
Waterfowl Stopover and Staging	Henvey Inlet	Once every other week (4 surveys)	April to Late May	PL
Raptors	2 stations	Ten surveys	Early March to end April	PL
<b>Breeding Birds</b>				
Point Counts	Minimum of 20 stations in each major habitat type	Two rounds of surveys	Late May to early July	PL, TL
Area Searches	Wandering transect between point count stations	Two rounds of surveys	Late May to early July	PL, TL
Play-back call surveys	Stations in suitable habitat	Owls – once Marsh Birds – Two rounds of surveys	Owls – April Marsh Birds – May to July	PL, TL
Crepuscular surveys	In suitable Whip-poor-will habitat	Two round of surveys	May - June	PL, TL
Raptor and Colonial Bird Nests	Visual survey for raptor and colonial nesting bird nests	Twice – once to locate, once to confirm use	Concurrent with aerial reconnaissance, then with point counts to confirm use	PL, TL
<b>Fall Migration</b>				
Passerines	Ten, 500m long transects	Once per week, each transect (8 surveys)	End August to mid-October	PL
Waterfowl Stopover and Staging	Henvey Inlet only	Once every other week (4 surveys)	September to October	PL
Raptors	2 stations	Ten surveys	September to October	PL

**2013 TERRESTRIAL SURVEY**

**WORK PROGRAM**

Proposed Field Work Program

March 2013

**Table 4: Summary of Natural Environment Field Program**

Study	Mode	Frequency	Timing	Study Area
<b>Bat Surveys</b>				
Ultrasonic Recording Units	Handheld units	Twice	June, in conjunction with crepuscular surveys	PL, TL
<b>Reptile Surveys</b>				
General Habitat Survey	Habitat Assessment	Once	Concurrent with Ecosite and vegetation surveys	PL, TL
SAR Surveys	Targeted surveys for turtle, snake and lizard species at risk	Once	June	PL, TL
<b>Amphibian Surveys</b>				
Western Chorus Frog Call Counts	Daytime call surveys, including audio recordings	Once	April	PL, TL
Salamander Egg Mass	Daytime surveys in wetlands	Once	April, concurrent with frog call counts	PL, TL
<b>FEC / Botanical Surveys</b>				
Ecosite classification, including wetlands	Ground surveys	Once	May to July	PL, TL
Rare Plants – Spring Ephemerals	Ground surveys	Once	May and June	PL, TL
Rare Plants – Summer Botanical	Ground surveys	Once	July	PL, TL

PL – Project Location.

TL – Transmission Line.



## 4.0 References and Information Sources

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**2013 TERRESTRIAL SURVEY**

**WORK PROGRAM**

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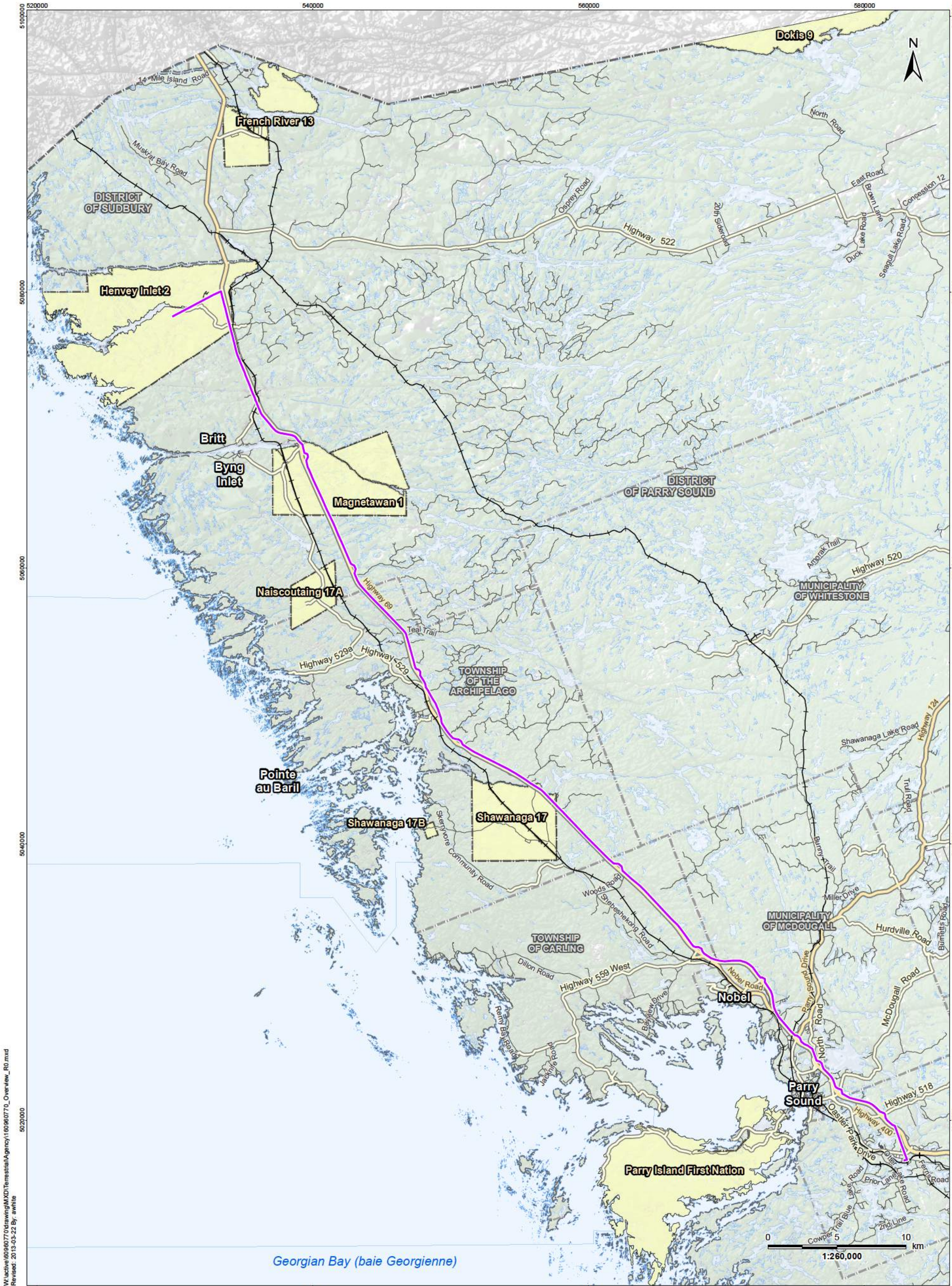
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# **Appendix A**


## **Figures**





W:\active\60960770\drawing\MXD\Terrestrial\Agency\160960770\_Overview\_R0.mxd  
Revised: 2013-03-22 By: awhite

March 2013  
160960770



### Legend

Proposed Transmission Line

**Existing Features**

Highway

Major Road

Local Road

Railway

Watercourse

First Nation Reserve

Upper Tier Boundary

Lower Tier Boundary

Waterbody

### Notes

- Coordinate System: NAD 1983 UTM Zone 17N
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

\*Precise location of transmission line within highway corridor to be determined

Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.

1

Title

**Study Area Overview**

**DRAFT**



## Appendix C

### Results of Stantec 2013 Field Studies

Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL05	TL05	TL06	TL06	TL07	TL07	TL08	TL08
							Survey No.	1	2	1	2	1	2	1	2
							Habitat Description	Marsh	Forest Swamp Marsh	Swamp Marsh	Forest Swamp Marsh	Rock Barren & Forest	Mixed Forest Rock Barrens	Rock Barren & Forest	Forest Railway Lawn
							Temperature (°C)	12	15	12	15	12	15	12	15
							Wind	1	1-2	1	1-2	1	1-2	1	1-2
							Cloud (%)	75	50	75	50	75	50	75	50
							Precipitation	0	0	0	0	0	0	0	0
							Precipitation (24h)	0	Light Rain	0	Light Rain	0	Light Rain	0	Light Rain
							Start Time	6:33	6:25	6:47	6:42	7:04	7:10	7:16	7:25
							End Time	6:43	6:35	6:57	6:52	7:14	7:20	7:26	7:35
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13
ALFL	Alder Flycatcher	<i>Empidonax alhorum</i>	-	-	-	S5		3	1		1		1		
AMBL	American Bittern	<i>Botaurus lentiginosus</i>	-	-	-	S4									
AMCO	American Coot	<i>Fulica americana</i>	-	-	-	S4									
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	-	-	-	S5		1				1	1	1	
AMGO	American Goldfinch	<i>Carduelis tristis</i>	-	-	-	S5						1	1	1	
AMRE	American Redstart	<i>Setophaga ruticilla</i>	-	-	-	S5			1	1	1	1	2	1	
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5									
BARS	Barn Swallow	<i>Hirundo rustica</i>	THR	-	THR	S4					3				1
BAWW	Black-and-white Warbler	<i>Mniotilta varia</i>	-	-	-	S5		1			1				
BBCU	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	-	-	-	S5									
BCCH	Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	-	S5						3			
BEKI	Belted Kingfisher	<i>Ceryle alcyon</i>	-	-	-	S4					1				
BHVI	Blue-headed Vireo	<i>Vireo solitarius</i>	-	-	-	S5									
BLBW	Blackburnian Warbler	<i>Dendroica fusca</i>	-	-	-	S5							1		
BLJA	Blue Jay	<i>Cyanocitta cristata</i>	-	-	-	S5					1	2	1		
BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	-	THR	S4									2
BRCR	Brown Creeper	<i>Certhia americana</i>	-	-	-	S5									
BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	-	-	-	S4					1				
BTBW	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	-	-	-	S5									
BTNW	Black-throated Green Warbler	<i>Dendroica virens</i>	-	-	-	S5					1		1		
BUFF	Bufflehead	<i>Bucephala albeola</i>	-	-	-	S4									
BWHA	Broad-winged Hawk	<i>Buteo platypterus</i>	-	-	-	S5									
CAGO	Canada Goose	<i>Branta canadensis</i>	-	THR	-	S5				320					
CAWA	Canada Warbler	<i>Wilsonia canadensis</i>	SC	Schedule 1	THR	S4									
CEDW	Cedar Waxwing	<i>Bombycilla cedrorum</i>	-	-	-	S5		1		3	2	1	2		2
CHSP	Chipping Sparrow	<i>Spizella passerina</i>	-	-	-	S5							1		
COGR	Common Grackle	<i>Quiscalus quiscula</i>	-	-	-	S5		5	4	2		1			
CORA	Common Raven	<i>Corvus corax</i>	-	-	-	S5		1							
COSN	Common Snipe	<i>Gallinago gallinago</i>	-	-	-	S5									
COYE	Common Yellowthroat	<i>Geothlypis trichas</i>	-	-	-	S5		3	1	1	2	1			1
CSWA	Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	-	-	-	S5			2	1			1	1	1
DCCO	Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	-	-	S5					1	2	1	1	
DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	-	-	-	S5									
EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	-	-	-	S4									
EAPH	Eastern Phoebe	<i>Sayornis phoebe</i>	-	-	-	S5									
EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	-	-	-	S4									
EAWP	Eastern Wood-pewee	<i>Contopus virens</i>	SC	-	SC	S4									
EUST	European Starling	<i>Sturnus vulgaris</i>	-	-	-	SNA					11				2
GBHE	Great Blue Heron	<i>Ardea herodias</i>	-	-	-	S4		3							
GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	-	-	-	S4						1			
GCKI	Golden-crowned Kinglet	<i>Regulus satrapa</i>	-	-	-	S5									
GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	-	-	-	S4					1				2
HAWO	Hairy Woodpecker	<i>Picoides villosus</i>	-	-	-	S5					1	1			
HEIH	Hermit Thrush	<i>Catharus guttatus</i>	-	-	-	S5					1				
HOME	Hooded Merganser	<i>Lophodytes cucullatus</i>	-	-	-	S5									
INBU	Indigo Bunting	<i>Passerina cyanea</i>	-	THR	-	S4			1						
LEBI	Least Bittern	<i>Ixobrychus exilis</i>	THR	Schedule 1	THR	S4									
LEFL	Least Flycatcher	<i>Empidonax minimus</i>	-	-	-	S4									
LISP	Lincoln's Sparrow	<i>Melospiza lincolni</i>	-	-	-	S5									
MAWA	Magnolia Warbler	<i>Dendroica magnolia</i>	-	-	-	S5					1	1			
MERL	Merlin	<i>Falco columbarus</i>	-	-	-	S5									
MODO	Mourning Dove	<i>Zenaida macroura</i>	-	-	-	S5									
MOWA	Mourning Warbler	<i>Oporornis philadelphia</i>	-	-	-	S4		1		1		1	1	1	
N/A	Accipiter species		-	-	-										
NAWA	Nashville Warbler	<i>Vermivora ruficapilla</i>	-	-	-	S5						2			
NOFL	Northern Flicker	<i>Colaptes auratus</i>	-	-	-	S4			1	1	1		1		
NOWA	Northern Waterthrush	<i>Seiurus noveboracensis</i>	-	-	-	S5									
ORWA	Speices Code Undetermined		-	-	-	-									
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4			1	1		2	4		
PHVI	Philadelphia Vireo	<i>Vireo philadelphicus</i>	-	-	-	S5									
PIWA	Pine Warbler	<i>Dendroica pinus</i>	-	-	-	S5									
PIWO	Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	-	S5					2				
PUFI	Purple Finch	<i>Carpodacus purpureus</i>	-	-	-	S4									
RBGR	Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	-	-	-	S4		1							
RBGU	Ring-billed Gull	<i>Larus delawarensis</i>	-	-	-	S5				6				1	
RBNU	Red-breasted Nuthatch	<i>Sitta canadensis</i>	-	-	-	S5									
REVI	Red-eyed Vireo	<i>Vireo olivaceus</i>	-	-	-	S5									
RTHA	Red-tailed Hawk	<i>Buteo jamaicensis</i>	-	-	-	S4			2	2	3		2	1	
RTHU	Ruby-throated Hummingbird	<i>Archilochus colubris</i>	-	-	-	S5									
RUGR	Ruffed Grouse	<i>Bonasa umbellus</i>	-	-	-	S4									
RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	-	-	-	S4		9	5	6	7	1			1
SACR	Sandhill Crane	<i>Grus canadensis tabida</i>	-	-	-	S5									
SAVS	Savannah Sparrow	<i>Passerculus sandwichensis</i>	-	-	-	S4									1



Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL05	TL05	TL06	TL06	TL07	TL07	TL08	TL08
							Survey No.	1	2	1	2	1	2	1	2
							Habitat Description	Marsh	Forest Swamp Marsh	Swamp Marsh	Forest Swamp Marsh	Rock Barren & Forest	Mixed Forest Rock Barrens	Rock Barren & Forest	Forest Railway Lawn
							Temperature (°C)	12	15	12	15	12	15	12	15
							Wind	1	1-2	1	1-2	1	1-2	1	1-2
							Cloud (%)	75	50	75	50	75	50	75	50
							Precipitation	0	0	0	0	0	0	0	0
							Precipitation (24h)	0	Light Rain	0	Light Rain	0	Light Rain	0	Light Rain
							Start Time	6:33	6:25	6:47	6:42	7:04	7:10	7:16	7:25
							End Time	6:43	6:35	6:57	6:52	7:14	7:20	7:26	7:35
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13
SOSP	Song Sparrow	<i>Melospiza melodia</i>	-	-	-	S5			1	1				1	4
SWSP	Swamp Sparrow	<i>Melospiza georgiana</i>	-	-	-	S5		2	2	2	2				
TRES	Tree Swallow	<i>Tachycineta bicolor</i>	-	-	-	S4									
TUVU	Turkey Vulture	<i>Cathartes aura</i>	-	-	-	S5									
VEER	Veery	<i>Catharus fuscescens</i>	-	-	-	S4			1		3				1
WIWR	Winter Wren	<i>Troglodytes troglodytes</i>	-	-	-	S5									
WODU	Wood Duck	<i>Aix sponsa</i>	-	-	-	S5						1	1		
WTSP	White-throated Sparrow	<i>Zonotrichia albicollis</i>	-	-	-	S5				2					
YBSA	Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	-	-	-	S5					1		2	3	1
YRWA	Yellow-rumped Warbler	<i>Dendroica coronata</i>	-	-	-	S5									
YWAR	Yellow Warbler	<i>Dendroica petechia</i>	-	-	-	S5		4	1	1	1			1	2

Data transcribed exactly as given in field sheets provided by Stantec in October 2014, with exceptions as described in the report.

Legend

ESA Status: The Endangered Species Act 2007 (ESA) protects Species at Risk at a provincial level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

SARA Status: The Species at Risk Act (SARA) protects Species at Risk at a federal level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

Schedule 1 - The official list of species that are classified as extirpated, endangered, threatened, and of special concern.  
Schedule 2 - Species listed in Schedule 2 are species that had been designated as endangered or threatened, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.  
Schedule 3 - Species listed in Schedule 3 are species that had been designated as special concern, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.

COSEWIC Status: The Committee on the Status of Endangered Wildlife in Canada assesses the status of species in Canada.  
SC - Special Concern  
THR - Threatened  
END - Endangered

S-rank: The nNatural hHeritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follows:  
S1 - Critically Imperiled, often < 5 occurrences  
S2 - Imperiled, often <20 occurrences  
S3 - Vulnerable, often 80 or fewer  
S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
SNA - Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

References  
1 - Ontario Ministry of Natural Resources. 2009. Natural Heritage Information Centre

Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location							
							Survey No.	TL09 1	TL09 2	TL10 1	TL10 2	TL11 1	TL11 2	T12 1
							Habitat Description	Rock Barren & Forest	Forest Rock Barrens	Rock Barrens & Forest Some Swamp Thickets	Marsh Rock & Pine Barrens	Rock Barrens	Rock and Pine Barrens	Swamp Marsh
							Temperature (°C)	12	15	12	15	12	15	12
							Wind	1	1-2	1	1-2	1	1-2	1
							Cloud (%)	75	50	75	50	75	50	75
							Precipitation	0	0	0	0	0	0	0
							Precipitation (24h)	0	Light Rain	0	Light Rain	0	Light Rain	0
							Start Time	7:29	7:45	7:43	8:02	7:55	8:22	8:10
							End Time	7:39	7:55	7:53	8:12	8:05	8:32	8:20
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13
ALFL	Alder Flycatcher	<i>Empidonax alnorum</i>	-	-	-	S5					1			
AMBL	American Bittern	<i>Botaurus lentiginosus</i>	-	-	-	S4								
AMCO	American Coot	<i>Fulica americana</i>	-	-	-	S4								
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	-	-	-	S5							1	
AMGO	American Goldfinch	<i>Carduelis tristis</i>	-	-	-	S5					1			
AMRE	American Redstart	<i>Setophaga ruticilla</i>	-	-	-	S5		2	2		1		1	
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5			1		1		1	1
BARS	Barn Swallow	<i>Hirundo rustica</i>	THR	-	THR	S4								
BAWW	Black-and-white Warbler	<i>Mniotilta varia</i>	-	-	-	S5		1					1	1
BBCU	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	-	-	-	S5					1			
BCCH	Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	-	S5			1					2
BEKI	Belted Kingfisher	<i>Ceryle alcyon</i>	-	-	-	S4								
BHVI	Blue-headed Vireo	<i>Vireo solitarius</i>	-	-	-	S5								
BLBW	Blackburnian Warbler	<i>Dendroica fusca</i>	-	-	-	S5								
BLJA	Blue Jay	<i>Cyanocitta cristata</i>	-	-	-	S5			2				1	
BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	-	THR	S4								
BRCR	Brown Creeper	<i>Certhia americana</i>	-	-	-	S5								
BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	-	-	-	S4								
BTBW	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	-	-	-	S5								
BTNW	Black-throated Green Warbler	<i>Dendroica virens</i>	-	-	-	S5			1		1			
BUFF	Bufflehead	<i>Bucephala albeola</i>	-	-	-	S4								
BWHA	Broad-winged Hawk	<i>Buteo platypterus</i>	-	-	-	S5								
CAGO	Canada Goose	<i>Branta canadensis</i>	-	-	-	S5								
CAWA	Canada Warbler	<i>Wilsonia canadensis</i>	SC	THR	THR	S4								1
CEDW	Cedar Waxwing	<i>Bombycilla cedrorum</i>	-	-	-	S5					1			
CHSP	Chipping Sparrow	<i>Spizella passerina</i>	-	-	-	S5								
COGR	Common Grackle	<i>Quiscalus quiscula</i>	-	-	-	S5								1
CORA	Common Raven	<i>Corvus corax</i>	-	-	-	S5								
COSN	Common Snipe	<i>Gallinago gallinago</i>	-	-	-	S5								
COYE	Common Yellowthroat	<i>Geothlypis trichas</i>	-	-	-	S5				2	1	2	1	
CSWA	Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	-	-	-	S5					1	1	2	2
DCCO	Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	-	-	S5								
DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	-	-	-	S5								
EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	-	-	-	S4								
EAPH	Eastern Phoebe	<i>Sayornis phoebe</i>	-	-	-	S5								
EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	-	-	-	S4				1				
EAWP	Eastern Wood-pewee	<i>Contopus virens</i>	SC	-	SC	S4								
EUST	European Starling	<i>Sturnus vulgaris</i>	-	-	-	SNA								
GBHE	Great Blue Heron	<i>Ardea herodias</i>	-	-	-	S4								
GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	-	-	-	S4		1						
GCKI	Golden-crowned Kinglet	<i>Regulus satrapa</i>	-	-	-	S5								
GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	-	-	-	S4								1
HAWO	Hairy Woodpecker	<i>Picoides villosus</i>	-	-	-	S5								
HEIH	Hermit Thrush	<i>Catharus guttatus</i>	-	-	-	S5					2			
HOME	Hooded Merganser	<i>Lophodytes cucullatus</i>	-	-	-	S5								
INBU	Indigo Bunting	<i>Passerina cyanea</i>	-	THR	-	S4								
LEBI	Least Bittern	<i>Ixobrychus exilis</i>	THR	Schedule 1	THR	S4								
LEFL	Least Flycatcher	<i>Empidonax minimus</i>	-	-	-	S4								
LISP	Lincoln's Sparrow	<i>Melospiza lincolni</i>	-	-	-	S5								
MAWA	Magnolia Warbler	<i>Dendroica magnolia</i>	-	-	-	S5		1						
MERL	Merlin	<i>Falco columbanus</i>	-	-	-	S5								1
MODO	Mourning Dove	<i>Zenaida macroura</i>	-	-	-	S5								
MOWA	Mourning Warbler	<i>Oporornis philadelphia</i>	-	-	-	S4			1					
N/A	Accipiter species		-	-	-									1
NAWA	Nashville Warbler	<i>Vermivora ruticapilla</i>	-	-	-	S5		1		1	1		1	
NOFL	Northern Flicker	<i>Colaptes auratus</i>	-	-	-	S4								1
NOWA	Northern Waterthrush	<i>Seiurus noveboracensis</i>	-	-	-	S5								
ORWA	Speices Code Undetermined		-	-	-	-								
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4		2	1	1		2	2	1
PHVI	Philadelphia Vireo	<i>Vireo philadelphicus</i>	-	-	-	S5					1			
PIWA	Pine Warbler	<i>Dendroica pinus</i>	-	-	-	S5								
PIWO	Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	-	S5								
PUFI	Purple Finch	<i>Carpodacus purpureus</i>	-	-	-	S4								
RBGR	Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	-	-	-	S4								
RBGU	Ring-billed Gull	<i>Larus delawarensis</i>	-	-	-	S5								
RBNU	Red-breasted Nuthatch	<i>Sitta canadensis</i>	-	-	-	S5								
REVI	Red-eyed Vireo	<i>Vireo olivaceus</i>	-	-	-	S5		1	1	1	1	2	1	1
RTHA	Red-tailed Hawk	<i>Buteo jamaicensis</i>	-	-	-	S4								
RTHU	Ruby-throated Hummingbird	<i>Archilochus colubris</i>	-	-	-	S5								
RUGR	Ruffed Grouse	<i>Bonasa umbellus</i>	-	-	-	S4								
RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	-	-	-	S4							1	7
SACR	Sandhill Crane	<i>Grus canadensis tabida</i>	-	-	-	S5								
SAVS	Savannah Sparrow	<i>Passerculus sandwichensis</i>	-	-	-	S4								

Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL09	TL09	TL10	TL10	TL11	TL11	T12
							Survey No.	1	2	1	2	1	2	1
							Habitat Description	Rock Barren & Forest	Forest Rock Barrens	Rock Barrens & Forest Some Swamp Thickets	Marsh Rock & Pine Barrens	Rock Barrens	Rock and Pine Barrens	Swamp Marsh
							Temperature (°C)	12	15	12	15	12	15	12
							Wind	1	1-2	1	1-2	1	1-2	1
							Cloud (%)	75	50	75	50	75	50	75
							Precipitation	0	0	0	0	0	0	0
							Precipitation (24h)	0	Light Rain	0	Light Rain	0	Light Rain	0
							Start Time	7:29	7:45	7:43	8:02	7:55	8:22	8:10
							End Time	7:39	7:55	7:53	8:12	8:05	8:32	8:20
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13
SOSP	Song Sparrow	Melospiza melodia	-	-	-	S5					1			2
SWSP	Swamp Sparrow	Melospiza georgiana	-	-	-	S5		1			1			1
TRES	Tree Swallow	Tachycineta bicolor	-	-	-	S4								
TUVU	Turkey Vulture	Cathartes aura	-	-	-	S5								
VEER	Veery	Catharus fuscescens	-	-	-	S4		1	3					
WIWR	Winter Wren	Troglodytes troglodytes	-	-	-	S5								
WODU	Wood Duck	Aix sponsa	-	-	-	S5								
WTSP	White-throated Sparrow	Zonotrichia albicollis	-	-	-	S5								
YBSA	Yellow-bellied Sapsucker	Sphyrapicus varius	-	-	-	S5		1		2	3	3	3	2
YRWA	Yellow-rumped Warbler	Dendroica coronata	-	-	-	S5								1
YWAR	Yellow Warbler	Dendroica petechia	-	-	-	S5				1	1	2	1	1

Data transcribed exactly as given in field sheets provided by Stantec in October 2014, with exceptions as described in the report.

Legend

ESA Status: The Endangered Species Act 2007 (ESA) protects Species at Risk at a provincial level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

SARA Status: The Species at Risk Act (SARA) protects Species at Risk at a federal level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

Schedule 1 - The official list of species that are classified as extirpated, endangered, threatened, and of special concern.  
Schedule 2 - Species listed in Schedule 2 are species that had been designated as endangered or threatened, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.  
Schedule 3 - Species listed in Schedule 3 are species that had been designated as special concern, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.

COSEWIC Status: The Committee on the Status of Endangered Wildlife in Canada assesses the status of species in Canada.  
SC - Special Concern  
THR - Threatened  
END - Endangered

S-rank: The nNatural hHeritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follow:  
S1 - Critically Imperiled, often < 5 occurrences  
S2 - Imperiled, often <20 occurrences  
S3 - Vulnerable, often 80 or fewer  
S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
SNA - Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

References  
1 - Ontario Ministry of Natural Resources. 2009. Natural Heritage Information Centre



Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL12	TL13	TL13	TL14	TL14	TL15	TL15
							Survey No.	2	1	2	1	2	1	2
							Habitat Description	Forest	Beaver Pond & Forest	Marsh & Rock Pine Barrens	Rock Barrens	Rock & Pine Barrens	Rock Barrens with Some Wetland and Forest	Marsh & Rock Pine Barrens
							Temperature (°C)	15	12	15	12	15	12	15
							Wind	1-2	1	1-2	1	1-2	1	1-2
							Cloud (%)	50	75	50	75	50	75	50
							Precipitation	0	0	0	0	0	0	0
							Precipitation (24h)	Light Rain	0	Light Rain	0	Light Rain	0	Light Rain
							Start Time	8:37	8:23	8:54	8:38	9:12	8:51	9:29
End Time	8:47	8:33	9:04	8:48	9:22	9:01	9:39							
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13
ALFL	Alder Flycatcher	<i>Empidonax alnorum</i>	-	-	-	S5				1				
AMBL	American Bittern	<i>Botaurus lentiginosus</i>	-	-	-	S4								
AMCO	American Coot	<i>Fulica americana</i>	-	-	-	S4								
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	-	-	-	S5		1				1		
AMGO	American Goldfinch	<i>Carduelis tristis</i>	-	-	-	S5						1		
AMRE	American Redstart	<i>Setophaga ruticilla</i>	-	-	-	S5						1		
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5		1	1	1	1	1	1	
BARS	Barn Swallow	<i>Hirundo rustica</i>	THR	-	THR	S4		1	1	1				1
BAWW	Black-and-white Warbler	<i>Mniotilta varia</i>	-	-	-	S5		1	1	1				
BBCU	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	-	-	-	S5								
BCCH	Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	-	S5		1				1	2	
BEKI	Belted Kingfisher	<i>Ceryle alcyon</i>	-	-	-	S4								
BHVI	Blue-headed Vireo	<i>Vireo solitarius</i>	-	-	-	S5								
BLBW	Blackburnian Warbler	<i>Dendroica fusca</i>	-	-	-	S5								
BLJA	Blue Jay	<i>Cyanocitta cristata</i>	-	-	-	S5					3			
BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	-	THR	S4								
BRCR	Brown Creeper	<i>Certhia americana</i>	-	-	-	S5								
BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	-	-	-	S4								
BTBW	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	-	-	-	S5								
BTNW	Black-throated Green Warbler	<i>Dendroica virens</i>	-	-	-	S5		1			1			
BUFF	Bufflehead	<i>Bucephala albeola</i>	-	-	-	S4								
BWHA	Broad-winged Hawk	<i>Buteo platypterus</i>	-	-	-	S5								
CAGO	Canada Goose	<i>Branta canadensis</i>	-	-	-	S5								
CAWA	Canada Warbler	<i>Wilsonia canadensis</i>	SC	THR	THR	S4		1						
CEDW	Cedar Waxwing	<i>Bombicilla cedrorum</i>	-	Schedule 1	-	S5			1					2
CHSP	Chipping Sparrow	<i>Spizella passerina</i>	-	-	-	S5				1				
COGR	Common Grackle	<i>Quiscalus quiscula</i>	-	-	-	S5								
CORA	Common Raven	<i>Corvus corax</i>	-	-	-	S5								
COSN	Common Snipe	<i>Gallinago gallinago</i>	-	-	-	S5								
COYE	Common Yellowthroat	<i>Geothlypis trichas</i>	-	-	-	S5		1	1			2	2	1
CSWA	Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	-	-	-	S5		1	2	1	2	1	1	1
DCCO	Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	-	-	S5		1	2	1	2	1		
DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	-	-	-	S5								
EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	-	-	-	S4								
EAPH	Eastern Phoebe	<i>Sayornis phoebe</i>	-	-	-	S5			2					
EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	-	-	-	S4								
EAWP	Eastern Wood-pewee	<i>Contopus virens</i>	SC	-	SC	S4								
EUST	European Starling	<i>Sturnus vulgaris</i>	-	-	-	SNA								
GBHE	Great Blue Heron	<i>Ardea herodias</i>	-	-	-	S4								
GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	-	-	-	S4								
GCKI	Golden-crowned Kinglet	<i>Regulus satrapa</i>	-	-	-	S5			1					
GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	-	-	-	S4					1			
HAWO	Hairy Woodpecker	<i>Picoides villosus</i>	-	-	-	S5								
HEIH	Hermit Thrush	<i>Catharus guttatus</i>	-	-	-	S5			1					1
HOME	Hooded Merganser	<i>Lophodytes cucullatus</i>	-	-	-	S5								
INBU	Indigo Bunting	<i>Passerina cyanea</i>	-	THR	-	S4								
LEBI	Least Bittern	<i>Ixobrychus exilis</i>	THR	Schedule 1	THR	S4								
LEFL	Least Flycatcher	<i>Empidonax minimus</i>	-	-	-	S4								
LISP	Lincoln's Sparrow	<i>Melospiza lincolni</i>	-	-	-	S5								
MAWA	Magnolia Warbler	<i>Dendroica magnolia</i>	-	-	-	S5								1
MERL	Merlin	<i>Falco columbarius</i>	-	-	-	S5								
MODO	Mourning Dove	<i>Zenaida macroura</i>	-	-	-	S5					1			
MOWA	Mourning Warbler	<i>Oporornis philadelphia</i>	-	-	-	S4								
N/A	Accipiter species													
NAWA	Nashville Warbler	<i>Vermivora ruficapilla</i>	-	-	-	S5							1	
NOFL	Northern Flicker	<i>Colaptes auratus</i>	-	-	-	S4				1			1	1
NOWA	Northern Waterthrush	<i>Seiurus noveboracensis</i>	-	-	-	S5								
ORWA	Speices Code Undetermined		-	-	-	-								
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4		4	1	1	1	1		
PHVI	Philadelphia Vireo	<i>Vireo philadelphicus</i>	-	-	-	S5								
PIWA	Pine Warbler	<i>Dendroica pinus</i>	-	-	-	S5		1	1	1				
PIWO	Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	-	S5								
PUFI	Purple Finch	<i>Carpodacus purpureus</i>	-	-	-	S4								
RBGR	Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	-	-	-	S4								
RBGU	Ring-billed Gull	<i>Larus delawarensis</i>	-	-	-	S5								
RBNU	Red-breasted Nuthatch	<i>Sitta canadensis</i>	-	-	-	S5								
REVI	Red-eyed Vireo	<i>Vireo olivaceus</i>	-	-	-	S5		1	2	2	1	2	3	
RTHA	Red-tailed Hawk	<i>Buteo jamaicensis</i>	-	-	-	S4								
RTHU	Ruby-throated Hummingbird	<i>Archilochus colubris</i>	-	-	-	S5								
RUGR	Ruffed Grouse	<i>Bonasa umbellus</i>	-	-	-	S4							1	
RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	-	-	-	S4		2	2					
SACR	Sandhill Crane	<i>Grus canadensis tabida</i>	-	-	-	S5								
SAVS	Savannah Sparrow	<i>Passerculus sandwichensis</i>	-	-	-	S4								

Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL12	TL13	TL13	TL14	TL14	TL15	TL15
							Survey No.	2	1	2	1	2	1	2
							Habitat Description	Forest	Beaver Pond & Forest	Marsh & Rock Pine Barrens	Rock Barrens	Rock & Pine Barrens	Rock Barrens with Some Wetland and Forest	Marsh & Rock Pine Barrens
							Temperature (°C)	15	12	15	12	15	12	15
							Wind	1-2	1	1-2	1	1-2	1	1-2
							Cloud (%)	50	75	50	75	50	75	50
							Precipitation	0	0	0	0	0	0	0
							Precipitation (24h)	Light Rain	0	Light Rain	0	Light Rain	0	Light Rain
							Start Time	8:37	8:23	8:54	8:38	9:12	8:51	9:29
							End Time	8:47	8:33	9:04	8:48	9:22	9:01	9:39
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13	10-Jun-13	30-Jun-13
SOSP	Song Sparrow	<i>Melospiza melodia</i>	-	-	-	S5		2	1				1	2
SWSP	Swamp Sparrow	<i>Melospiza georgiana</i>	-	-	-	S5			1					
TRES	Tree Swallow	<i>Tachycineta bicolor</i>	-	-	-	S4								
TUVU	Turkey Vulture	<i>Cathartes aura</i>	-	-	-	S5						1		
VEER	Veery	<i>Catharus fuscescens</i>	-	-	-	S4				1	1			
WIWR	Winter Wren	<i>Troglodytes troglodytes</i>	-	-	-	S5		1						1
WODU	Wood Duck	<i>Aix sponsa</i>	-	-	-	S5								1
WTSP	White-throated Sparrow	<i>Zonotrichia albicollis</i>	-	-	-	S5			1	1		1	2	3
YBSA	Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	-	-	-	S5				1				
YRWA	Yellow-rumped Warbler	<i>Dendroica coronata</i>	-	-	-	S5		1				1		1
YWAR	Yellow Warbler	<i>Dendroica petechia</i>	-	-	-	S5			1	1	3	1	1	1

Data transcribed exactly as given in field sheets provided by Stantec in October 2014, with exceptions as described in the report.

Legend

ESA Status: The Endangered Species Act 2007 (ESA) protects Species at Risk at a provincial level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

SARA Status: The Species at Risk Act (SARA) protects Species at Risk at a federal level.  
SC - Special Concern  
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END - Endangered

Schedule 1 - The official list of species that are classified as extirpated, endangered, threatened, and of special concern.  
Schedule 2 - Species listed in Schedule 2 are species that had been designated as endangered or threatened, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.  
Schedule 3 - Species listed in Schedule 3 are species that had been designated as special concern, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.

COSEWIC Status: The Committee on the Status of Endangered Wildlife in Canada assesses the status of species in Canada.  
SC - Special Concern  
THR - Threatened  
END - Endangered

S-rank: The nNatural hHeritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follow:  
S1 - Critically Imperiled, often < 5 occurrences  
S2 - Imperiled, often <20 occurrences  
S3 - Vulnerable, often 80 or fewer  
S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
SNA - Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

References  
1 - Ontario Ministry of Natural Resources. 2009. Natural Heritage Information Centre

Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							<div>Point Count Location</div>							
							Survey No.	TL16	TL16	TL17	TL17	TL18	TL18	TL19
							Habitat Description	1	2	1	2	1	2	1
								Rock Barren Some Wetland & Forest	Marsh, Pine Rock Barrens	Marsh	Forest Marsh Rock Pine Barrens	Rock Barren & Forest	Swamp Marsh Rock / Pine Barrens	Rock Barren & Forest
							Temperature (°C)	12	15	12	15	12	15	13
							Wind	1	1-2	1	1-2	1	1-2	0-1
							Cloud (%)	75	0	75	0	75	0	100
							Precipitation	0	0	0	0	0	0	Thick Fog
							Precipitation (24h)	0	0	0	0	0	0	Heavy Rain
							Start Time	9:08	5:32	9:22	5:49	9:36	6:15	5:29
							End Time	9:18	5:42	9:32	5:59	9:46	6:25	5:39
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	10-Jun-13	1-Jul-13	10-Jun-13	1-Jul-13	10-Jun-13	1-Jul-13	12-Jun-13
ALFL	Alder Flycatcher	Empidonax alnorum	-	-	-	S5				1				
AMBL	American Bittern	Botaurus lentiginosus	-	-	-	S4								
AMCO	American Coot	Fulca americana	-	-	-	S4								
AMCR	American Crow	Corvus brachyrhynchos	-	-	-	S5						1		1
AMGO	American Goldfinch	Carduelis tristis	-	-	-	S5								
AMRE	American Redstart	Setophaga ruticilla	-	-	-	S5		1		2	1			
AMRO	American Robin	Turdus migratorius	-	-	-	S5			2	1	1		2	
BARS	Barn Swallow	Hirundo rustica	THR	-	THR	S4								
BAWW	Black-and-white Warbler	Mniotilta varia	-	-	-	S5								1
BBCU	Black-billed Cuckoo	Coccyzus erythrophthalmus	-	-	-	S5								
BCCH	Black-capped Chickadee	Poecile atricapillus	-	-	-	S5		1			1	2		1
BEKI	Belted Kingfisher	Ceryle alcyon	-	-	-	S4					1			
BHVI	Blue-headed Vireo	Vireo solitarius	-	-	-	S5								
BLBW	Blackburnian Warbler	Dendroica fusca	-	-	-	S5								
BLJA	Blue Jay	Cyanocitta cristata	-	-	-	S5		1					1	
BOBO	Bobolink	Dolichonyx oryzivorus	THR	-	THR	S4								
BRCR	Brown Creeper	Certhia americana	-	-	-	S5								
BRTH	Brown Thrasher	Toxostoma rufum	-	-	-	S4								
BTBW	Black-throated Blue Warbler	Dendroica caerulescens	-	-	-	S5								
BTNW	Black-throated Green Warbler	Dendroica virens	-	-	-	S5			3					1
BUFF	Bufflehead	Bucephala albeola	-	-	-	S4								
BWHA	Broad-winged Hawk	Buteo platypterus	-	-	-	S5								
CAGO	Canada Goose	Branta canadensis	-	-	-	S5								
CAWA	Canada Warbler	Wilsonia canadensis	SC	THR	THR	S4								1
CEDW	Cedar Waxwing	Bombycilla cedrorum	-	-	-	S5		1			3		2	
CHSP	Chipping Sparrow	Spizella passerina	-	-	-	S5							1	
COGR	Common Grackle	Quiscalus quiscula	-	-	-	S5			2					
CORA	Common Raven	Corvus corax	-	-	-	S5					1			
COSN	Common Snipe	Gallinago gallinago	-	-	-	S5								
COYE	Common Yellowthroat	Geothlypis trichas	-	-	-	S5		1	1	1	4	2	2	1
CSWA	Chestnut-sided Warbler	Dendroica pensylvanica	-	-	-	S5		1	1	1	1	1	1	
DCCO	Double-crested Cormorant	Phalacrocorax auritus	-	-	-	S5							1	
DOWO	Downy Woodpecker	Picoides pubescens	-	-	-	S5								
EAKI	Eastern Kingbird	Tyrannus tyrannus	-	-	-	S4							1	
EAPH	Eastern Phoebe	Sayornis phoebe	-	-	-	S5								
EATO	Eastern Towhee	Pipilo erythrophthalmus	-	-	-	S4								
EAWP	Eastern Wood-pewee	Contopus virens	SC	-	SC	S4							1	
EUST	European Starling	Sturnus vulgaris	-	-	-	SNA								
GBHE	Great Blue Heron	Ardea herodias	-	-	-	S4			1					
GCFL	Great Crested Flycatcher	Myiarchus crinitus	-	-	-	S4								
GCKI	Golden-crowned Kinglet	Regulus satrapa	-	-	-	S5								
GRCA	Gray Catbird	Dumetella carolinensis	-	-	-	S4		1						
HAWO	Hairy Woodpecker	Picoides villosus	-	-	-	S5					2			
HEIH	Hermit Thrush	Catharus guttatus	-	-	-	S5							2	
HOME	Hooded Merganser	Lophodytes cucullatus	-	-	-	S5								
INBU	Indigo Bunting	Passerina cyanea	-	THR	-	S4								
LEBI	Least Bittern	Ixobrychus exilis	THR	Schedule 1	THR	S4								
LEFL	Least Flycatcher	Empidonax minimus	-	-	-	S4								
LISP	Lincoln's Sparrow	Melospiza lincolni	-	-	-	S5								
MAWA	Magnolia Warbler	Dendroica magnolia	-	-	-	S5								
MERL	Merlin	Falco columbanus	-	-	-	S5								
MODO	Mourning Dove	Zenaida macroura	-	-	-	S5								
MOWA	Mourning Warbler	Oporornis philadelphia	-	-	-	S4					1			
N/A	Accipiter species		-	-	-									
NAWA	Nashville Warbler	Vermivora ruticapilla	-	-	-	S5								1
NOFL	Northern Flicker	Colaptes auratus	-	-	-	S4			1					
NOWA	Northern Waterthrush	Seiurus noveboracensis	-	-	-	S5								
ORWA	Speices Code Undetermined		-	-	-	-								
OVEN	Ovenbird	Seiurus aurocapillus	-	-	-	S4		1		2	2	1		3
PHVI	Philadelphia Vireo	Vireo philadelphicus	-	-	-	S5								
PIWA	Pine Warbler	Dendroica pinus	-	-	-	S5		1		1	1		1	
PIWO	Pileated Woodpecker	Dryocopus pileatus	-	-	-	S5								
PUIF	Purple Finch	Carpodacus purpureus	-	-	-	S4								
RBGR	Rose-breasted Grosbeak	Pheucticus ludovicianus	-	-	-	S4								
RBGU	Ring-billed Gull	Larus delawarensis	-	-	-	S5								
RBNU	Red-breasted Nuthatch	Sitta canadensis	-	-	-	S5								
REVI	Red-eyed Vireo	Vireo olivaceus	-	-	-	S5		1	1	1		1	1	2
RTHA	Red-tailed Hawk	Buteo jamaicensis	-	-	-	S4								
RTHU	Ruby-throated Hummingbird	Archilochus colubris	-	-	-	S5								
RUGR	Ruffed Grouse	Bonasa umbellus	-	-	-	S4								
RWBL	Red-winged Blackbird	Agelaius phoeniceus	-	-	-	S4		1		4	3		2	
SACR	Sandhill Crane	Grus canadensis tabida	-	-	-	S5			2					
SAVS	Savannah Sparrow	Passerculus sandwichensis	-	-	-	S4								



Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL16	TL16	TL17	TL17	TL18	TL18	TL19
							Survey No.	1	2	1	2	1	2	1
							Habitat Description	Rock Barren Some Wetland & Forest	Marsh, Pine Rock Barrens	Marsh	Forest Marsh Rock Pine Barrens	Rock Barren & Forest	Swamp Marsh Rock / Pine Barrens	Rock Barren & Forest
							Temperature (°C)	12	15	12	15	12	15	13
							Wind	1	1-2	1	1-2	1	1-2	0-1
							Cloud (%)	75	0	75	0	75	0	100
							Precipitation	0	0	0	0	0	0	Thick Fog
							Precipitation (24h)	0	0	0	0	0	0	Heavy Rain
							Start Time	9:08	5:32	9:22	5:49	9:36	6:15	5:29
							End Time	9:18	5:42	9:32	5:59	9:46	6:25	5:39
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	10-Jun-13	1-Jul-13	10-Jun-13	1-Jul-13	10-Jun-13	1-Jul-13	12-Jun-13
SOSP	Song Sparrow	Melospiza melodia	-	-	-	S5				1	2			
SWSP	Swamp Sparrow	Melospiza georgiana	-	-	-	S5			1	1				
TRES	Tree Swallow	Tachycineta bicolor	-	-	-	S4								
TUVU	Turkey Vulture	Cathartes aura	-	-	-	S5								
VEER	Veery	Catharus fuscescens	-	-	-	S4			2	1	2			1
WIWR	Winter Wren	Troglodytes troglodytes	-	-	-	S5								
WODU	Wood Duck	Aix sponsa	-	-	-	S5							1	
WTSP	White-throated Sparrow	Zonotrichia albicollis	-	-	-	S5								
YBSA	Yellow-bellied Sapsucker	Sphyrapicus varius	-	-	-	S5			1		1	2	3	1
YRWA	Yellow-rumped Warbler	Dendroica coronata	-	-	-	S5			1			2	1	
YWAR	Yellow Warbler	Dendroica petechia	-	-	-	S5		1		2	2	1		

Data transcribed exactly as given in field sheets provided by Stantec in October 2014, with exceptions as described in the report.

Legend

ESA Status: The Endangered Species Act 2007 (ESA) protects Species at Risk at a provincial level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

SARA Status: The Species at Risk Act (SARA) protects Species at Risk at a federal level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

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S1 - Critically Imperiled, often < 5 occurrences  
S2 - Imperiled, often <20 occurrences  
S3 - Vulnerable, often 80 or fewer  
S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
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Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL19	TL20	TL20	TL21	TL21	TL22	TL22
							Survey No.	2	1	2	1	2	1	2
							Habitat Description	Forest Rock / Pine / Oak Barrens	Forest Swamp Marsh	Forest Marsh Rock / Pine Barrens	Forest	Forest Rocky Areas	Forest Swamp Treed Leatherleaf Bog / Fen?	Rock Pine Sand Barrens
							Temperature (°C)	15	13	15	13	15	13	15
							Wind	1-2	0-1	1-2	0-1	1-2	0-1	1-2
							Cloud (%)	0	100	0	100	0	100	0
							Precipitation	0	Thick Fog	0	Thick Fog	0	Thick Fog	0
							Precipitation (24h)	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0
							Start Time	6:46	5:42	7:11	5:56	7:31	6:10	7:46
							End Time	6:56	5:52	7:21	6:06	7:41	6:20	7:56
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	1-Jul-13	12-Jun-13	1-Jul-13	12-Jun-13	1-Jul-13	12-Jun-13	1-Jul-13
ALFL	Alder Flycatcher	<i>Empidonax alhorum</i>	-	-	-	S5								
AMBL	American Bittern	<i>Botaurus lentiginosus</i>	-	-	-	S4			1					
AMCO	American Coot	<i>Fulica americana</i>	-	-	-	S4								
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	-	-	-	S5								
AMGO	American Goldfinch	<i>Carduelis tristis</i>	-	-	-	S5			1					
AMRE	American Redstart	<i>Setophaga ruticilla</i>	-	-	-	S5			1	1	1			
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5	1		1		1			1
BARS	Barn Swallow	<i>Hirundo rustica</i>	THR	-	THR	S4			1		1	1		
BAWW	Black-and-white Warbler	<i>Mniotilta vana</i>	-	-	-	S5			1				1	
BBCU	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	-	-	-	S5							1	
BCCH	Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	-	S5					1		3	2
BEKI	Belted Kingfisher	<i>Ceryle alcyon</i>	-	-	-	S4					1			
BHVI	Blue-headed Vireo	<i>Vireo solitarius</i>	-	-	-	S5			1			1		
BLBW	Blackburnian Warbler	<i>Dendroica fusca</i>	-	-	-	S5				1	1	1		
BLJA	Blue Jay	<i>Cyanocitta cristata</i>	-	-	-	S5					1	1		1
BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	-	THR	S4								
BRCR	Brown Creeper	<i>Certhia americana</i>	-	-	-	S5	1							
BRTH	Brown Thrasher	<i>Toxostoma rulum</i>	-	-	-	S4								
BTBW	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	-	-	-	S5								
BTNW	Black-throated Green Warbler	<i>Dendroica virens</i>	-	-	-	S5		1	1		2	1		
BUFF	Bufflehead	<i>Bucephala albeola</i>	-	-	-	S4								
BWHA	Broad-winged Hawk	<i>Buteo platypterus</i>	-	-	-	S5	1							
CAGO	Canada Goose	<i>Branta canadensis</i>	-	THR	-	S5								
CAWA	Canada Warbler	<i>Wilsonia canadensis</i>	SC	Schedule 1	THR	S4								
CEDW	Cedar Waxwing	<i>Bombycilla cedrorum</i>	-	-	-	S5		4				8		
CHSP	Chipping Sparrow	<i>Spizella passerina</i>	-	-	-	S5		1						1
COGR	Common Grackle	<i>Quiscalus quiscula</i>	-	-	-	S5								
CORA	Common Raven	<i>Corvus corax</i>	-	-	-	S5		2						
COSN	Common Snipe	<i>Gallinago gallinago</i>	-	-	-	S5								1
COYE	Common Yellowthroat	<i>Geothlyphis trichas</i>	-	-	-	S5	1	1	2	1	1		1	1
CSWA	Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	-	-	-	S5		1				1		
DCCO	Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	-	-	S5			1		2	1	1	
DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	-	-	-	S5								
EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	-	-	-	S4								
EAPH	Eastern Phoebe	<i>Sayornis phoebe</i>	-	-	-	S5								
EATO	Eastern Towhee	<i>Pipilio erythrophthalmus</i>	-	-	-	S4								
EAWP	Eastern Wood-pewee	<i>Contopus virens</i>	SC	-	SC	S4								
EUST	European Starling	<i>Sturnus vulgaris</i>	-	-	-	SNA								
GBHE	Great Blue Heron	<i>Ardea herodias</i>	-	-	-	S4			1	1				
GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	-	-	-	S4								
GCKI	Golden-crowned Kinglet	<i>Regulus satrapa</i>	-	-	-	S5								
GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	-	-	-	S4								
HAWO	Hairy Woodpecker	<i>Picoides villosus</i>	-	-	-	S5					1			
HEIH	Hermit Thrush	<i>Catharus guttatus</i>	-	-	-	S5							1	4
HOME	Hooded Merganser	<i>Lophodytes cucullatus</i>	-	-	-	S5			4					
INBU	Indigo Bunting	<i>Passerina cyanea</i>	-	THR	-	S4								
LEBI	Least Bittern	<i>Ixobrychus exilis</i>	THR	Schedule 1	THR	S4								
LEFL	Least Flycatcher	<i>Empidonax minimus</i>	-	-	-	S4		1	1					
LISP	Lincoln's Sparrow	<i>Melospiza lincolni</i>	-	-	-	S5								
MAWA	Magnolia Warbler	<i>Dendroica magnolia</i>	-	-	-	S5								
MERL	Merlin	<i>Falco columbarius</i>	-	-	-	S5								
MODO	Mourning Dove	<i>Zenaida macroura</i>	-	-	-	S5								
MOWA	Mourning Warbler	<i>Oporornis philadelphia</i>	-	-	-	S4								
N/A	Accipiter species		-	-	-									
NAWA	Nashville Warbler	<i>Vermivora ruficapilla</i>	-	-	-	S5							1	
NOFL	Northern Flicker	<i>Colaptes auratus</i>	-	-	-	S4								
NOWA	Northern Waterthrush	<i>Seiurus noveboracensis</i>	-	-	-	S5								
ORWA	Speices Code Undetermined		-	-	-	-								
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4	2	1	2	4	2	2		
PHVI	Philadelphia Vireo	<i>Vireo philadelphicus</i>	-	-	-	S5								
PIWA	Pine Warbler	<i>Dendroica pinus</i>	-	-	-	S5			1	1				
PIWO	Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	-	S5								
PUFI	Purple Finch	<i>Carpodacus purpureus</i>	-	-	-	S4								
RBGR	Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	-	-	-	S4								
RBGU	Ring-billed Gull	<i>Larus delawarensis</i>	-	-	-	S5								
RBNU	Red-breasted Nuthatch	<i>Sitta canadensis</i>	-	-	-	S5								
REVI	Red-eyed Vireo	<i>Vireo olivaceus</i>	-	-	-	S5								
RTHA	Red-tailed Hawk	<i>Buteo jamaicensis</i>	-	-	-	S4	2	2	1	2	1	2		1
RTHU	Ruby-throated Hummingbird	<i>Archilochus colubris</i>	-	-	-	S5		1						
RUGR	Ruffed Grouse	<i>Bonasa umbellus</i>	-	-	-	S4								
RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	-	-	-	S4		11	2					1
SACR	Sandhill Crane	<i>Grus canadensis tabida</i>	-	-	-	S5								
SAVS	Savannah Sparrow	<i>Passerculus sandwichensis</i>	-	-	-	S4								

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Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL19	TL20	TL20	TL21	TL21	TL22	TL22
							Survey No.	2	1	2	1	2	1	2
							Habitat Description	Forest Rock / Pine / Oak Barrens	Forest Swamp Marsh	Forest Marsh Rock / Pine Barrens	Forest	Forest Rocky Areas	Forest Swamp Treed Leatherleaf Bog / Fen?	Rock Pine Sand Barrens
							Temperature (°C)	15	13	15	13	15	13	15
							Wind	1-2	0-1	1-2	0-1	1-2	0-1	1-2
							Cloud (%)	0	100	0	100	0	100	0
							Precipitation	0	Thick Fog	0	Thick Fog	0	Thick Fog	0
							Precipitation (24h)	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0
							Start Time	6:46	5:42	7:11	5:56	7:31	6:10	7:46
							End Time	6:56	5:52	7:21	6:06	7:41	6:20	7:56
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	1-Jul-13	12-Jun-13	1-Jul-13	12-Jun-13	1-Jul-13	12-Jun-13	1-Jul-13
SOSP	Song Sparrow	Melospiza melodia	-	-	-	S5		1		1				
SWSP	Swamp Sparrow	Melospiza georgiana	-	-	-	S5			1				2	
TRES	Tree Swallow	Tachycineta bicolor	-	-	-	S4								
TUVU	Turkey Vulture	Cathartes aura	-	-	-	S5								
VEER	Veery	Catharus fuscescens	-	-	-	S4								
WIWR	Winter Wren	Troglodytes troglodytes	-	-	-	S5		1	1	1				
WODU	Wood Duck	Aix sponsa	-	-	-	S5								
WTSP	White-throated Sparrow	Zonotrichia albicollis	-	-	-	S5				2				
YBSA	Yellow-bellied Sapsucker	Sphyrapicus varius	-	-	-	S5		1	3		3	2	2	2
YRWA	Yellow-rumped Warbler	Dendroica coronata	-	-	-	S5								
YWAR	Yellow Warbler	Dendroica petechia	-	-	-	S5			1		1	1	2	2

Data transcribed exactly as given in field sheets provided by Stantec in October 2014, with exceptions as described in the report.

Legend

ESA Status: The Endangered Species Act 2007 (ESA) protects Species at Risk at a provincial level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

SARA Status: The Species at Risk Act (SARA) protects Species at Risk at a federal level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

Schedule 1 - The official list of species that are classified as extirpated, endangered, threatened, and of special concern.  
Schedule 2 - Species listed in Schedule 2 are species that had been designated as endangered or threatened, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.  
Schedule 3 - Species listed in Schedule 3 are species that had been designated as special concern, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.

COSEWIC Status: The Committee on the Status of Endangered Wildlife in Canada assesses the status of species in Canada.  
SC - Special Concern  
THR - Threatened  
END - Endangered

S-rank: The nNatural hHeritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follow:  
S1 - Critically Imperiled, often < 5 occurrences  
S2 - Imperiled, often <20 occurrences  
S3 - Vulnerable, often 80 or fewer  
S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
SNA - Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

References  
1 - Ontario Ministry of Natural Resources. 2009. Natural Heritage Information Centre



Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL23	TL23	TL24	TL24	TL25	TL25	TL26	TL26
							Survey No.	1	2	1	2	1	2	1	2
							Habitat Description	Forest Swamp	Lake, White Pine	Forest Marsh	Lake, Rock Pine	Forest & Marsh	Forest Marsh	Forest	Forest
							Temperature (°C)	Lake	Barrens		Woodland				
							Wind	13	15	13	15	13	15	13	15
							Cloud (%)	0-1	1-2	0-1	1-2	0-1	1-2	0-1	1-2
							Precipitation	100	0	100	0	100	0	100	0
							Precipitation (24h)	Thick Fog	0	Thick Fog	0	Thick Fog	0	Thick Fog	0
							Start Time	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0
							End Time	6:23	8:03	6:40	8:24	6:56	8:47	7:10	9:20
								6:33	8:13	6:50	8:34	7:06	8:57	7:20	9:30
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	12-Jun-13	1-Jul-13	12-Jun-13	1-Jul-13	12-Jun-13	1-Jul-13	12-Jun-13	1-Jul-13
ALFL	Alder Flycatcher	<i>Empidonax alnorum</i>	-	-	-	S5									
AMBL	American Bittern	<i>Botaurus lentiginosus</i>	-	-	-	S4									
AMCO	American Coot	<i>Fulica americana</i>	-	-	-	S4									
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	-	-	-	S5								1	1
AMGO	American Goldfinch	<i>Carduelis tristis</i>	-	-	-	S5									
AMRE	American Redstart	<i>Setophaga ruticilla</i>	-	-	-	S5									
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5									1
BARS	Barn Swallow	<i>Hirundo rustica</i>	THR	-	THR	S4		16	4			1		1	
BAWW	Black-and-white Warbler	<i>Mniotilta varia</i>	-	-	-	S5									
BBCU	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	-	-	-	S5						1		1	
BCCH	Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	-	S5				3	1	1		3	2
BEKI	Belted Kingfisher	<i>Ceryle alcyon</i>	-	-	-	S4									
BHVI	Blue-headed Vireo	<i>Vireo solitarius</i>	-	-	-	S5			1		1		1		
BLBW	Blackburnian Warbler	<i>Dendroica fusca</i>	-	-	-	S5		2	1	2		1		1	1
BLJA	Blue Jay	<i>Cyanocitta cristata</i>	-	-	-	S5					1				
BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	-	THR	S4						2			
BRCR	Brown Creeper	<i>Certhia americana</i>	-	-	-	S5									
BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	-	-	-	S4									
BTBW	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	-	-	-	S5									
BTNW	Black-throated Green Warbler	<i>Dendroica virens</i>	-	-	-	S5			2			3	1		3
BUFF	Bufflehead	<i>Bucephala albeola</i>	-	-	-	S4								1	
BWHA	Broad-winged Hawk	<i>Buteo platypterus</i>	-	-	-	S5									
CAGO	Canada Goose	<i>Branta canadensis</i>	-	-	-	S5									
CAWA	Canada Warbler	<i>Wilsonia canadensis</i>	SC	THR	THR	S4									1
CEDW	Cedar Waxwing	<i>Bombycilla cedrorum</i>	-	Schedule 1	-	S5									
CHSP	Chipping Sparrow	<i>Spizella passerina</i>	-	-	-	S5		1			1	1			
COGR	Common Grackle	<i>Quiscalus quiscula</i>	-	-	-	S5									
CORA	Common Raven	<i>Corvus corax</i>	-	-	-	S5				1		2			1
COSN	Common Snipe	<i>Gallinago gallinago</i>	-	-	-	S5									
COYE	Common Yellowthroat	<i>Geothlypis trichas</i>	-	-	-	S5			2	1	3	2		1	
CSWA	Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	-	-	-	S5		2	1						
DCCO	Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	-	-	S5			1	3		1			
DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	-	-	-	S5			1						
EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	-	-	-	S4									
EAPH	Eastern Phoebe	<i>Sayornis phoebe</i>	-	-	-	S5		1							
EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	-	-	-	S4									
EAWP	Eastern Wood-pewee	<i>Contopus virens</i>	SC	-	SC	S4									
EUST	European Starling	<i>Sturnus vulgaris</i>	-	-	-	SNA									
GBHE	Great Blue Heron	<i>Ardea herodias</i>	-	-	-	S4								1	
GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	-	-	-	S4									
GCKI	Golden-crowned Kinglet	<i>Regulus satrapa</i>	-	-	-	S5									
GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	-	-	-	S4									
HAWO	Hairy Woodpecker	<i>Picoides villosus</i>	-	-	-	S5									
HEIH	Hermit Thrush	<i>Catharus guttatus</i>	-	-	-	S5									
HOME	Hooded Merganser	<i>Lophodytes cucullatus</i>	-	-	-	S5									
INBU	Indigo Bunting	<i>Passerina cyanea</i>	-	-	-	S4									
LEBI	Least Bittern	<i>Ixobrychus exilis</i>	THR	THR	THR	S4							1		
LEFL	Least Flycatcher	<i>Empidonax minimus</i>	-	Schedule 1	-	S4									
LISP	Lincoln's Sparrow	<i>Melospiza lincolni</i>	-	-	-	S5									
MAWA	Magnolia Warbler	<i>Dendroica magnolia</i>	-	-	-	S5								1	
MERL	Merlin	<i>Falco columbanus</i>	-	-	-	S5									
MODO	Mourning Dove	<i>Zenaida macroura</i>	-	-	-	S5									
MOWA	Mourning Warbler	<i>Oporornis philadelphia</i>	-	-	-	S4									
N/A	Accipiter species		-	-	-										
NAWA	Nashville Warbler	<i>Vermivora ruficapilla</i>	-	-	-	S5									1
NOFL	Northern Flicker	<i>Colaptes auratus</i>	-	-	-	S4			2		1			1	
NOWA	Northern Waterthrush	<i>Seiurus noveboracensis</i>	-	-	-	S5								1	
ORWA	Speices Code Undetermined		-	-	-	-									
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4			1	1	2	2		2	3
PHVI	Philadelphia Vireo	<i>Vireo philadelphicus</i>	-	-	-	S5									
PIWA	Pine Warbler	<i>Dendroica pinus</i>	-	-	-	S5		1	3	1	1	2	1	1	2
PIWO	Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	-	S5									
PUIF	Purple Finch	<i>Carpodacus purpureus</i>	-	-	-	S4									
RBGR	Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	-	-	-	S4									
RBGU	Ring-billed Gull	<i>Larus delawarensis</i>	-	-	-	S5									
RBNU	Red-breasted Nuthatch	<i>Sitta canadensis</i>	-	-	-	S5									
REVI	Red-eyed Vireo	<i>Vireo olivaceus</i>	-	-	-	S5		2	2	2			1	1	1
RTHA	Red-tailed Hawk	<i>Buteo jamaicensis</i>	-	-	-	S4									
RTHU	Ruby-throated Hummingbird	<i>Archilochus colubris</i>	-	-	-	S5									
RUGR	Ruffed Grouse	<i>Bonasa umbellus</i>	-	-	-	S4									
RWBL	Red-winged blackbird	<i>Agelaius phoeniceus</i>	-	-	-	S4				1	1				
SACR	Sandhill Crane	<i>Grus canadensis tabida</i>	-	-	-	S5									
SAVS	Savannah Sparrow	<i>Passerculus sandwichensis</i>	-	-	-	S4									

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Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL23	TL23	TL24	TL24	TL25	TL25	TL26	TL26
							Survey No.	1	2	1	2	1	2	1	2
							Habitat Description	Forest Swamp	Lake, White Pine	Forest Marsh	Lake, Rock Pine	Forest & Marsh	Forest Marsh	Forest	Forest
								Lake	Barrens		Woodland				
							Temperature (°C)	13	15	13	15	13	15	13	15
							Wind	0-1	1-2	0-1	1-2	0-1	1-2	0-1	1-2
							Cloud (%)	100	0	100	0	100	0	100	0
							Precipitation	Thick Fog	0	Thick Fog	0	Thick Fog	0	Thick Fog	0
							Precipitation (24h)	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0
							Start Time	6:23	8:03	6:40	8:24	6:56	8:47	7:10	9:20
							End Time	6:33	8:13	6:50	8:34	7:06	8:57	7:20	9:30
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	12-Jun-13	1-Jul-13	12-Jun-13	1-Jul-13	12-Jun-13	1-Jul-13	12-Jun-13	1-Jul-13
SOSP	Song Sparrow	Melospiza melodia	-	-	-	S5		1			1	1			
SWSP	Swamp Sparrow	Melospiza georgiana	-	-	-	S5					1	1			
TRES	Tree Swallow	Tachycineta bicolor	-	-	-	S4					1	1			
TUVU	Turkey Vulture	Cathartes aura	-	-	-	S5									
VEER	Veery	Catharus fuscescens	-	-	-	S4				1	2	1	2		
WIWR	Winter Wren	Troglodytes troglodytes	-	-	-	S5									
WODU	Wood Duck	Aix sponsa	-	-	-	S5									1
WTSP	White-throated Sparrow	Zonotrichia albicollis	-	-	-	S5									
YBSA	Yellow-bellied Sapsucker	Sphyrapicus varius	-	-	-	S5									1
YRWA	Yellow-rumped Warbler	Dendroica coronata	-	-	-	S5		1	1		1	1		1	1
YWAR	Yellow Warbler	Dendroica petechia	-	-	-	S5								1	

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S3S4 - Uncertain between S3 and S4  
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S5 - Secure, common  
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SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

References  
1 - Ontario Ministry of Natural Resources. 2009. Natural Heritage Information Centre

Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location							
							Survey No.	TL27 1	TL27 2	TL28 1	TL28 2	TL29 1	TL29 2	TL30 1
							Habitat Description	Forest & Cultural Meadow	Rock Pine Juniper Barrens	Forest	Forest	Forest Swamp Marsh	Forest Powerline Cut	Forest Swamp Leatherleaf Bog with Stream
							Temperature (°C)	13	15	13	12	13	12	13
							Wind	0-1	1-2	0-1	1-0	0-1	1-0	0-1
							Cloud (%)	100	0	100	100	100	100	100
							Precipitation	Thick Fog	0	Thick Fog	0	Thick Fog	0	Thick Fog
							Precipitation (24h)	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain
							Start Time	7:24	9:38	7:43	7:00	7:56	7:17	8:10
							End Time	7:34	9:48	7:53	7:10	8:06	7:27	8:20
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	12-Jun-13	1-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13
ALFL	Alder Flycatcher	<i>Empidonax alnorum</i>	-	-	-	S5								
AMBL	American Bittern	<i>Botaurus lentiginosus</i>	-	-	-	S4								
AMCO	American Coot	<i>Fulca americana</i>	-	-	-	S4			1					
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	-	-	-	S5								
AMGO	American Goldfinch	<i>Carduelis tristis</i>	-	-	-	S5								1
AMRE	American Redstart	<i>Setophaga ruticilla</i>	-	-	-	S5				1	1	1	2	
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5		1	1	2				
BARS	Barn Swallow	<i>Hirundo rustica</i>	THR	-	THR	S4								
BAWW	Black-and-white Warbler	<i>Mniotilta varia</i>	-	-	-	S5						1	1	1
BBCU	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	-	-	-	S5								
BCCH	Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	-	S5		2			2	2		
BEKI	Belted Kingfisher	<i>Ceryle alcyon</i>	-	-	-	S4		1						
BHVI	Blue-headed Vireo	<i>Vireo solitarius</i>	-	-	-	S5		1						
BLBW	Blackburnian Warbler	<i>Dendroica fusca</i>	-	-	-	S5								
BLJA	Blue Jay	<i>Cyanocitta cristata</i>	-	-	-	S5			2	1	1	1		3
BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	-	THR	S4								
BRCR	Brown Creeper	<i>Certhia americana</i>	-	-	-	S5								
BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	-	-	-	S4								
BTBW	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	-	-	-	S5								
BTNW	Black-throated Green Warbler	<i>Dendroica virens</i>	-	-	-	S5				1		1	2	1
BUFF	Bufflehead	<i>Bucephala albeola</i>	-	-	-	S4								
BWHA	Broad-winged Hawk	<i>Buteo platypterus</i>	-	-	-	S5			1					
CAGO	Canada Goose	<i>Branta canadensis</i>	-	-	-	S5								
CAWA	Canada Warbler	<i>Wilsonia canadensis</i>	SC	Schedule 1	THR	S4						1		
CEDW	Cedar Waxwing	<i>Bombycilla cedrorum</i>	-	-	-	S5								
CHSP	Chipping Sparrow	<i>Spizella passerina</i>	-	-	-	S5			1					
COGR	Common Grackle	<i>Quiscalus quiscula</i>	-	-	-	S5								
CORA	Common Raven	<i>Corvus corax</i>	-	-	-	S5		1						
COSN	Common Snipe	<i>Gallinago gallinago</i>	-	-	-	S5								
COYE	Common Yellowthroat	<i>Geothlypis trichas</i>	-	-	-	S5				1		1	2	2
CSWA	Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	-	-	-	S5		1			1	3	2	2
DCCO	Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	-	-	S5								
DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	-	-	-	S5								
EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	-	-	-	S4								
EAPH	Eastern Phoebe	<i>Sayornis phoebe</i>	-	-	-	S5								
EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	-	-	-	S4								
EAWP	Eastern Wood-pewee	<i>Contopus virens</i>	SC	-	SC	S4								
EUST	European Starling	<i>Sturnus vulgaris</i>	-	-	-	SNA								
GBHE	Great Blue Heron	<i>Ardea herodias</i>	-	-	-	S4								
GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	-	-	-	S4					1			
GCKI	Golden-crowned Kinglet	<i>Regulus satrapa</i>	-	-	-	S5								
GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	-	-	-	S4								
HAWO	Hairy Woodpecker	<i>Picoides villosus</i>	-	-	-	S5					1			
HEIH	Hermit Thrush	<i>Catharus guttatus</i>	-	-	-	S5						1		1
HOME	Hooded Merganser	<i>Lophodytes cucullatus</i>	-	-	-	S5								
INBU	Indigo Bunting	<i>Passerina cyanea</i>	-	THR	-	S4								
LEBI	Least Bittern	<i>Ixobrychus exilis</i>	THR	Schedule 1	THR	S4								
LEFL	Least Flycatcher	<i>Empidonax minimus</i>	-	-	-	S4								
LISP	Lincoln's Sparrow	<i>Melospiza lincolni</i>	-	-	-	S5								
MAWA	Magnolia Warbler	<i>Dendroica magnolia</i>	-	-	-	S5		1						
MERL	Merlin	<i>Falco columbanus</i>	-	-	-	S5								
MODO	Mourning Dove	<i>Zenaida macroura</i>	-	-	-	S5								
MOWA	Mourning Warbler	<i>Oporornis philadelphia</i>	-	-	-	S4								
N/A	Accipiter species		-	-	-									
NAWA	Nashville Warbler	<i>Vermivora ruticapilla</i>	-	-	-	S5							1	
NOFL	Northern Flicker	<i>Colaptes auratus</i>	-	-	-	S4			1					
NOWA	Northern Waterthrush	<i>Seiurus noveboracensis</i>	-	-	-	S5							1	
ORWA	Speices Code Undetermined		-	-	-	-								
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4			2	1	4	1	1	2
PHVI	Philadelphia Vireo	<i>Vireo philadelphicus</i>	-	-	-	S5								
PIWA	Pine Warbler	<i>Dendroica pinus</i>	-	-	-	S5		2	1			1		
PIWO	Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	-	S5								
PUFI	Purple Finch	<i>Carpodacus purpureus</i>	-	-	-	S4				1				
RBGR	Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	-	-	-	S4								
RBGU	Ring-billed Gull	<i>Larus delawarensis</i>	-	-	-	S5			1					
RBNU	Red-breasted Nuthatch	<i>Sitta canadensis</i>	-	-	-	S5								
REVI	Red-eyed Vireo	<i>Vireo olivaceus</i>	-	-	-	S5		2	1	1		3	2	2
RTHA	Red-tailed Hawk	<i>Buteo jamaicensis</i>	-	-	-	S4								
RTHU	Ruby-throated Hummingbird	<i>Archilochus colubris</i>	-	-	-	S5								
RUGR	Ruffed Grouse	<i>Bonasa umbellus</i>	-	-	-	S4								
RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	-	-	-	S4								
SACR	Sandhill Crane	<i>Grus canadensis tabida</i>	-	-	-	S5								
SAVS	Savannah Sparrow	<i>Passerculus sandwichensis</i>	-	-	-	S4								



Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location							
							Survey No.	TL27 1	TL27 2	TL28 1	TL28 2	TL29 1	TL29 2	TL30 1
							Habitat Description	Forest & Cultural Meadow	Rock Pine Juniper Barrens	Forest	Forest	Forest Swamp Marsh	Forest Powerline Cut	Forest Swamp Leatherleaf Bog with Stream
							Temperature (°C)	13	15	13	12	13	12	13
							Wind	0-1	1-2	0-1	1-0	0-1	1-0	0-1
							Cloud (%)	100	0	100	100	100	100	100
							Precipitation	Thick Fog	0	Thick Fog	0	Thick Fog	0	Thick Fog
							Precipitation (24h)	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain
							Start Time	7:24	9:38	7:43	7:00	7:56	7:17	8:10
							End Time	7:34	9:48	7:53	7:10	8:06	7:27	8:20
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	12-Jun-13	1-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13
SOSP	Song Sparrow	Melospiza melodia	-	-	-	S5				2				2
SWSP	Swamp Sparrow	Melospiza georgiana	-	-	-	S5				1				
TRES	Tree Swallow	Tachycineta bicolor	-	-	-	S4								
TUVU	Turkey Vulture	Cathartes aura	-	-	-	S5								
VEER	Veery	Catharus fuscescens	-	-	-	S4			1		4		1	2
WIWR	Winter Wren	Troglodytes troglodytes	-	-	-	S5								
WODU	Wood Duck	Aix sponsa	-	-	-	S5								
WTSP	White-throated Sparrow	Zonotrichia albicollis	-	-	-	S5						1		1
YBSA	Yellow-bellied Sapsucker	Sphyrapicus varius	-	-	-	S5								
YRWA	Yellow-rumped Warbler	Dendroica coronata	-	-	-	S5		2		1	1			
YWAR	Yellow Warbler	Dendroica petechia	-	-	-	S5				1				2

Data transcribed exactly as given in field sheets provided by Stantec in October 2014, with exceptions as described in the report.

Legend

ESA Status: The Endangered Species Act 2007 (ESA) protects Species at Risk at a provincial level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

SARA Status: The Species at Risk Act (SARA) protects Species at Risk at a federal level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

Schedule 1 - The official list of species that are classified as extirpated, endangered, threatened, and of special concern.  
Schedule 2 - Species listed in Schedule 2 are species that had been designated as endangered or threatened, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.  
Schedule 3 - Species listed in Schedule 3 are species that had been designated as special concern, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.

COSEWIC Status: The Committee on the Status of Endangered Wildlife in Canada assesses the status of species in Canada.  
SC - Special Concern  
THR - Threatened  
END - Endangered

S-rank: The nNatural hHeritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follow:  
S1 - Critically Imperiled, often < 5 occurrences  
S2 - Imperiled, often <20 occurrences  
S3 - Vulnerable, often 80 or fewer  
S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
SNA - Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

References  
1 - Ontario Ministry of Natural Resources. 2009. Natural Heritage Information Centre

Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL30	TL31	TL31	TL32	TL32	TL33	TL33	TL34
							Survey No.	2	1	2	1	2	1	2	1
							Habitat Description	Marsh Meadow?, Rocky Pine Barrens	Forest Marsh & Rock Barrens	Marsh, Rock Pine Barrens	Forest	Forest	Forest	Rock / Pine Barrens / Woodland	Forest Swamp Lake
							Temperature (°C)	12	13	12	13	12	13	12	13
							Wind	1-0	0-1	1-0	0-1	1-0	0-1	1-0	0-1
							Cloud (%)	100	100	100	100	100	100	100	100
							Precipitation	0	Thick Fog	0	Thick Fog	0	Thick Fog	0	Thick Fog
							Precipitation (24h)	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain
							Start Time	7:36	8:23	7:53	8:39	8:10	8:53	8:23	9:06
							End Time	7:43	8:33	8:03	8:49	8:20	9:03	8:38	9:16
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13
ALFL	Alder Flycatcher	<i>Empidonax alnorum</i>	-	-	-	S5							1		
AMBL	American Bittern	<i>Botaurus lentiginosus</i>	-	-	-	S4									
AMCO	American Coot	<i>Fulica americana</i>	-	-	-	S4									
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	-	-	-	S5					1				
AMGO	American Goldfinch	<i>Carduelis tristis</i>	-	-	-	S5									
AMRE	American Redstart	<i>Setophaga ruticilla</i>	-	-	-	S5		1		3	2	2	2		2
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5			1	2	1		1	1	1
BARS	Barn Swallow	<i>Hirundo rustica</i>	THR	-	THR	S4									
BAWW	Black-and-white Warbler	<i>Mniotilta varia</i>	-	-	-	S5									
BBCU	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	-	-	-	S5									
BCCH	Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	-	S5		1	1	1	1	1			
BEKI	Belted Kingfisher	<i>Ceryle alcyon</i>	-	-	-	S4									
BHVI	Blue-headed Vireo	<i>Vireo solitarius</i>	-	-	-	S5									
BLBW	Blackburnian Warbler	<i>Dendroica fusca</i>	-	-	-	S5					1	1			
BLJA	Blue Jay	<i>Cyanocitta cristata</i>	-	-	-	S5		1	1						
BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	-	THR	S4									
BRCR	Brown Creeper	<i>Certhia americana</i>	-	-	-	S5									
BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	-	-	-	S4									
BTBW	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	-	-	-	S5									
BTNW	Black-throated Green Warbler	<i>Dendroica virens</i>	-	-	-	S5		1		3	1	1	1	1	
BUFF	Bufflehead	<i>Bucephala albeola</i>	-	-	-	S4									
BWHA	Broad-winged Hawk	<i>Buteo platypterus</i>	-	-	-	S5									
CAGO	Canada Goose	<i>Branta canadensis</i>	-	-	-	S5			1						
CAWA	Canada Warbler	<i>Wilsonia canadensis</i>	SC	Schedule 1	THR	S4					1				1
CEDW	Cedar Waxwing	<i>Bombycilla cedrorum</i>	-	-	-	S5				2			2	2	
CHSP	Chipping Sparrow	<i>Spizella passerina</i>	-	-	-	S5			1					1	
COGR	Common Grackle	<i>Quiscalus quiscula</i>	-	-	-	S5									
CORA	Common Raven	<i>Corvus corax</i>	-	-	-	S5							1		
COSN	Common Snipe	<i>Gallinago gallinago</i>	-	-	-	S5									
COYE	Common Yellowthroat	<i>Geothlypis trichas</i>	-	-	-	S5		3	2	2		1			
CSWA	Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	-	-	-	S5			1	1	1	1		1	2
DCCO	Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	-	-	S5		1	1	1	1	1		1	2
DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	-	-	-	S5									
EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	-	-	-	S4									
EAPH	Eastern Phoebe	<i>Sayornis phoebe</i>	-	-	-	S5									
EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	-	-	-	S4									
EAWP	Eastern Wood-pewee	<i>Contopus virens</i>	SC	-	SC	S4							1		
EUST	European Starling	<i>Sturnus vulgaris</i>	-	-	-	SNA									
GBHE	Great Blue Heron	<i>Ardea herodias</i>	-	-	-	S4									
GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	-	-	-	S4									
GCKI	Golden-crowned Kinglet	<i>Regulus satrapa</i>	-	-	-	S5									
GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	-	-	-	S4									
HAWO	Hairy Woodpecker	<i>Picoides villosus</i>	-	-	-	S5									
HEIH	Hermit Thrush	<i>Catharus guttatus</i>	-	-	-	S5						2			
HOME	Hooded Merganser	<i>Lophodytes cucullatus</i>	-	-	-	S5									
INBU	Indigo Bunting	<i>Passerina cyanea</i>	-	-	-	S4									
LEBI	Least Bittern	<i>Ixobrychus exilis</i>	THR	Schedule 1	THR	S4									
LEFL	Least Flycatcher	<i>Empidonax minimus</i>	-	-	-	S4									
LISP	Lincoln's Sparrow	<i>Melospiza lincolni</i>	-	-	-	S5									
MAWA	Magnolia Warbler	<i>Dendroica magnolia</i>	-	-	-	S5									
MERL	Merlin	<i>Falco columbarius</i>	-	-	-	S5									
MODO	Mourning Dove	<i>Zenaida macroura</i>	-	-	-	S5									
MOWA	Mourning Warbler	<i>Oporornis philadelphia</i>	-	-	-	S4									
N/A	Accipiter species		-	-	-										
NAWA	Nashville Warbler	<i>Vermivora ruficapilla</i>	-	-	-	S5						1		1	
NOFL	Northern Flicker	<i>Colaptes auratus</i>	-	-	-	S4									
NOWA	Northern Waterthrush	<i>Seiurus noveboracensis</i>	-	-	-	S5									
ORWA	Species Code Undetermined		-	-	-	-									
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4		3	1	1	2	3	2	2	1
PHVI	Philadelphia Vireo	<i>Vireo philadelphicus</i>	-	-	-	S5									
PIWA	Pine Warbler	<i>Dendroica pinus</i>	-	-	-	S5			1	1			2	1	
PIWO	Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	-	S5								1	
PUFI	Purple Finch	<i>Carpodacus purpureus</i>	-	-	-	S4									
RBGR	Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	-	-	-	S4									
RBGU	Ring-billed Gull	<i>Larus delawarensis</i>	-	-	-	S5					1				
RBNU	Red-breasted Nuthatch	<i>Sitta canadensis</i>	-	-	-	S5				1		1			
REVI	Red-eyed Vireo	<i>Vireo olivaceus</i>	-	-	-	S5									
RTHA	Red-tailed Hawk	<i>Buteo jamaicensis</i>	-	-	-	S4		2	1	2	2	1	2	2	2
RTHU	Ruby-throated Hummingbird	<i>Archilochus colubris</i>	-	-	-	S5									
RUGR	Ruffed Grouse	<i>Bonasa umbellus</i>	-	-	-	S4									
RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	-	-	-	S4			1						
SACR	Sandhill Crane	<i>Grus canadensis tabida</i>	-	-	-	S5									
SAVS	Savannah Sparrow	<i>Passerculus sandwichensis</i>	-	-	-	S4									

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Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL30	TL31	TL31	TL32	TL32	TL33	TL33	TL34
							Survey No.	2	1	2	1	2	1	2	1
							Habitat Description	Marsh Meadow?, Rocky Pine Barrens	Forest Marsh & Rock Barrens	Marsh, Rock Pine Barrens	Forest	Forest	Forest	Rock / Pine Barrens / Woodland	Forest Swamp Lake
							Temperature (°C)	12	13	12	13	12	13	12	13
							Wind	1-0	0-1	1-0	0-1	1-0	0-1	1-0	0-1
							Cloud (%)	100	100	100	100	100	100	100	100
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							Start Time	7:36	8:23	7:53	8:39	8:10	8:53	8:23	9:06
							End Time	7:43	8:33	8:03	8:49	8:20	9:03	8:38	9:16
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13
SOSP	Song Sparrow	Melospiza melodia	-	-	-	S5									2
SWSP	Swamp Sparrow	Melospiza georgiana	-	-	-	S5		2		1			1		
TRES	Tree Swallow	Tachycineta bicolor	-	-	-	S4									
TUVU	Turkey Vulture	Cathartes aura	-	-	-	S5							2	1	
VEER	Veery	Catharus fuscescens	-	-	-	S4		1		1	1	3	2		
WIWR	Winter Wren	Troglodytes troglodytes	-	-	-	S5						1			
WODU	Wood Duck	Aix sponsa	-	-	-	S5			9						
WTSP	White-throated Sparrow	Zonotrichia albicollis	-	-	-	S5				2	1				
YBSA	Yellow-bellied Sapsucker	Sphyrapicus varius	-	-	-	S5				1		1			
YRWA	Yellow-rumped Warbler	Dendroica coronata	-	-	-	S5		1							1
YWAR	Yellow Warbler	Dendroica petechia	-	-	-	S5			1					3	2

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S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
SNA - Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

References  
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Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL34	TL35	TL35	TL36	TL36	TL37	TL37	TL38
							Survey No.	2	1	2	1	2	1	2	1
							Habitat Description	Forest Shrub Fen Swamp	Forest	Forest	Swamp Marsh	Forest Swamp	Forest	Forest	Marsh Meadow
							Temperature (°C)	12	13	12	13	12	13	12	14
							Wind	1-0	0-1	1-0	0-1	1-0	0-1	1-0	1
							Cloud (%)	100	100	100	100	100	100	100	100
							Precipitation	0	Thick Fog	0	Thick Fog	0	Thick Fog	0	Fog
							Precipitation (24h)	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain
							Start Time	8:44	9:20	9:00	9:36	9:15	9:51	9:34	5:29
							End Time	8:54	9:30	9:10	9:46	9:25	10:01	9:44	5:39
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13	2-Jul-13	13-Jun-13
ALFL	Alder Flycatcher	Empidonax alnorum	-	-	-	S5		1							
AMBL	American Bittern	Botaurus lentiginosus	-	-	-	S4									
AMCO	American Coot	Fulica americana	-	-	-	S4									
AMCR	American Crow	Corvus brachyrhynchos	-	-	-	S5		1							
AMGO	American Goldfinch	Carduelis tristis	-	-	-	S5									
AMRE	American Redstart	Setophaga ruticilla	-	-	-	S5		1	1			2	1		1
AMRO	American Robin	Turdus migratorius	-	-	-	S5		3	2			1			1
BARS	Barn Swallow	Hirundo rustica	THR	-	THR	S4									
BAWW	Black-and-white Warbler	Mniotilta varia	-	-	-	S5					2	1			
BBCU	Black-billed Cuckoo	Coccyzus erythrophthalmus	-	-	-	S5									
BCCH	Black-capped Chickadee	Poecile atricapillus	-	-	-	S5		1	2	1				2	
BEKI	Belted Kingfisher	Ceryle alcyon	-	-	-	S4									
BHVI	Blue-headed Vireo	Vireo solitarius	-	-	-	S5				1					
BLBW	Blackburnian Warbler	Dendroica fusca	-	-	-	S5									1
BLJA	Blue Jay	Cyanocitta cristata	-	-	-	S5			1		1		1	1	
BOBO	Bobolink	Dolichonyx oryzivorus	THR	-	THR	S4									
BRCR	Brown Creeper	Certhia americana	-	-	-	S5									
BRTH	Brown Thrasher	Toxostoma rufum	-	-	-	S4									
BTBW	Black-throated Blue Warbler	Dendroica caerulescens	-	-	-	S5									
BTNW	Black-throated Green Warbler	Dendroica virens	-	-	-	S5		1	3	2	1	1	2	1	
BUFF	Bufflehead	Bucephala albeola	-	-	-	S4									
BWHA	Broad-winged Hawk	Buteo platypterus	-	-	-	S5			1		1		4		
CAGO	Canada Goose	Branta canadensis	-	THR	-	S5									
CAWA	Canada Warbler	Wilsonia canadensis	SC	Schedule 1	THR	S4					1	1			
CEDW	Cedar Waxwing	Bombycilla cedrorum	-	-	-	S5		2						2	
CHSP	Chipping Sparrow	Spizella passerina	-	-	-	S5									
COGR	Common Grackle	Quiscalus quiscula	-	-	-	S5									
CORA	Common Raven	Corvus corax	-	-	-	S5				1					1
COSN	Common Snipe	Gallinago gallinago	-	-	-	S5									
COYE	Common Yellowthroat	Geothlypis trichas	-	-	-	S5				3	2				2
CSWA	Chestnut-sided Warbler	Dendroica pensylvanica	-	-	-	S5		3		1					2
DCCO	Double-crested Cormorant	Phalacrocorax auritus	-	-	-	S5				1					2
DOWO	Downy Woodpecker	Picoides pubescens	-	-	-	S5									2
EAKI	Eastern Kingbird	Tyrannus tyrannus	-	-	-	S4									
EAPH	Eastern Phoebe	Sayornis phoebe	-	-	-	S5									
EATO	Eastern Towhee	Pipilo erythrophthalmus	-	-	-	S4									
EAWP	Eastern Wood-pewee	Contopus virens	SC	-	SC	S4									
EUST	European Starling	Sturnus vulgaris	-	-	-	SNA									
GBHE	Great Blue Heron	Ardea herodias	-	-	-	S4									
GCFL	Great Crested Flycatcher	Myiarchus crinitus	-	-	-	S4									
GCKI	Golden-crowned Kinglet	Regulus satrapa	-	-	-	S5									
GRCA	Gray Catbird	Dumetella carolinensis	-	-	-	S4		2							
HAWO	Hairy Woodpecker	Picoides villosus	-	-	-	S5									2
HEIH	Hermit Thrush	Catharus guttatus	-	-	-	S5				2	1				2
HOME	Hooded Merganser	Lophodytes cucullatus	-	-	-	S5									
INBU	Indigo Bunting	Passerina cyanea	-	THR	-	S4									
LEBI	Least Bittern	Ixobrychus exilis	THR	Schedule 1	THR	S4									
LEFL	Least Flycatcher	Empidonax minimus	-	-	-	S4									
LISP	Lincoln's Sparrow	Melospiza lincolni	-	-	-	S5									
MAWA	Magnolia Warbler	Dendroica magnolia	-	-	-	S5									
MERL	Merlin	Falco columbarius	-	-	-	S5									
MODO	Mourning Dove	Zenaida macroura	-	-	-	S5									
MOWA	Mourning Warbler	Oporornis philadelphia	-	-	-	S4									
N/A	Accipiter species		-	-	-										
NAWA	Nashville Warbler	Vermivora ruficapilla	-	-	-	S5		1		1	1		1	1	
NOFL	Northern Flicker	Colaptes auratus	-	-	-	S4			1		1		1		
NOWA	Northern Waterthrush	Seiurus noveboracensis	-	-	-	S5				1					
ORWA	Speices Code Undetermined		-	-	-	-									1
OVEN	Ovenbird	Seiurus aurocapillus	-	-	-	S4			1	2	2	4	3	1	2
PHVI	Philadelphia Vireo	Vireo philadelphicus	-	-	-	S5									
PIWA	Pine Warbler	Dendroica pinus	-	-	-	S5						1	2	1	
PIWO	Pileated Woodpecker	Dryocopus pileatus	-	-	-	S5									
PUFI	Purple Finch	Carpodacus purpureus	-	-	-	S4									
RBGR	Rose-breasted Grosbeak	Pheucticus ludovicianus	-	-	-	S4			1						
RBGU	Ring-billed Gull	Larus delawarensis	-	-	-	S5		2							
RBNU	Red-breasted Nuthatch	Sitta canadensis	-	-	-	S5							1	1	
REVI	Red-eyed Vireo	Vireo olivaceus	-	-	-	S5		3	3	3	2	1	3	1	3
RTHA	Red-tailed Hawk	Buteo jamaicensis	-	-	-	S4									
RTHU	Ruby-throated Hummingbird	Archilochus colubris	-	-	-	S5			1						
RUGR	Ruffed Grouse	Bonasa umbellus	-	-	-	S4									
RWBL	Red-winged Blackbird	Agelaius phoeniceus	-	-	-	S4		4							5
SACR	Sandhill Crane	Grus canadensis tabida	-	-	-	S5									
SAVS	Savannah Sparrow	Passerculus sandwichensis	-	-	-	S4									

Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location	TL34	TL35	TL35	TL36	TL36	TL37	TL37	TL38
							Survey No.	2	1	2	1	2	1	2	1
							Habitat Description	Forest Shrub Fen Swamp	Forest	Forest	Swamp Marsh	Forest Swamp	Forest	Forest	Marsh Meadow
							Temperature (°C)	12	13	12	13	12	13	12	14
							Wind	1-0	0-1	1-0	0-1	1-0	0-1	1-0	1
							Cloud (%)	100	100	100	100	100	100	100	100
							Precipitation	0	Thick Fog	0	Thick Fog	0	Thick Fog	0	Fog
							Precipitation (24h)	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain
							Start Time	8:44	9:20	9:00	9:36	9:15	9:51	9:34	5:29
							End Time	8:54	9:30	9:10	9:46	9:25	10:01	9:44	5:39
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13	2-Jul-13	12-Jun-13	2-Jul-13	13-Jun-13
SOSP	Song Sparrow	<i>Melospiza melodia</i>	-	-	-	S5		2			1				1
SWSP	Swamp Sparrow	<i>Melospiza georgiana</i>	-	-	-	S5									1
TRES	Tree Swallow	<i>Tachycineta bicolor</i>	-	-	-	S4									
TUVU	Turkey Vulture	<i>Cathartes aura</i>	-	-	-	S5		1			1				
VEER	Veery	<i>Catharus fuscescens</i>	-	-	-	S4		1	1	2		2	1		1
WIWR	Winter Wren	<i>Troglodytes troglodytes</i>	-	-	-	S5						1			
WODU	Wood Duck	<i>Aix sponsa</i>	-	-	-	S5									
WTSP	White-throated Sparrow	<i>Zonotrichia albicollis</i>	-	-	-	S5		1			1			1	3
YBSA	Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	-	-	-	S5			1	2		1		1	
YRWA	Yellow-rumped Warbler	<i>Dendroica coronata</i>	-	-	-	S5			2		1			1	1
YWAR	Yellow Warbler	<i>Dendroica petechia</i>	-	-	-	S5		1							2

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Legend

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SC - Special Concern  
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END - Endangered

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SC - Special Concern  
THR - Threatened  
END - Endangered

Schedule 1 - The official list of species that are classified as extirpated, endangered, threatened, and of special concern.  
Schedule 2 - Species listed in Schedule 2 are species that had been designated as endangered or threatened, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.  
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THR - Threatened  
END - Endangered

S-rank: The nNatural hHeritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follow:  
S1 - Critically Imperiled, often < 5 occurrences  
S2 - Imperiled, often <20 occurrences  
S3 - Vulnerable, often 80 or fewer  
S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
SNA - Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

References

1 - Ontario Ministry of Natural Resources. 2009. Natural Heritage Information Centre

Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Point Count Location									
							Survey No.	TL38	TL39	TL39	TL40	TL40	TL41	TL41	TL48	TL48
							Habitat Description	Forest, Rock / Pine Barren	Marsh	Swamp Marsh Rock / Pine Barrens	Forest	Forest	Forest	Forest	Forest Swamp	Forest Marsh
							Temperature (°C)	12	14	15	14	15	14	15	14	15
							Wind	1-0	1	1	1	1	1	1	1	1
							Cloud (%)	100	100	50	100	50	100	50	100	50
							Precipitation	0	Fog	0	Fog	0	Fog	0	Fog	0
							Precipitation (24h)	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0
							Start Time	9:55	5:42	6:45	5:56	7:03	6:09	7:20	8:26	9:37
							End Time	10:05	5:52	6:55	6:06	7:13	6:19	7:30	8:36	9:47
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	2-Jul-13	13-Jun-13	3-Jul-13	13-Jun-13	3-Jul-13	13-Jun-13	3-Jul-13	13-Jun-13	3-Jul-13
ALFL	Alder Flycatcher	Empidonax alnorum	-	-	-	S5										1
AMBL	American Bittern	Botaurus lentiginosus	-	-	-	S4										
AMCO	American Coot	Fulica americana	-	-	-	S4										
AMCR	American Crow	Corvus brachyrhynchos	-	-	-	S5			1							
AMGO	American Goldfinch	Carduelis tristis	-	-	-	S5				2		1				1
AMRE	American Redstart	Setophaga ruticilla	-	-	-	S5		1			2		2		1	1
AMRO	American Robin	Turdus migratorius	-	-	-	S5		1		2				1	1	2
BARS	Barn Swallow	Hirundo rustica	THR	-	THR	S4					1					
BAWW	Black-and-white Warbler	Mniotilta varia	-	-	-	S5		1	1					1		
BBCU	Black-billed Cuckoo	Coccyzus erythrophthalmus	-	-	-	S5										
BCCH	Black-capped Chickadee	Poecile atricapillus	-	-	-	S5						2	2			1
BEKI	Belted Kingfisher	Ceryle alcyon	-	-	-	S4										
BHVI	Blue-headed Vireo	Vireo solitarius	-	-	-	S5										
BLBW	Blackburnian Warbler	Dendroica fusca	-	-	-	S5					1				1	
BLJA	Blue Jay	Cyanocitta cristata	-	-	-	S5					1			1		
BOBO	Bobolink	Dolichonyx oryzivorus	THR	-	THR	S4							1	2		
BRCR	Brown Creeper	Certhia americana	-	-	-	S5										
BRTH	Brown Thrasher	Toxostoma rufum	-	-	-	S4			1							
BTBW	Black-throated Blue Warbler	Dendroica caerulescens	-	-	-	S5					1					
BTNW	Black-throated Green Warbler	Dendroica virens	-	-	-	S5		1	2		1	2	3	2	2	3
BUFF	Bufflehead	Bucephala albeola	-	-	-	S4					1					
BWHA	Broad-winged Hawk	Buteo platypterus	-	-	-	S5		1					1			
CAGO	Canada Goose	Branta canadensis	-	-	-	S5										
CAWA	Canada Warbler	Wilsonia canadensis	SC	THR	THR	S4		1		1					1	1
CEDW	Cedar Waxwing	Bombycilla cedrorum	-	-	-	S5			2			1			2	1
CHSP	Chipping Sparrow	Spizella passerina	-	-	-	S5		1		4	1			1		
COGR	Common Grackle	Quiscalus quiscula	-	-	-	S5										
CORA	Common Raven	Corvus corax	-	-	-	S5										
COSN	Common Snipe	Gallinago gallinago	-	-	-	S5										
COYE	Common Yellowthroat	Geothlypis trichas	-	-	-	S5		2	2		3				1	4
CSWA	Chestnut-sided Warbler	Dendroica pensylvanica	-	-	-	S5		1	2	2	1	1		1	2	1
DCCO	Double-crested Cormorant	Phalacrocorax auritus	-	-	-	S5										
DOWO	Downy Woodpecker	Picoides pubescens	-	-	-	S5									1	
EAKI	Eastern Kingbird	Tyrannus tyrannus	-	-	-	S4										1
EAPH	Eastern Phoebe	Sayornis phoebe	-	-	-	S5										
EATO	Eastern Towhee	Pipilo erythrophthalmus	-	-	-	S4										
EAWP	Eastern Wood-pewee	Contopus virens	SC	-	SC	S4								1		
EUST	European Starling	Sturnus vulgaris	-	-	-	SNA										
GBHE	Great Blue Heron	Ardea herodias	-	-	-	S4		1			1				1	
GCFL	Great Crested Flycatcher	Myiarchus crinitus	-	-	-	S4		1								
GCKI	Golden-crowned Kinglet	Regulus satrapa	-	-	-	S5										
GRCA	Gray Catbird	Dumetella carolinensis	-	-	-	S4					1					
HAWO	Hairy Woodpecker	Picoides villosus	-	-	-	S5										
HEIH	Hermit Thrush	Catharus guttatus	-	-	-	S5										2
HOME	Hooded Merganser	Lophodytes cucullatus	-	-	-	S5										
INBU	Indigo Bunting	Passerina cyanea	-	THR	-	S4					1	1			1	
LEBI	Least Bittern	Ixobrychus exilis	THR	THR	THR	S4										
LEFL	Least Flycatcher	Empidonax minimus	-	-	-	S4						2			2	1
LISP	Lincoln's Sparrow	Melospiza lincolni	-	-	-	S5										1
MAWA	Magnolia Warbler	Dendroica magnolia	-	-	-	S5		1								
MERL	Merlin	Falco columbanus	-	-	-	S5										1
MODO	Mourning Dove	Zenaida macroura	-	-	-	S5										
MOWA	Mourning Warbler	Oporornis philadelphia	-	-	-	S4						1			1	
N/A	Accipiter species		-	-	-											
NAWA	Nashville Warbler	Vermivora ruticapilla	-	-	-	S5		2		1				1	1	2
NOFL	Northern Flicker	Colaptes auratus	-	-	-	S4			1	1						
NOWA	Northern Waterthrush	Seiurus noveboracensis	-	-	-	S5										
ORWA	Speices Code Undetermined		-	-	-	-										
OVEN	Ovenbird	Seiurus aurocapillus	-	-	-	S4		2		1	2	3	1	4		1
PHVI	Philadelphia Vireo	Vireo philadelphicus	-	-	-	S5										
PIWA	Pine Warbler	Dendroica pinus	-	-	-	S5			2	2						
PIWO	Pileated Woodpecker	Dryocopus pileatus	-	-	-	S5										
PUFI	Purple Finch	Carpodacus purpureus	-	-	-	S4		1							1	
RBGR	Rose-breasted Grosbeak	Pheucticus ludovicianus	-	-	-	S4			1							
RBGU	Ring-billed Gull	Larus delawarensis	-	-	-	S5										
RBNU	Red-breasted Nuthatch	Sitta canadensis	-	-	-	S5		1				1				1
REVI	Red-eyed Vireo	Vireo olivaceus	-	-	-	S5		2	2	1	2	2	3	3	2	
RTHA	Red-tailed Hawk	Buteo jamaicensis	-	-	-	S4									1	
RTHU	Ruby-throated Hummingbird	Archilochus colubris	-	-	-	S5										
RUGR	Ruffed Grouse	Bonasa umbellus	-	-	-	S4							1			
RWBL	Red-winged Blackbird	Agelaius phoeniceus	-	-	-	S4			2	3					2	1
SACR	Sandhill Crane	Grus canadensis tabida	-	-	-	S5										
SAVS	Savannah Sparrow	Passerculus sandwichensis	-	-	-	S4										



Henvey Inlet Wind

Summary of 2013 Breeding Bird Surveys –

Route B Transmission Line Study Area

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							Point Count Location					
							Survey No.	TL38	TL39	TL39	TL40	TL40
								2	1	2	1	2
							Habitat Description	Forest, Rock / Pine Barren	Marsh	Swamp Marsh Rock / Pine Barrens	Forest	Forest
							Temperature (°C)	12	14	15	14	15
							Wind	1-0	1	1	1	1
							Cloud (%)	100	100	50	100	50
							Precipitation	0	Fog	0	Fog	0
							Precipitation (24h)	0	Heavy Rain	0	Heavy Rain	0
							Start Time	9:55	5:42	6:45	5:56	7:03
							End Time	10:05	5:52	6:55	6:06	7:13
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	2-Jul-13	13-Jun-13	3-Jul-13	13-Jun-13	3-Jul-13
SOSP	Song Sparrow	Melospiza melodia	-	-	-	S5			2	2	1	
SWSP	Swamp Sparrow	Melospiza georgiana	-	-	-	S5			2	1		1
TRES	Tree Swallow	Tachycineta bicolor	-	-	-	S4						1
TUVU	Turkey Vulture	Cathartes aura	-	-	-	S5						
VEER	Veery	Catharus fuscescens	-	-	-	S4						3
WIWR	Winter Wren	Troglodytes troglodytes	-	-	-	S5		1		2		3
WODU	Wood Duck	Aix sponsa	-	-	-	S5						
WTSP	White-throated Sparrow	Zonotrichia albicollis	-	-	-	S5						
YBSA	Yellow-bellied Sapsucker	Sphyrapicus varius	-	-	-	S5		2	2	2		1
YRWA	Yellow-rumped Warbler	Dendroica coronata	-	-	-	S5						1
YWAR	Yellow Warbler	Dendroica petechia	-	-	-	S5			2		1	1

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Henvey Inlet Wind  
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Route B Transmission Line Study Area

							Point Count Location	TL49	TL49	TL50	TL50	TL51	TL51	
							Survey No.	1	2	1	2	1	2	
							Habitat Description	Rock Barrens & Wetland	Rock Jack Pine Barrens	Forest, Rock / Jack Pine Barrens	Forest, Rock Jack Pine Barrens	Rock / Pine Barrens	Rock Pine Barrens	
							Temperature (°C)	14	15	14	15	14	20	
							Wind	1	1	1	1	1	0-1	
							Cloud (%)	100	50	100	50	100	100	
							Precipitation	Fog	0	Fog	0	Fog	0	
							Precipitation (24h)	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0	
							Start Time	8:42	9:59	9:05	10:10	9:55	5:50	
							End Time	8:52	10:09	9:15	10:20	10:05	6:00	
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	13-Jun-13	3-Jul-13	13-Jun-13	3-Jul-13	13-Jun-13	4-Jul-13	Grand Total
ALFL	Alder Flycatcher	<i>Empidonax alnorum</i>	-	-	-	S5		1						13
AMBL	American Bittern	<i>Botaurus lentiginosus</i>	-	-	-	S4								1
AMCO	American Coot	<i>Fulica americana</i>	-	-	-	S4								1
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	-	-	-	S5							2	16
AMGO	American Goldfinch	<i>Carduelis tristis</i>	-	-	-	S5		1						11
AMRE	American Redstart	<i>Setophaga ruticilla</i>	-	-	-	S5		1		1		1	1	68
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5			1	1		2	1	56
BARS	Barn Swallow	<i>Hirundo rustica</i>	THR	-	THR	S4				1				21
BAWW	Black-and-white Warbler	<i>Mniotilta varia</i>	-	-	-	S5								25
BBCU	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	-	-	-	S5			1	1		1		2
BCCH	Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	-	S5							1	60
BEKI	Belted Kingfisher	<i>Ceryle alcyon</i>	-	-	-	S4		1	2	2		1		4
BHVI	Blue-headed Vireo	<i>Vireo solitarius</i>	-	-	-	S5							1	7
BLBW	Blackburnian Warbler	<i>Dendroica fusca</i>	-	-	-	S5								18
BLJA	Blue Jay	<i>Cyanocitta cristata</i>	-	-	-	S5		1			1			34
BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	-	THR	S4								2
BRCR	Brown Creeper	<i>Certhia americana</i>	-	-	-	S5								1
BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	-	-	-	S4			1				1	5
BTBW	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	-	-	-	S5								1
BTNW	Black-throated Green Warbler	<i>Dendroica virens</i>	-	-	-	S5								1
BINW	Black-throated Green Warbler	<i>Dendroica virens</i>	-	-	-	S5			1	1		1		67
BUFF	Bufflehead	<i>Bucephala albeola</i>	-	-	-	S4								1
BWHA	Broad-winged Hawk	<i>Buteo platypterus</i>	-	-	-	S5								10
CAGO	Canada Goose	<i>Branta canadensis</i>	-	-	-	S5								321
CAWA	Canada Warbler	<i>Wilsonia canadensis</i>	SC	THR	THR	S4								13
CEDW	Cedar Waxwing	<i>Bombycilla cedrorum</i>	-	Schedule 1	-	S5								1
CHSP	Chipping Sparrow	<i>Spizella passerina</i>	-	-	-	S5						3	2	59
COGR	Common Grackle	<i>Quiscalus quiscula</i>	-	-	-	S5		1	1			1	2	18
CORA	Common Raven	<i>Corvus corax</i>	-	-	-	S5								15
COSN	Common Snipe	<i>Gallinago gallinago</i>	-	-	-	S5						1		13
COYE	Common Yellowthroat	<i>Geothlypis trichas</i>	-	-	-	S5								4
CSWA	Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	-	-	-	S5								82
DCCO	Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	-	-	S5		1	1	1	2	1	1	76
DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	-	-	-	S5								5
EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	-	-	-	S4								2
EAPH	Eastern Phoebe	<i>Sayornis phoebe</i>	-	-	-	S5								2
EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	-	-	-	S4								3
EAWP	Eastern Wood-pewee	<i>Contopus virens</i>	SC	-	SC	S4		1				1	1	4
EUST	European Starling	<i>Sturnus vulgaris</i>	-	-	-	SNA								5
GBHE	Great Blue Heron	<i>Ardea herodias</i>	-	-	-	S4								13
GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	-	-	-	S4							1	11
GCKI	Golden-crowned Kinglet	<i>Regulus satrapa</i>	-	-	-	S5								4
GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	-	-	-	S4		1						1
HAWO	Hairy Woodpecker	<i>Picoides villosus</i>	-	-	-	S5								10
HEIH	Hermit Thrush	<i>Catharus guttatus</i>	-	-	-	S5								8
HOME	Hooded Merganser	<i>Lophodytes cucullatus</i>	-	-	-	S5		1	2	1	1	1		29
INBU	Indigo Bunting	<i>Passerina cyanea</i>	-	-	-	S4								4
LEBI	Least Bittern	<i>Ixobrychus exilis</i>	THR	THR	THR	S4								1
LEFL	Least Flycatcher	<i>Empidonax minimus</i>	-	Schedule 1	-	S4								7
LISP	Lincoln's Sparrow	<i>Melospiza lincolni</i>	-	-	-	S5		1						2
MAWA	Magnolia Warbler	<i>Dendroica magnolia</i>	-	-	-	S5								7
MERL	Merlin	<i>Falco columbanus</i>	-	-	-	S5								2
MODO	Mourning Dove	<i>Zenaida macroura</i>	-	-	-	S5								2
MOWA	Mourning Warbler	<i>Oporornis philadelphia</i>	-	-	-	S4								1
N/A	Accipiter species		-	-	-									9
NAWA	Nashville Warbler	<i>Vermivora ruticapilla</i>	-	-	-	S5								1
NOFL	Northern Flicker	<i>Colaptes auratus</i>	-	-	-	S4						1	1	27
NOWA	Northern Waterthrush	<i>Seiurus noveboracensis</i>	-	-	-	S5								21
ORWA	Species Code Undetermined		-	-	-	-								2
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4		2	1	2	1			1
PHVI	Philadelphia Vireo	<i>Vireo philadelphicus</i>	-	-	-	S5								119
PIWA	Pine Warbler	<i>Dendroica pinus</i>	-	-	-	S5								1
PIWO	Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	-	S5			1	1		1		41
PUFI	Purple Finch	<i>Carpodacus purpureus</i>	-	-	-	S4								3
RBGR	Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	-	-	-	S4		1		1	1			6
RBGU	Ring-billed Gull	<i>Larus delawarensis</i>	-	-	-	S5		2						5
RBNU	Red-breasted Nuthatch	<i>Sitta canadensis</i>	-	-	-	S5								11
REVI	Red-eyed Vireo	<i>Vireo olivaceus</i>	-	-	-	S5								11
RTHA	Red-tailed Hawk	<i>Buteo jamaicensis</i>	-	-	-	S4		2		1	2	1	1	123
RTHU	Ruby-throated Hummingbird	<i>Archilochus colubris</i>	-	-	-	S5								2
RUGR	Ruffed Grouse	<i>Bonasa umbellus</i>	-	-	-	S4								3
RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	-	-	-	S4								2
SACR	Sandhill Crane	<i>Grus canadensis tabida</i>	-	-	-	S5		2		2	1	1	1	91
SAVS	Savannah Sparrow	<i>Passerculus sandwichensis</i>	-	-	-	S4								2
			-	-	-	S4		1						2

Table C-1. Daytime Breeding Bird Point Count Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							<div>Point Count Location</div>								
							Survey No.	TL49	TL49	TL50	TL50	TL51	TL51		
							Habitat Description	Rock Barrens & Wetland	Rock Jack Pine Barrens	Forest, Rock / Jack Pine Barrens	Forest, Rock Jack Pine Barrens	Rock / Pine Barrens	Rock Pine Barrens		
							Temperature (°C)	14	15	14	15	14	20		
							Wind	1	1	1	1	1	0-1		
							Cloud (%)	100	50	100	50	100	100		
							Precipitation	Fog	0	Fog	0	Fog	0		
							Precipitation (24h)	Heavy Rain	0	Heavy Rain	0	Heavy Rain	0		
							Start Time	8:42	9:59	9:05	10:10	9:55	5:50		
							End Time	8:52	10:09	9:15	10:20	10:05	6:00		
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	13-Jun-13	3-Jul-13	13-Jun-13	3-Jul-13	13-Jun-13	4-Jul-13	Grand Total	
SOSP	Song Sparrow	Melospiza melodia	-	-	-	S5		2		1		1		45	
SWSP	Swamp Sparrow	Melospiza georgiana	-	-	-	S5		1						31	
TRES	Tree Swallow	Tachycineta bicolor	-	-	-	S4		1						2	
TUVU	Turkey Vulture	Cathartes aura	-	-	-	S5								10	
VEER	Veery	Catharus fuscescens	-	-	-	S4				1	1	1		60	
WIWR	Winter Wren	Troglodytes troglodytes	-	-	-	S5						1		8	
WODU	Wood Duck	Aix sponsa	-	-	-	S5								15	
WTSP	White-throated Sparrow	Zonotrichia albicollis	-	-	-	S5		2	3	2	2	1	3	85	
YBSA	Yellow-bellied Sapsucker	Sphyrapicus varius	-	-	-	S5								15	
YRWA	Yellow-rumped Warbler	Dendroica coronata	-	-	-	S5		1	2	1	1	2	2	40	
YWAR	Yellow Warbler	Dendroica petechia	-	-	-	S5		1		1				53	
														1997	

Data transcribed exactly as given in field sheets provided by Stantec in October 2014, with exceptions as described in the report.

Legend

ESA Status: The Endangered Species Act 2007 (ESA) protects Species at Risk at a provincial level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

SARA Status: The Species at Risk Act (SARA) protects Species at Risk at a federal level.  
SC - Special Concern  
THR - Threatened  
END - Endangered

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Schedule 2 - Species listed in Schedule 2 are species that had been designated as endangered or threatened, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.  
Schedule 3 - Species listed in Schedule 3 are species that had been designated as special concern, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.

COSEWIC Status: The Committee on the Status of Endangered Wildlife in Canada assesses the status of species in Canada.  
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THR - Threatened  
END - Endangered

S-rank: The nNatural hHeritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follow:  
S1 - Critically Imperiled, often < 5 occurrences  
S2 - Imperiled, often <20 occurrences  
S3 - Vulnerable, often 80 or fewer  
S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
SNA - Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

References

1 - Ontario Ministry of Natural Resources. 2009. Natural Heritage Information Centre



Table C-2: Daytime Breeding Bird Area Search Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Area	Point Count Locations TL01 to TL18		Point Count Locations TL19 to TL37		Point Count Locations TL38 to TL50			
							Habitat Description	Not Recorded		Not Recorded		Not Recorded			
							Temperature (°C)	12		14		15			
							Wind (Beaufort Scale)	1		1		1			
							Cloud (%)	75		Full Fog		50			
							Precipitation	0		Fog		0			
							Precipitation (24h)	0		Heavy Rain		Heavy Rain			
							Start Time	Not Recorded		Not Recorded		Not Recorded			
							End Time	Not Recorded		Not Recorded		Not Recorded			
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	10-Jun		12-Jun		13-Jun		Grand Total	
ALFL	Alder Flycatcher	<i>Empidonax alnorum</i>	-	-	-	S5						1	S	1	
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	-	-	-	S5		4	H					4	
AMGO	American Goldfinch	<i>Carduelis tristis</i>	-	-	-	S5				1	S	1	S	2	
AMKE	American Kestrel	<i>Falco sparverius</i>	-	-	-	S4		1	H					1	
AMRE	American Redstart	<i>Setophaga ruticilla</i>	-	-	-	S5				3	S			3	
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5				4	CF	3	CF	7	
BARS	Barn Swallow	<i>Hirundo rustica</i>	THR	-	THR	S4		2	H			16	NY	18	
BAWW	Black-and-white Warbler	<i>Mniotilta varia</i>	-	-	-	S5		1	S	2	S			3	
BBCU	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	-	-	-	S5				1	H			1	
BCCH	Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	-	S5						1	S	1	
BEKI	Belted Kingfisher	<i>Ceryle alcyon</i>	-	-	-	S4		2	P			1	H	3	
BHCO	Brown-headed Cowbird	<i>Molothrus ater</i>	-	-	-	S4		1	H			3	P	4	
BLBW	Blackburnian Warbler	<i>Dendroica fusca</i>	-	-	-	S5		4	S					4	
BLJA	Blue Jay	<i>Cyanocitta cristata</i>	-	-	-	S5		3	FY			1	H	4	
BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	-	THR	S4		4	P					4	
BRCR	Brown Creeper	<i>Certhia americana</i>	-	-	-	S5				1	S			1	
BTBW	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	-	-	-	S5		1	S	1	S	1	S	3	
BTNW	Black-throated Green Warbler	<i>Dendroica virens</i>	-	-	-	S5		2	S					2	
BWHA	Broad-winged Hawk	<i>Buteo platypterus</i>	-	-	-	S5		1	CF					1	
CANG	Canada Goose	<i>Branta canadensis</i>	-	-	-	S5				1	4FY	2	H	3	
CAWA	Canada Warbler	<i>Wilsonia canadensis</i>	SC	THR Schedule 1	THR	S4						1	S	1	
COGR	Common Grackle	<i>Quiscalus quiscula</i>	-	-	-	S5		4	CF	2	H	2	H	8	
COLO	Common Loon	<i>Gavia immer</i>	-	-	-	S5				1	H	2	NE	3	
CORA	Common Raven	<i>Corvus corax</i>	-	-	-	S5		8	H			2	H	10	
COYE	Common Yellowthroat	<i>Geothlypis trichas</i>	-	-	-	S5		5	CF					5	
CSWA	Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	-	-	-	S5		1	S	1	S			2	
DCCO	Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	-	-	S5				1	H			1	
DOWO	Downy Woodpecker	<i>Picoides pubescens</i>	-	-	-	S5						1	H	1	
EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	-	-	-	S4		2	H	2	H	2	S	6	
EAME	Eastern Meadowlark	<i>Sturnella magna</i>	THR	-	THR	S4		2	S					2	
EAPH	Eastern Phoebe	<i>Sayornis phoebe</i>	-	-	-	S5				4	NE	2	S	6	
EUST	European Starling	<i>Sturnus vulgaris</i>	-	-	-	SNA				4	CF			4	
GBHE	Great Blue Heron	<i>Ardea herodias</i>	-	-	-	S4		1	H	4	H	3	H	8	
GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	-	-	-	S4						1	S	1	
GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	-	-	-	S4		1	S			1	S	2	
HEGU	Herring Gull	<i>Larus argentatus</i>	-	-	-	S5		2	X					2	
HETH	Hermit Thrush	<i>Catharus guttatus</i>	-	-	-	S5						1	S	1	
HOWR	House Wren	<i>Troglodytes aedon</i>	-	-	-	S5		1	S			1	S	2	
INBU	Indigo Bunting	<i>Passerina cyanea</i>	-	-	-	S4		1	S	1	S	1	S	3	
KILL	Killdeer	<i>Charadrius vociferus</i>	-	-	-	S5		1	H					1	
LEFL	Least Flycatcher	<i>Empidonax minimus</i>	-	-	-	S4				1	S			1	
MAWA	Magnolia Warbler	<i>Dendroica magnolia</i>	-	-	-	S5		1	S					1	
MODO	Mourning Dove	<i>Zenaida macroura</i>	-	-	-	S5		1	H			1	H	2	
MOWA	Mourning Warbler	<i>Oporornis philadelphia</i>	-	-	-	S4						1	S	1	
NAWA	Nashville Warbler	<i>Vermivora ruficapilla</i>	-	-	-	S5		2	S	3	S			5	
NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	-	-	-	S5		1	H	1	S			2	
NOFL	Northern Flicker	<i>Colaptes auratus</i>	-	-	-	S4		2	S			1	S	3	
OSPR	Osprey	<i>Pandion haliaetus</i>	-	-	-	S5			4			1	H	1	
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4				1	S			1	
PIWO	Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	-	S5		1	H					1	
RBGU	Ring-billed Gull	<i>Larus delawarensis</i>	-	-	-	S5		7	X					7	

Table C-2: Daytime Breeding Bird Area Search Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Area	Point Count Locations TL01 to TL18		Point Count Locations TL19 to TL37		Point Count Locations TL38 to TL50			
							Habitat Description	Not Recorded		Not Recorded		Not Recorded			
							Temperature (°C)	12		14		15			
							Wind (Beaufort Scale)	1		1		1			
							Cloud (%)	75		Full Fog		50			
							Precipitation	0		Fog		0			
							Precipitation (24h)	0		Heavy Rain		Heavy Rain			
							Start Time	Not Recorded		Not Recorded		Not Recorded			
							End Time	Not Recorded		Not Recorded		Not Recorded			
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Survey Date	10-Jun		12-Jun		13-Jun		Grand Total	
RODO	Rock Dove	<i>Columba livia</i>	-	-	-	S5		3	H					3	
RSHA	Red-shouldered Hawk	<i>Buteo lineatus</i>	-	SC Schedule 3	-	S4						1	H	1	
RTHA	Red-tailed Hawk	<i>Buteo jamaicensis</i>	-	-	-	S4		1	H	2	P			3	
RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	-	-	-	S4		7	CF	2	CF	4	Nest	13	
SACR	Sandhill Crane	<i>Grus canadensis tabida</i>	-	-	-	S5		2	P					2	
SAVS	Savannah Sparrow	<i>Passerculus sandwichensis</i>	-	-	-	S4		1	S			1	S	2	
SCTA	Scarlet Tanager	<i>Piranga olivacea</i>	-	-	-	S4				1	S			1	
SOSP	Song Sparrow	<i>Melospiza melodia</i>	-	-	-	S5				3	CF	2	S	5	
SPSA	Spotted Sandpiper	<i>Actitis macularia</i>	-	-	-	S5		1	H	1	H	1	h	3	
TRES	Tree Swallow	<i>Tachycineta bicolor</i>	-	-	-	S4		2	H			2	H	4	
TUVU	Turkey Vulture	<i>Cathartes aura</i>	-	-	-	S5		7	H	6	H	5	H	18	
VEER	Veery	<i>Catharus fuscescens</i>	-	-	-	S4		2	S					2	
WAVI	Warbling Vireo	<i>Vireo gilvus</i>	-	-	-	S5				1	S			1	
WISN	Wilson's Snipe	<i>Gallinago delicata</i>	-	-	-	S5						1	A	1	
WITU	Wild Turkey	<i>Meleagris gallopavo</i>	-	-	-	S5		1	H					1	
WODU	Wood Duck	<i>Aix sponsa</i>	-	-	-	S5		1	H	1	H			2	
WTSP	White-throated Sparrow	<i>Zonotrichia albicollis</i>	-	-	-	S5		2	S			1	S	3	
YBSA	Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	-	-	-	S5						2	P	2	
YRWA	Yellow-rumped Warbler	<i>Dendroica coronata</i>	-	-	-	S5				3	S			3	
YWAR	Yellow Warbler	<i>Dendroica petechia</i>	-	-	-	S5		1	S	4	S			5	
														239	

Data transcribed exactly as given in field sheets provided by Stantec in October 2014.

Legend

Beaufort Scale:  
0 (Less than 1 Km/h), 1 (1 -5 Km/h), 2 (6 - 11 Km/h), 3 (12 - 19 Km/h), 4 (20 - 28 Km/h), 5 (29 - 38 Km/h), 6 (39 - 49 Km/h), 7( 50 - 61 Km/h), 8 (62 - 74 Km/h), 9 (75 - 88 Km/h), 10 (89 - 102 Km/h), 11 ( 103 - 117 Km/h), 12 (118 - 133 Km/h)

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S5 - Secure, common  
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SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

References

1 - Ontario Ministry of Natural Resources. 2009. Natural Heritage Information Centre

Table C-3: Crepuscular Breeding Bird Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Station Name	6	6	7	7	8	8	9	9
							Survey Number	1	2	1	2	1	2	1	2
							Background Noise	traffic-moderate	traffic - infrequent	traffic-moderate	traffic-regular	traffic-moderate	traffic-frequent	traffic-moderate	traffic-frequent
							Offical Sunset	21:00	21:10	21:00	21:14	21:00	21:14	21:00	21:14
							Full Moon Date	25-May-13	23-Jun-13	25-May-13	-	25-May-13	-	25-May-13	-
							Moon Phase	-	2/3 full	-	-	-	-	-	-
							Moon Above Horizon	-	Yes	-	-	-	-	-	-
							Temperature (°C)	12	12	12	8	12	8	12	8
							Wind (Beaufort Scale)	1	1-2	1	1	1	1	1	1
							Cloud (%)	65	0	65	0	65	0	65	0
							Precipitation	-	None	-	None	-	None	-	None
							Precipitation (24h)	-	None	-	light steady rain	-	light steady rain	-	light steady rain
							Start time	22:50	22:59	23:08	23:34	23:14	23:22	23:33	23:11
							End time	22:56	23:05	23:14	23:40	23:20	23:28	23:39	23:17
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Date	27-May-13	18-Jun-13	27-May-13	9-Jun-13	27-May-13	9-Jun-13	27-May-13	9-Jun-13
EWPW	Whip-poor-will	<i>Caprimulgus vociferus</i>	THR	THR Schedule 1	THR	S4			2				1		1
CONI	Common Nighthawk	<i>Chordeiles minor</i>	SC	THR Schedule 1	THR	S4									
Incidental Wildlife Observations															
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5									
AMWO	American Woodcock	<i>Scolopax minor</i>	-	-	-	S4									
COYE	Common Yellowthroat	<i>Geothlyphis trichas</i>	-	-	-	S5		1				1			
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4						1			
SEWR	Sedge Wren	<i>Cistothorus platensis</i>	-	-	-	S4									
VEER	Veery	<i>Catharus fuscescens</i>	-	-	-	S4									
WTSP	White-throated Sparrow	<i>Zonotrichia albicollis</i>	-	-	-	S5									
AMTO	American Toad	<i>Anaxyrus americanus</i>	-	-	-	S5									
GRTR	Gray Treefrog	<i>Hyla versicolor</i>	-	-	-	S5									
SPPE	Spring Peeper	<i>Pseudacris crucifer</i>	-	-	-	S5		1		1		1		1	
fireflies									1						

Data transcribed exactly as given in field sheets provided by Stantec in October 2014.

Legend

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S4 - Aparently Secure, ncommon  
S5 - Secure, common  
SNA - Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
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Table C-3: Crepuscular Breeding Bird Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Station Name	10	10	11	11	12	12	13
							Survey Number	1	2	1	2	1	2	1
							Background Noise	traffic-frequent	traffic-frequent	traffic-frequent	traffic-frequent/regular	traffic-frequent	traffic-frequent	Traffic-frequent
							Offical Sunset	21:01	21:14	21:01	21:14	21:01	21:14	21:01
							Full Moon Date	25-May-13	-	25-May-13	-	25-May-13	-	25-May-13
							Moon Phase	Past full	-	Past full	-	Past full	-	Past full
							Moon Above Horizon	No	-	No	-	No	-	No
							Temperature (°C)	14	8	14	8	14	8	14
							Wind (Beaufort Scale)	2-3	1	2-3	1	2-3	1	2-3
							Cloud (%)	100	0	100	0	100	0	100
							Precipitation	light rain - none	None	light rain - none	None	light rain - none	None	light rain - none
							Precipitation (24h)	rain	light steady rain	rain	light steady rain	rain	light steady rain	rain
							Start time	21:21	23:01	21:33	22:50	21:57	22:40	22:09
							End time	21:27	23:07	21:39	22:56	22:03	22:46	22:15
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Date	28-May-13	9-Jun-13	28-May-13	9-Jun-13	28-May-13	9-Jun-13	28-May-13
EWPW	Whip-poor-will	<i>Caprimulgus vociferus</i>	THR	THR Schedule 1	THR	S4			1		1		2	
CONI	Common Nighthawk	<i>Chordeiles minor</i>	SC	THR Schedule 1	THR	S4		1						
Incidental Wildlife Observations														
AMRO	American Robin	<i>Turdus migratorius</i>	-	-	-	S5		1						
AMWO	American Woodcock	<i>Scolopax minor</i>	-	-	-	S4				1				
COYE	Common Yellowthroat	<i>Geothlyphis trichas</i>	-	-	-	S5						1		
OVEN	Ovenbird	<i>Seiurus aurocapillus</i>	-	-	-	S4								1
SEWR	Sedge Wren	<i>Cistothorus platensis</i>	-	-	-	S4				1				
VEER	Veery	<i>Catharus fuscescens</i>	-	-	-	S4		1						
WTSP	White-throated Sparrow	<i>Zonotrichia albicollis</i>	-	-	-	S5						1		
AMTO	American Toad	<i>Anaxyrus americanus</i>	-	-	-	S5								
GRTR	Gray Treefrog	<i>Hyla versicolor</i>	-	-	-	S5						2		3
SPPE	Spring Peeper	<i>Pseudacris crucifer</i>	-	-	-	S5		3		3				3
fireflies														

Data transcribed exactly as given in field sheets provided by Stantec in October 2014.

Legend

Beaufort Scale:  
0 (Less than 1 Km/h). 1 (1 -5 Km/h). 2 (6 - 11 Km/h). 3 (12 - 19 Km/h). 4 (20 - 28 Km/h). 5 (29 - 38 Km/h). 6 (39 - 49 Km/h). 7( 50 - 61 Km/h). 8 (62 - 74 Km/h). 9 (75 -

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SC - Special Concern  
THR - Threatened  
END - Endangered

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Schedule 3 - Species listed in Schedule 3 are species that had been designated as special concern, and have yet to be re-assessed by COSEWIC using revised criteria. Once these species have been re-assessed, they may be considered for inclusion in Schedule 1.

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S1 - Critically Imperiled, often < 5 occurrences  
S2 - Imperiled, often <20 occurrences  
S3 - Vulnerable, often 80 or fewer  
S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
SNA - Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.  
SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

Table C-3: Crepuscular Breeding Bird Survey Results - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Breeding Bird Surveys –  
Route B Transmission Line Study Area

							Station Name	13	14	14	15	15	16
							Survey Number	2	1	2	1	2	1
							Background Noise	traffic-frequent	Traffic-frequent	Traffic	Traffic Frequent	Traffic	Traffic - Frequent
							Offical Sunset	21:14	21:01	21:14	21:01	21:14	21:01
							Full Moon Date	-	25-May-13	-	25-May-13	-	25-May-13
							Moon Phase	-	Past full	-	Past Full	-	Past Full
							Moon Above Horizon	-	No	-	No	-	No
							Temperature (°C)	8	14	8	14	8	14
							Wind (Beaufort Scale)	1	2-3	1	2-3	1	2-3
							Cloud (%)	0	100	0	100	0	100
							Precipitation	None	light rain - none	None	Light Rain - None	None	Light Rain - None
							Precipitation (24h)	light steady rain	rain	Light Steady Rain	Rain	Light Steady Rain	Rain
							Start time	22:30	22:15	22:20	22:27	22:12	22:38
							End time	22:36	22:21	22:26	22:34	22:19	22:44
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Date	9-Jun-13	28-May-13	9-Jun-13	28-May-13	9-Jun-13	28-May-13
EWPW	Whip-poor-will	Caprimulgus vociferus	THR	THR Schedule 1	THR	S4		1		1		1	
CONI	Common Nighthawk	Chordeiles minor	SC	THR Schedule 1	THR	S4							
Incidental Wildlife Observations													
AMRO	American Robin	Turdus migratorius	-	-	-	S5							
AMWO	American Woodcock	Scolopax minor	-	-	-	S4			1				
COYE	Common Yellowthroat	Geothlyphis trichas	-	-	-	S5		1					
OVEN	Ovenbird	Seiurus aurocapillus	-	-	-	S4							
SEWR	Sedge Wren	Cistothorus platensis	-	-	-	S4							
VEER	Veery	Catharus fuscescens	-	-	-	S4							
WTSP	White-throated Sparrow	Zonotrichia albicollis	-	-	-	S5							
AMTO	American Toad	Anaxyrus americanus	-	-	-	S5			3		1		
GRTR	Gray Treefrog	Hyla versicolor	-	-	-	S5			5		1		6
SPPE	Spring Peeper	Pseudacris crucifer	-	-	-	S5			3		1		3
fireflies													

Data transcribed exactly as given in field sheets provided by Stantec in October 2014.

Legend

Beaufort Scale:  
0 (Less than 1 Km/h). 1 (1 -5 Km/h). 2 (6 - 11 Km/h). 3 (12 - 19 Km/h). 4 (20 - 28 Km/h). 5 (29 - 38 Km/h). 6 (39 - 49 Km/h). 7( 50 - 61 Km/h). 8 (62 - 74 Km/h). 9 (75 -

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S3S4 - Uncertain between S3 and S4  
S4 - Aparently Secure, ncommon  
S5 - Secure, common  
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SH - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.

Table C-3: Crepuscular Breeding Bird Survey Results - Route B Transmission Line Study Area

							Station Name	16	
							Survey Number	2	
							Background Noise	Traffic - Frequent, Crickets	
							Offical Sunset	21:14	
							Full Moon Date	-	
							Moon Phase	-	
							Moon Above Horizon	-	
							Temperature (°C)	8	
							Wind (Beaufort Scale)	1	
							Cloud (%)	0	
							Precipitation	None	
							Precipitation (24h)	Light Steady Rain	
							Start time	22:01	
							End time	22:07	
Code	Common Name	Scientific Name	ESA Status	SARA Status	COSEWIC Status	S-rank	Date	9-Jun-13	Grand Total
EWPW	Whip-poor-will	Caprimulgus vociferus	THR	THR Schedule 1	THR	S4		1	12
CONI	Common Nighthawk	Chordeiles minor	SC	THR Schedule 1	THR	S4			1
Incidental Wildlife Observations									
AMRO	American Robin	Turdus migratorius	-	-	-	S5			1
AMWO	American Woodcock	Scolopax minor	-	-	-	S4			2
COYE	Common Yellowthroat	Geothlyphis trichas	-	-	-	S5			4
OVEN	Ovenbird	Seiurus aurocapillus	-	-	-	S4			2
SEWR	Sedge Wren	Cistothorus platensis	-	-	-	S4			1
VEER	Veery	Catharus fuscescens	-	-	-	S4			1
WTSP	White-throated Sparrow	Zonotrichia albicollis	-	-	-	S5			1
AMTO	American Toad	Anaxyrus americanus	-	-	-	S5			4
GRTR	Gray Treefrog	Hyla versicolor	-	-	-	S5			17
SPPE	Spring Peeper	Pseudacris crucifer	-	-	-	S5			20
fireflies									1

Data transcribed exactly as given in field sheets provided by Stantec in October 2014.

Legend

Beaufort Scale:  
0 (Less than 1 Km/h). 1 (1 -5 Km/h). 2 (6 - 11 Km/h). 3 (12 - 19 Km/h). 4 (20 - 28 Km/h). 5 (29 - 38 Km/h). 6 (39 - 49 Km/h). 7( 50 - 61 Km/h). 8 (62 - 74 Km/h). 9 (75 -

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# Appendix C2

## Summary of 2013 Herpetological Surveys – Route B Transmission Line Study Area

**Henvey Inlet Wind LP**

# **Henvey Inlet Wind**

## **Summary of 2013 Herpetological Surveys – Route B Transmission Line Study Area**

**Prepared by:**

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60341251

**Date:**

September 2015

## Statement of Qualifications and Limitations

The attached Report (the “Report”) has been prepared by AECOM Canada Ltd. (“Consultant”) for the benefit of the client (“Client”) in accordance with the agreement between Consultant and Client, including the scope of work detailed therein (the “Agreement”).

The information, data, recommendations and conclusions contained in the Report (collectively, the “Information”):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the “Limitations”);
- represents Consultant’s professional judgement in light of the Limitations and industry standards for the preparation of similar reports;
- may be based on information provided to Consultant which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and sections thereof should not be read out of such context;
- was prepared for the specific purposes described in the Report and the Agreement; and
- in the case of subsurface, environmental or geotechnical conditions, may be based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time.

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Consultant agrees that the Report represents its professional judgement as described above and that the Information has been prepared for the specific purpose and use described in the Report and the Agreement, but Consultant makes no other representations, or any guarantees or warranties whatsoever, whether express or implied, with respect to the Report, the Information or any part thereof.

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## AECOM Signatures

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Heather Kime, H.B.Sc.  
Terrestrial Ecologist**Report Reviewed By:**

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Jill deMan, H.B.Sc  
Terrestrial and Wetland Ecologist

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Jessica MacKay Ward, Ph.D.  
Senior Ecologist

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- Appendix A. Stantec 2013 Field Notes and Documentation
- Appendix B. Stantec's Terrestrial Survey Work Program (Stantec, 2013)
- Appendix C. Results of Stantec 2013 Field Studies

## List of Acronyms and Glossary

HONI ..... Hydro One Networks Inc.  
SAR ..... Species at Risk  
UTM ..... Universal Transverse Mercator



# 1. Introduction

In the growing season of 2013, Stantec Consulting Ltd. (Stantec) collected field data to determine baseline conditions within the Route B Transmission Line study area. Data collected by Stantec included:

- Breeding Birds;
- Herpetological;
- Ecosite Classification<sup>1</sup>; and
- Incidental Wildlife Observations.

This report has been prepared by AECOM to summarize the **Herpetological** survey field data for the Route B Transmission Line study area. This is based on raw field and GIS data collected by Stantec during the 2013 season. These data were provided to AECOM by Stantec in October 2014. The following provides the work plan written by Stantec outlining data collection methods as well as AECOM's summary and analysis of the data collected, and assumptions made concerning the data.

Stantec provided AECOM with the following documents which were used to produce this report:

- Scanned handwritten field notes entitled "60824\_Amphibianscall.pdf";
- Scanned handwritten field notes entitled "60824\_Reptile.pdf";
- Scanned handwritten field notes entitled "60824\_TL\_MassasaugaGestationhabitat.pdf";
- Scanned handwritten field notes entitled "60824\_TL\_MassasaugaGestationhabitatmaps.pdf";
- Scanned handwritten field notes entitled "60824\_TL\_Massasaugahibernation.pdf";
- An Excel spreadsheet indicating all survey locations entitled "All survey locations\_UTM\_MC\_07112013.xlsx"; and
- An Excel spreadsheet indicating all Species at Risk (SAR) observation locations entitled "Significant species observations.xlsx".

A copy of the above files is provided in **Appendix A**.

---

1. Note: Based on AECOM's review of the raw field data provided by Stantec, undertaking digitization of these data would be inefficient and potentially inaccurate; therefore, interpretation of aerial imagery in combination with 2015 field investigations were instead completed by qualified AECOM Biologists and are considered to be sufficient to support this Environmental Assessment.

## 2. Methods

The following section provides a description of work plan methods written by Stantec for the *Herpetological* surveys. This description is taken directly from Stantec's *Terrestrial Survey Work Program* (Stantec, 2013).

A complete copy of Stantec's *Terrestrial Survey Work Program* (Stantec, 2013) is provided in **Appendix B**.

### 2.1 Western Chorus Frog and Salamanders Work Plan Text

*“Western Chorus Frog surveys will consist of 3-minute call counts at potential breeding habitat conducted in April, during appropriate weather conditions. This species breeds in small or shallow aquatic habitats associated with moist, open terrestrial habitat (COSEWIC, 2008c). Males call from the water and are typically active when air temperatures are above 5°C, although calls have been detected at air temperatures as low as -1°C (COSEWIC, 2008c).”*

*Unlike many anurans, Western Chorus Frogs are generally very active throughout the day. As such, daytime survey will be used to cover larger portions of the Study Area than evening call surveys would permit.*

*Surveys for amphibian egg masses will take place concurrent with calling surveys. These will consist of perimeter surveys of suitable breeding ponds by trained field personnel. Egg masses of different species are often characteristic based on features such as where they are laid, how many eggs are in the mass, density of the egg mass, and whether or not the eggs are encased in jelly.”*

### 2.2 Reptile Habitat and Targeted Surveys Work Plan Text

*“Reptile habitat and targeted species surveys will take place in three stages.*

*Preliminary surveys for reptiles will also take place throughout the migratory and breeding bird survey periods. Field biologists familiar with reptile species identification will be surveying the Transmission Line corridor regularly from early April until early July, and will be conducting area searches and wandering transect surveys in a variety of habitats providing habitat for reptiles. Any incidental observations of turtles, snakes or lizards, including shed skins or shells, will be recorded on survey forms and used to refine the field survey program proposed for June.*

*Potential snake or turtle habitat within the Study Area will also be identified during Ecosite surveys, beginning in May. The habitat assessment will involve identification of potential reptile habitat features, including:*

- *Turtle overwintering habitat and snake/skink hibernacula;*
- *Nesting sites; and,*
- *Foraging habitats.*

*Targeted field surveys for reptile species at risk will occur in June. Timing of these surveys will coincide with a period of high activity for reptiles (nesting and foraging), but also when air temperatures encourage basking behaviour. Surveys for snake species at risk and Five-lined Skink will consist of wandering transects through all appropriate habitat types (Table 2).*

*Additional survey effort will be directed toward areas with previous observations of these species which may indicate high quality or limited habitat. To the extent possible, surveys will be conducted on sunny days when air temperatures are a minimum of 15°C (ideally 20°C).*

Surveys for turtles will consist of daytime basking surveys from land or boat in suitable wetland and open water habitat (Table 1-1), and evening nesting surveys in potential upland nesting sites identified during Ecosite surveys. Basking surveys will be conducted on sunny days when air temperatures are a minimum of 15°C (ideally 20°C). Nesting surveys will take place on warm evenings (daytime air temperature >20°C), ideally before or after rainfall. All surveys will record species, number, location and behaviour of observed reptiles.

The purpose of the targeted surveys is to confirm habitat used by the various reptile species at risk within the Study Area and provide information on general abundance and distribution. Survey results will be used to produce detailed mapping of reptile habitat features which will be used to guide the siting layout process and maximize avoidance of sensitive features.”

**Table 2-1: General Habitat Description and Use by Reptile Species at Risk**

	Common Name	General Habitat and Use*
<b>Turtles</b>	Blanding’s Turtle	Lakes, ponds and wetlands with clear shallow water and muck bottoms. Will move between habitats within active season; aerial basking; nesting in late May to early July, in open sandy soil up to 2.5 km from primary wetland, but typically within 400 m of water; overwinter in marsh, bog or fen with >0.5 m water depth.
	Stinkpot	Shallow water in rivers, lakes and ponds with slow current and soft bottom; aquatic basking, often under floating vegetation; nesting in June, in shallow soil near water, occasionally in or under leaf litter; overwinter in primary habitat with muck bottom.
	Northern Map Turtle	Large rivers and lakes with soft bottom; aerial basking; nesting June and July in sandy soil; overwinter in general habitat in areas with >5 m water depth.
	Snapping Turtle	All aquatic habitats, but rarely in moving water, prefer large water bodies associated with marsh and/or swamp; aquatic basking
	Eastern Hog-nosed Snake	Open forest and forest edges with sandy soil in proximity to water; egg-laying in late June and July in nests excavated in sandy soil, often under cover objects; hibernation in mammal burrows.
<b>Snakes and Lizard</b>	Eastern Foxsnake	Georgian Bay populations inhabit rock barrens with sparse trees and shrubs in close proximity to shoreline; basking under or near rocks or in rock crevices; egg-laying late June to July in rock crevices or decaying vegetation; communal hibernation in rock crevices near shoreline.
	Eastern Massasauga	Georgian Bay populations use rock barrens, wetlands and shorelines; viviparous, bearing young in late summer; communal gestation under rock cover; hibernation in rock crevices or animal burrows where water level is close to surface.
	Eastern Ribbonsnake	Wetland edges with low vegetation and open basking areas; often seen swimming; viviparous, bearing young in late summer; hibernation in rock crevices and mammal burrows.
	Milksnake	Forest edges and open meadow; bask under cover objects; egg-laying May to July in loose soil, decomposing wood or vegetation; hibernation in rock crevices and mammal burrows, often communally and with other species.
	Five-lined Skink	Open forest and rock barren; abundance of cover objects (rocks and woody debris) is important, longer/larger cover is preferred; nesting in shallow soil under cover objects.

Note: \* Habitat description and use data obtained from COSEWIC assessment and status reports.



## 3. Results

The data presented below take into consideration only those observations which fall within the Route B Transmission Line study area.

### 3.1 Herpetological Survey Study Area

#### 3.1.1 *Western Chorus Frog and Salamanders*

Surveys for Western Chorus Frog and salamanders were conducted along the portion of the Route B Transmission Line study area which follows Highway 69; however, the portions of the Route B Transmission Line study area located east of Highway 69 and along the existing 500 kV HONI system were not studied. Survey stations were widespread and roughly equally spaced along the portion of the Route B Transmission Line study area which is located in close proximity to Highway 69. The locations of all survey stations are presented on **Figure 3-1**.

#### 3.1.2 *Reptile Habitat and Targeted Surveys*

Reptile habitat surveys were conducted along the portions of the Route B Transmission Line study area which follow Highway 69 and the 500 kV HONI system; however the segment of the Route B Transmission Line study area located between Highway 69 and the existing 500 kV HONI system was not studied.

It is assumed that only those locations with suitable habitat were recorded in the field notes entitled “60824\_Reptile.pdf”. This assumption is based on the inclusion of marked up field maps from both portions of the Route B Transmission Line study area which follow Highway 69 and the existing 500 kV HONI system in the field notes entitled “60824\_Reptile.pdf”. The locations of these observations are presented in **Figure 3-1**.

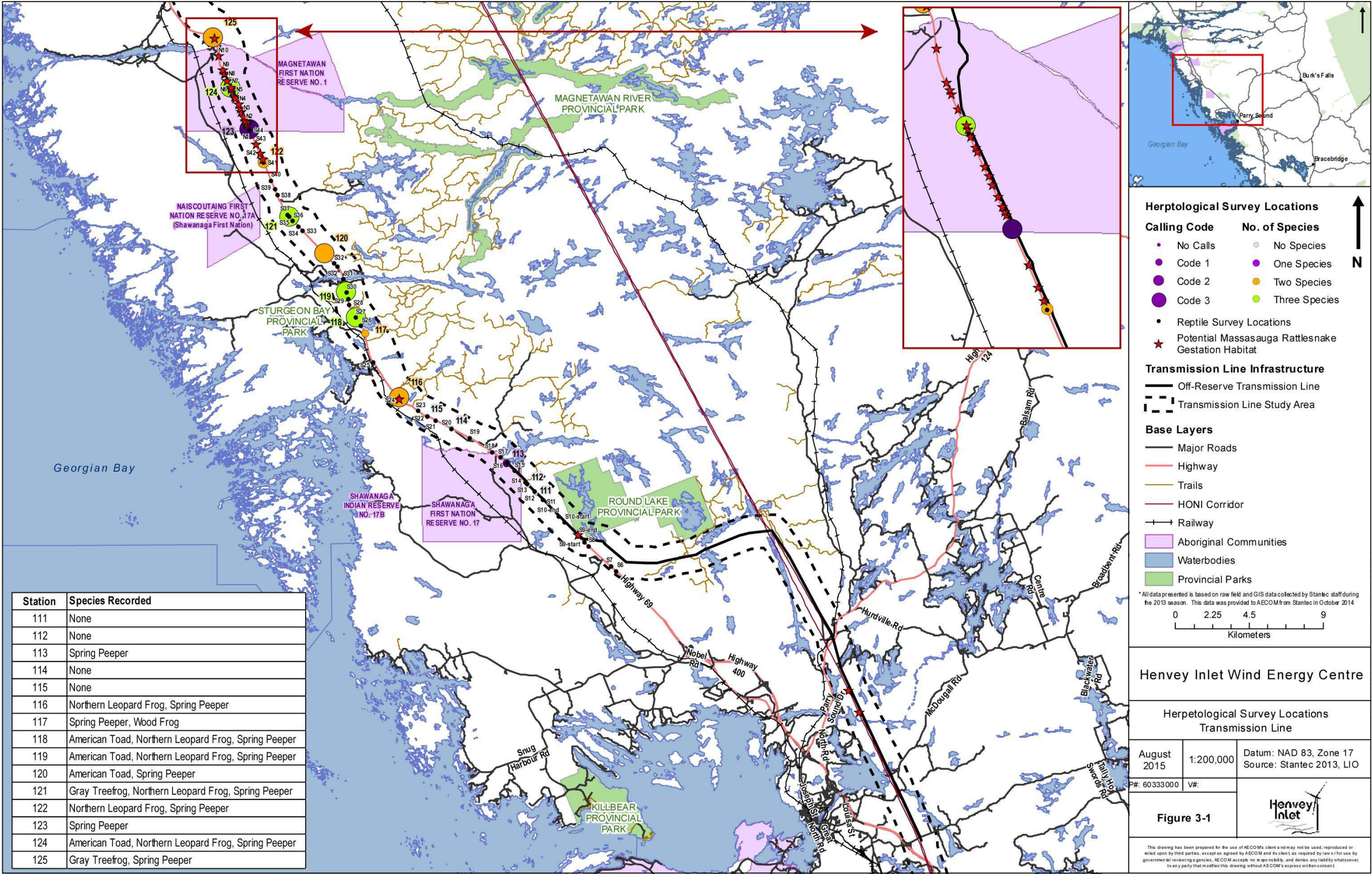
It is assumed that Massasauga Rattlesnake (Great Lakes / St. Lawrence population) gestation habitat surveys were also conducted along the portions of the Route B Transmission Line study area which follow Highway 69 and the existing 500 kV HONI system, and only those locations with suitable Massasauga Rattlesnake gestation habitat were recorded in the field notes entitled “60824\_TL\_MassasaugaGestationhabitat.pdf”. However, the field notes entitled “60824\_TL\_MassasaugaGestationhabitatmaps.pdf” include marked up field maps for the entirety of the portion of the Route B Transmission Line study area which follows Highway 69 and one field map from the portion of the Route B Transmission Line study area which follows the existing 500 kV HONI system. Therefore the extent of surveys in the existing 500 kV HONI system is unknown. The locations of these observations are presented in **Figure 3-1**.

Surveys for Massasauga Rattlesnake hibernation habitat appear to have only been conducted in the northern portion of the existing 500 kV HONI system. This area is outside of the Route B Transmission Line study area.

Based on the field notes provided, Stantec did not conduct surveys targeting nesting and / or basking turtles.



Figure 3-1: Herpetological Survey Locations





## 3.2 Herpetological Survey Results

### 3.2.1 Western Chorus Frog and Salamanders

Amphibian surveys were generally conducted in accordance with the methods described above. Calling codes were recorded inside and outside of a 100 m radius area at each station using the codes established for the Marsh Monitoring Program (MMP, 2000). The direction in which the surveyors were facing was also recorded for each station. Field data are summarized in **Table C-1** in **Appendix C**. Refer to **Figure 3-1** for survey locations as well as the Marsh Monitoring Program calling code and species observed at each survey station.

Based on the field notes provided, 15 stations were surveyed along the Route B Transmission Line study area on April 18 and May 1, 2013. All surveys were conducted in the evening. Egg mass searches were conducted at all stations. At least 50 amphibians were recorded during the amphibian surveys. Five (5) different amphibian species were recorded, including American Toad (*Anaxyrus americanus*), Gray Treefrog (*Hyla versicolor*), Northern Leopard Frog (*Lithobates pipiens*), Spring Peeper (*Pseudacris crucifer*) and Wood Frog (*Lithobates sylvaticus*). The most common species observed was Spring Peeper, with at least 22 individuals recorded. Choruses of calling amphibians were recorded at eight (8) survey stations along the Route B Transmission Line study area (**Figure 3-1**). No Western Chorus Frogs (*Pseudacris triseriata*) were recorded along the Route B Transmission Line study area. The Great Lakes/St. Lawrence-Canadian Shield Population of Western Chorus Frog is listed as Threatened under Schedule 1 of the federal Species at Risk Act (SARA). No egg masses were observed during the egg mass surveys.

### 3.2.2 Reptile Habitat and Targeted Survey Results

#### 3.2.2.1 Reptile Habitat Surveys

Potential reptile habitats were identified along the portions of the Route B Transmission Line study area which follow Highway 69 and the existing 500 kV HONI system. The following data were generally recorded by Stantec on the field sheets: survey start and end times, observed species, habitat descriptions and potential for different reptile species to occur in the identified habitat (refer to **Appendix A**).

Based on the locations where UTM co-ordinates were recorded, a total of 52 locations were surveyed along the Route B Transmission Line study area for reptile habitat on May 22 and 23, 2013. A summary of the dates and weather conditions of these surveys is provided in **Table 3-1**. The dates that these surveys were completed fall within the survey period described in the methods above (early April to early July). It appears that the weather conditions on May 22, 2013 were so poor (cold and windy) that the survey was aborted.

**Table 3-1: Summary of Survey Dates, Times and Weather Conditions**

Date and Time	Dates	May 22	May 23
	Start Time	8:14	13:31
	End Time	8:20	17:17
Weather Conditions	Temperature (°C)	4-6	16
	Beaufort Wind Scale <sup>1</sup>	6-8	1
	Relative Cloud Cover (%)	100	100
	Precipitation	0	Mist
	Precipitation in last 24 hours	Heavy rain	Heavy rain

Note: 1. Beaufort Wind Scale:

- 0: 0-2 km/hr – calm, smoke rises vertically
- 1: 3-5 km/hr – light air movement
- 2: 6-11 km/hr – wind felt on face; leaves rustle
- 3: 12-19 km/hr – leaves/small twigs in constant motion
- 4: 20-30 km/hr – dust/loose papers below; small branches move
- 5: 31-38 km/hr – fresh breeze; moderate branch moves
- 6: 39-49 km/hr – strong breeze; large branch moves



Of the 52 locations that were surveyed along the Route B Transmission Line study area, 16 had confirmed reptile species observations including Species at Risk (refer to **Figure 3-1** for locations). These observations are summarized in **Table C-2** in **Appendix C** including the UTM co-ordinates, species observed, number of individuals observed, evidence of record, and habitat description. **Table 3-2** provides a summary of all of the reptile species that were recorded during the reptile habitat surveys along the Route B Transmission Line study area. These include Blanding's Turtle, a Federal and Provincial Species at Risk (i.e., species listed as Endangered or Threatened under both the *Endangered Species Act, 2007* and Schedule 1 of the federal *Species at Risk Act*). One (1) Species of Conservation Concern, Snapping Turtle, was also recorded within the Route B Transmission Line study area; this species is listed as Special Concern both provincially and federally.

**Table 3-2: Summary of Confirmed Reptile Species During Reptile Habitat Surveys**

Species Observed	Number of Individuals Observed	ESA Status <sup>2</sup>	SARO Status <sup>3</sup>	S-rank <sup>4</sup>
Blanding's Turtle ( <i>Emydoidea blandingii</i> )	5	Threatened	Threatened (Schedule 1)	S4
Midland Painted Turtle ( <i>Chrysemys picta marginata</i> )	3	-	-	S5
Snapping Turtle ( <i>Chelydra serpentina</i> )	5	Special Concern	Special Concern (Schedule 1)	S3
Unknown Turtle Species <sup>1</sup>	Approx. 7	N/A	N/A	N/A

- Notes: 1 Species of reptile could not be identified because of the condition of the specimen or evidence of the specimen found (i.e., heavily decomposed carcass or hatched and/or predated egg shells).
2. **ESA Status:** The Endangered Species Act 2007 (ESA) protects Species at Risk (Threatened and Endangered) at a provincial level.
3. **SARA Status:** The Species at Risk Act (SARA) protects Species at Risk (Threatened and Endangered) at a federal level.
4. **S-rank:** The natural heritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follows:
- S1 Extremely rare in Ontario; usually 5 or fewer occurrences in the province or very few remaining individuals; often especially vulnerable to extirpation.
  - S2 Very rare in Ontario; usually between 5 and 20 occurrences in the province or with many individuals in fewer occurrences; often susceptible to extirpation.
  - S3 Rare to uncommon in Ontario; usually between 20 and 100 occurrences in the province; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances. Most species with an S3 rank are assigned to the watch list, unless they have a relatively high global rank.
  - S4 Common and apparently secure in Ontario; usually with more than 100 occurrences in the province.
  - S5 Very common and demonstrably secure in Ontario.
  - SH Possibly Extirpated (Historical). Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years.
  - S#S# A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community.
  - S#? Rank uncertain.

### 3.2.2.2 Massasauga Rattlesnake Gestation Habitat Surveys

Stantec conducted Massasauga Rattlesnake gestation habitat surveys along the portions of the Route B Transmission Line study area which follow Highway 69 and the existing 500 kV HONI system. Habitat descriptions of potential Massasauga Rattlesnake gestation habitats identified along the Route B Transmission Line study area were recorded in the field notes (refer to **Appendix A**).

Based on the field data provided, Massasauga Rattlesnake gestation habitat surveys along the Route B Transmission Line study area were completed between July 23 and August 9, 2013. A summary of the dates and weather conditions of these surveys are provided in **Table 3-3**. Surveys were generally completed on warm days with temperatures greater than 15°C.

**Table 3-3: Summary of EMR Gestation Habitat Survey Dates and Conditions**

Date and Time	Dates	July 23	July 29	July 30 to August 13 <sup>2</sup>	August 9
	Start Time	Not recorded			
	End Time	Not recorded			
Weather Conditions	Temperature (°C)	21	18	Not recorded	23
	Beaufort Wind Scale <sup>1</sup>	2-3	2	Not recorded	Not recorded
	Relative Cloud Cover (%)	100	80	Not recorded	0
	Precipitation	None	None	Not recorded	None
	Precipitation in last 24 hours	Heavy rain	Heavy rain	Not recorded	None

Note: 1. Beaufort Wind Scale: 0: 0-2 km/hr – calm, smoke rises vertically

1: 3-5 km/hr – light air movement

2: 6-11 km/hr – wind felt on face; leaves rustle

3: 12-19 km/hr – leaves/small twigs in constant motion

4: 20-30 km/hr – dust/loose papers below; small branches move

5: 31-38 km/hr – fresh breeze; moderate branch moves

6: 39-49 km/hr – strong breeze; large branch moves

2. It is unclear if this survey was conducted on one day or over duration of multiple days for the identified habitats located on the Route B Transmission Line study area.

A total of 24 potential Massasauga Rattlesnake gestation habitats were identified along the Route B Transmission Line study area and are mapped on **Figure 3-1**. The majority of recorded habitats are concentrated along a short section of the Route B Transmission Line, in the vicinity of Magnetawan First Nation Reserve No. 1.

Generally, the Massasauga Rattlesnake prefers gestation sites that have suitable thermal conditions for embryonic development such as open canopy areas and places to hide from predators (COSEWIC, 2012). Gestation sites at Killarney Provincial Park are usually located on rock-barren habitats and consist of large perched table rocks, with sufficient cover such as bushes, grasses and flat rocks (COSEWIC, 2012). Along the section of the Route B Transmission Line study area that was surveyed, the percentage of tree and shrub cover ranged from 0-75 percent (refer to **Appendix A**). Habitats and surrounding areas included rock barrens, fields, scrub meadows, marshes, beaver ponds, hummocks, swamps and fens. Several types of cover were also recorded by Stantec, including rock piles, stumps, rock crevices and brush piles. Two (2) Midland Painted Turtles and one (1) Blanding's Turtle were incidentally observed during these surveys along Highway 69.

### 3.2.2.3 Massasauga Rattlesnake Hibernacula Habitat Survey

Stantec conducted Massasauga Rattlesnake hibernacula habitat surveys on the northern section of the existing 500 kV HONI system on August 1, 2013 under appropriate weather conditions for the survey. All of the potential Massasauga Rattlesnake hibernacula habitats identified in the field notes are now located outside of the Route B Transmission Line study area. For this reason, these results are not presented here.

### 3.2.2.4 Turtle Nesting and Basking Surveys

Based on the field data provided, Stantec did not conduct turtle nesting and / or basking surveys in the Route B Transmission Line study area.

## 3.3 Important Observations

Locations of important reptile observations were recorded by Stantec and provided to AECOM in an Excel file entitled “*Significant Species Observations.xlsx*” and accompanying field notes in the document entitled

“60824\_Reptile.pdf” (refer to **Appendix A**). UTM co-ordinates for most of these observations were provided by Stantec and mapped by AECOM to determine which locations fall within the Route B Transmission Line study area (**Figure 3-2**). The important reptile observations that are located within the Route B Transmission Line study area were analyzed by AECOM and are discussed in further detail below.

Based on the field notes provided, important reptile observations were recorded along the Route B Transmission Line study area between May 23 and August 14, 2013 (refer to **Table C-3** in **Appendix C**). These appear to be opportunistic observations that were not part of targeted surveys. **Table 3-3** below provides a summary of the important reptile species observed along the Route B Transmission Line study area, based on the field notes provided (refer to **Tables C-2 and C-3** in **Appendix C**). The total numbers of individuals observed in **Table 3-5** include the records described in **Section 3.2.2.1** of this report. The locations of these important species observations are shown on **Figure 3-2**.

**Table 3-4: Summary of Important Reptile Observations**

Species Observed	Number of Individuals Observed	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>
<b>Blanding's Turtle</b> ( <i>Emydoidea blandingii</i> )	15	Threatened	Threatened (Schedule 1)	S4
<b>Massasauga Rattlesnake</b> ( <i>Sistrurus catenatus</i> )	1	Threatened	Threatened (Schedule 1)	S3
<b>Five-lined Skink</b> ( <i>Plestiodon fasciatus</i> )	1	Special Concern	Special Concern (Schedule 1)	S3
<b>Snapping Turtle</b> ( <i>Chelydra serpentina</i> )	22	Special Concern	Special Concern (Schedule 1)	S3

Notes: 1. **ESA Status:** The Endangered Species Act 2007 (ESA) protects Species at Risk (Threatened and Endangered) at a provincial level.

2. **SARA Status:** The Species at Risk Act (SARA) protects Species at Risk (Threatened and Endangered) at a federal level.

3. **S-rank:** The natural heritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follows:

S3 Rare to uncommon in Ontario; usually between 20 and 100 occurrences in the province; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances. Most species with an S3 rank are assigned to the watch list, unless they have a relatively high global rank.

S4 Common and apparently secure in Ontario; usually with more than 100 occurrences in the province.

A total of 15 Blanding's Turtle were observed during 2013 surveys in the Route B Transmission Line study area (refer to **Figure 3-2**). Observations were mostly in the northern portion of the Route B Transmission Line study area.

One (1) Eastern Massasauga Rattlesnake was observed during 2013 surveys in the Route B Transmission Line study area (refer to **Figure 3-2**). One individual was observed in the southern portion of the Route B Transmission Line study area near Round Lake Provincial Park.

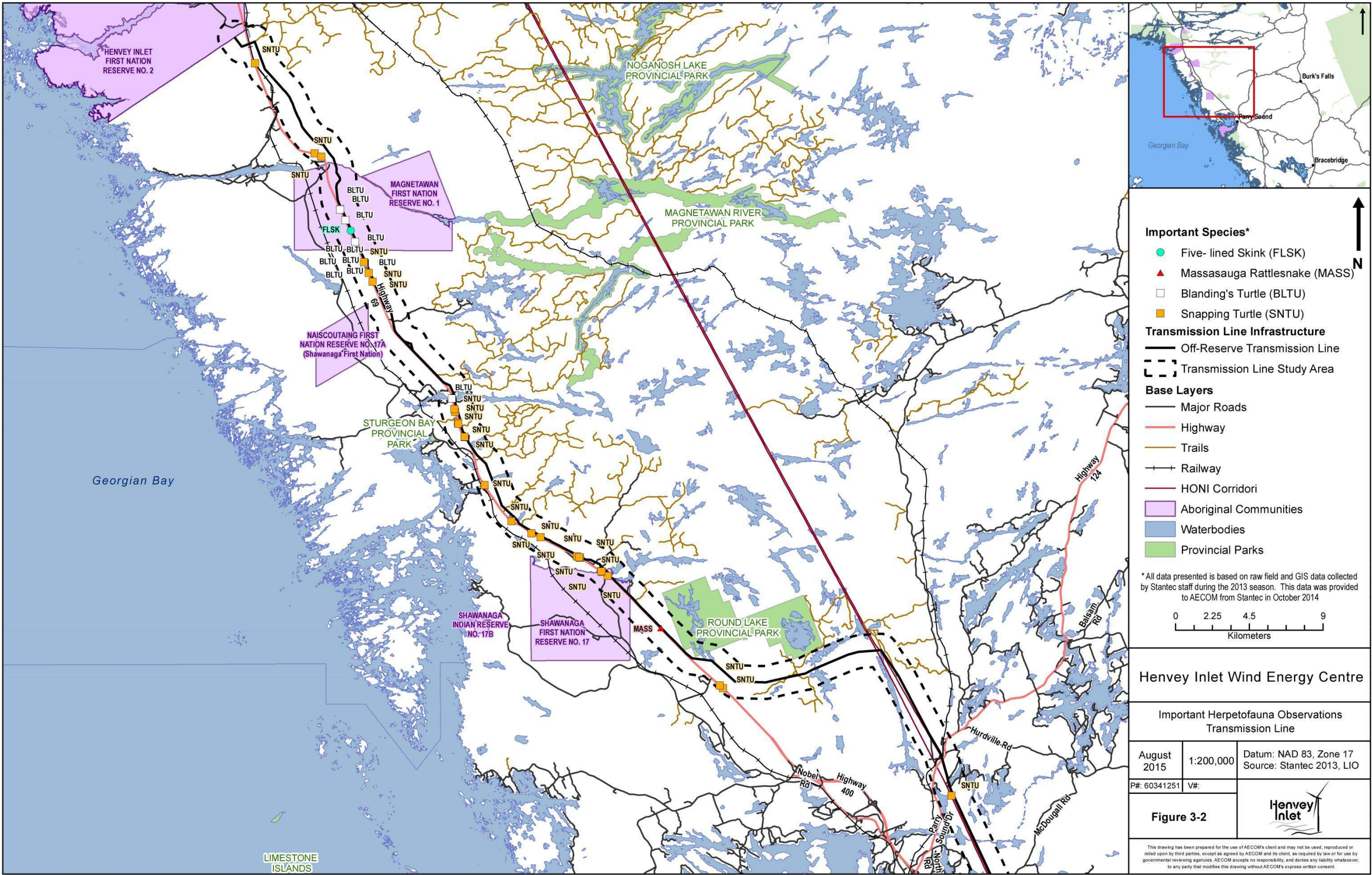
One (1) Five-lined Skink was observed during 2013 surveys in the Route B Transmission Line study area (refer to **Figure 3-2**). The individual was observed in the northern portion of the Route B Transmission Line study area.

A total of 22 Snapping Turtles were observed during 2013 surveys in the Route B Transmission Line study area (refer to **Figure 3-2**). Observations of this species were widespread across the study area.

In addition, three (3) predated turtle nests were observed in the Route B Transmission Line study area. Based on notes provided in the excel file entitled “Significant Species Observations.xlsx” the predated turtle nests were those of Snapping Turtle and other turtle species. These nests are not included in the count of important reptile observations in **Table 3-5** or in **Figure 3-2**.



Figure 3-2: Important Herpetofauna Observations





## 4. Summary

Stantec conducted the following herpetological surveys in 2013 along the Route B Transmission Line study area:

- Amphibian calling surveys were completed on April 18 and May 1 in 2013 at 15 stations along the Route B Transmission Line study area. Five (5) different amphibian species were recorded. Western Chorus Frog, a species listed as Threatened under Schedule 1 of SARA, was not recorded.
- Massasauga Rattlesnake gestation habitat surveys were completed between July 23 and August 13, 2013 along a short section of the Route B Transmission Line study area, just south of the community of Britt. The northern portion of the existing 500 kV HONI system was also surveyed for gestation sites. The majority of sites discovered were located along Highway 69, south of Britt; however, two sites were also discovered in the HONI corridor.
- No field notes were provided by Stantec for Massasauga Rattlesnake hibernacula habitat surveys along the Route B Transmission Line study area. The surveys were conducted along the northern portion of the HONI corridor on August 1, 2013; however, the habitats identified no longer lie within the study area, and are not included here.
- No field notes were provided by Stantec for turtle nesting and / or basking surveys. It is assumed that these surveys were not completed in 2013. Stantec provided comments to AECOM on February 26, 2015 that confirmed this assumption.
- A total of one (1) Federal Species at Risk, Blanding's Turtle and one (1) Species of Conservation Concern, Snapping Turtle were recorded during the Reptile Habitat and Targeted Surveys. In addition to these targeted surveys, important reptile observations were made incidentally in or within the vicinity of the Route B Transmission Line study area. In total two (2) Federal Species at Risk were recorded which includes 15 Blanding's Turtle and one (1) Eastern Massasauga Rattlesnake. A total of two (2) Species of Conservation Concern were recorded including, 22 Snapping Turtle and one (1) Five-linked Skink. Additionally three (3) predated turtle nests of Snapping Turtle and other turtle species were recorded.

## 5. Assumptions and Clarification

The following are assumptions and clarifications made and / or required by AECOM based on the field notes provided by Stantec in October 2014:

- It was often difficult to decipher from the field notes which surveys were completed as part of the reptile habitat surveys and targeted species surveys as originally described in the *2013 Terrestrial Survey Work Program* (Stantec, 2013). On February 26, 2015, Stantec provided AECOM with comments that confirm the below assumptions:
  - Field notes from *60824\_Reptile.pdf* are for the reptile habitat and targeted species surveys; and
  - Field notes from *60824\_TL\_MassasaugaGestationhabitat.pdf*, *60824\_TL\_MassasaugaGestationhabitatmaps.pdf*, and *60824\_TL\_MassasaugaGestationhabitatmaps.pdf* are for the targeted species surveys.
- According to the *2013 Terrestrial Survey Work Program* (Stantec, 2013), “Potential snake or turtle habitat within the Study Area will also be identified during Ecosite surveys, beginning in May”. On February 26, 2015, Stantec provided AECOM with comments that confirmed that these surveys were not undertaken.
- It was unclear whether turtle nesting and / or basking surveys were completed by Stantec in 2013 as described in the *2013 Terrestrial Survey Work Program* (Stantec, 2013). On February 26, 2015, Stantec provided AECOM with comments that confirmed that these surveys were not undertaken.



## 6. References

Committee on the Status of Endangered Wildlife in Canada (COSEWIC), 2012:

COSEWIC assessment and status report on the Massasauga *Sistrurus catenatus* in Canada. Ottawa: Committee on the Status of Endangered Wildlife in Canada, xiii + 84 p. Available: [www.registrelep-sararegistry.gc.ca/default\\_e.cfm](http://www.registrelep-sararegistry.gc.ca/default_e.cfm)

Marsh Monitoring Program (MMP), 2000:

The Marsh Monitoring Program Quality Assurance Project Plan. Prepared for U.S. Environmental Protection Agency. Ontario: Bird Studies Canada.

Stantec Consulting Ltd., 2013:

2013 Terrestrial Survey Work Program. Prepared for Nigig Power Corp., 25 p.

# Appendix A

## Stantec 2013 Field Notes and Documentation



**Stantec**

Stantec Consulting Ltd.  
70-1 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Amphibian Call Survey Observation Form

Project Number 160960824

Project Name: Nigig

Date Apr 18, 2013

Field Personnel: B. Holden B. Miller

<b>Weather Conditions:</b>	Temp: <u>14°C - 11°C</u>	Wind: <u>W-South 3-4 South</u>	Cloud: <u>100% + some fog</u>	PPT: <u>RAIN</u>	PPT in last 24 hrs: <u>Heavy RAIN</u>
----------------------------	--------------------------	--------------------------------	-------------------------------	------------------	---------------------------------------

Visit Number:	<u>1</u>	<u>Sundown = 8:13 pm</u>	
Start Time:	<u>0845</u>	End Time:	<u>2320</u>

• **Record Start Time at Each Station**

~~171 0579053 5021512~~  
171 0578838 5021578

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

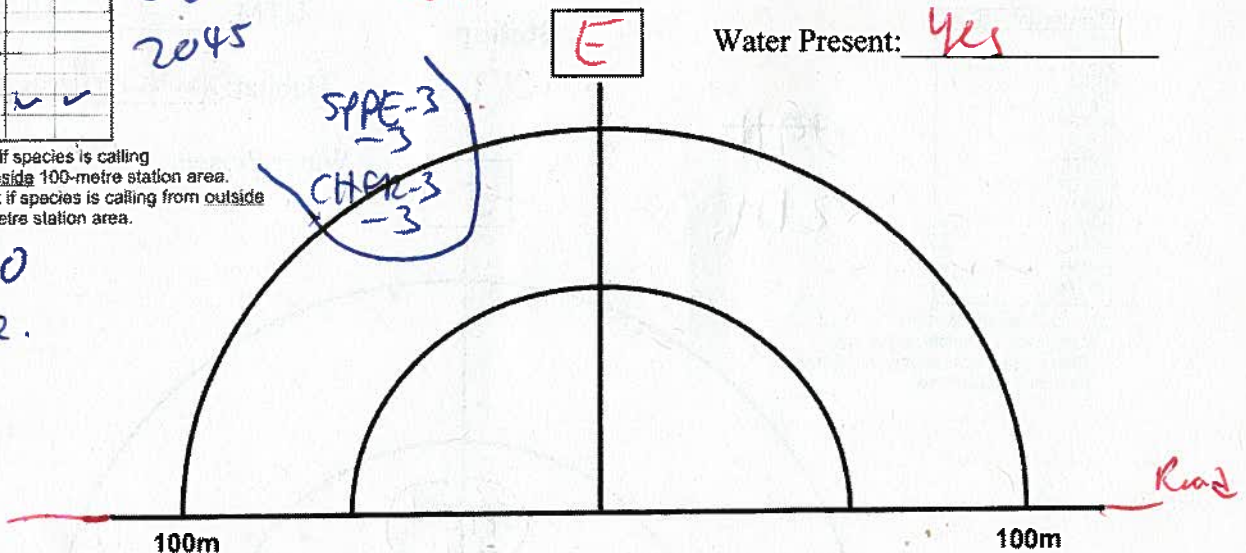
AMWO  
in circle.

Station

UTM: \_\_\_\_\_

Habitat: RAIN + Shallow water Marsh

Water Present: Yes



Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 8

REV: Mar, 09 Form 003



AMWO  
close by

17T

0576269

5024947

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR	✓	
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	✓	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
\*\* Check if species is calling from outside 100-metre station area.

2056

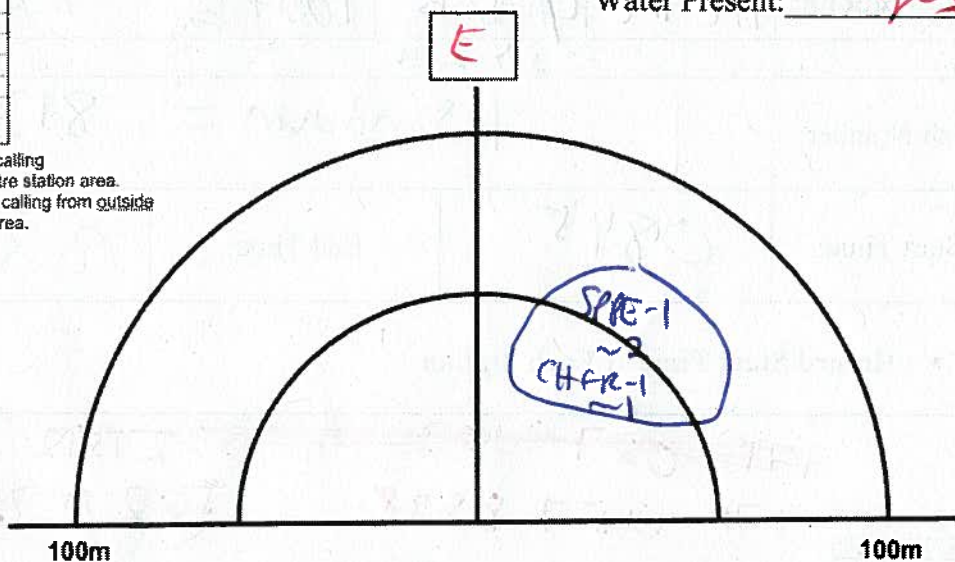
Station

0856 102

UTM:

Habitat: Cattail Marsh (shallow)

Water Present: yes



17T 0574228

5086829

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	✓	✓
WOFR		

\* Check if species is calling from inside 100-metre station area.  
\*\* Check if species is calling from outside 100-metre station area.

0911

2111

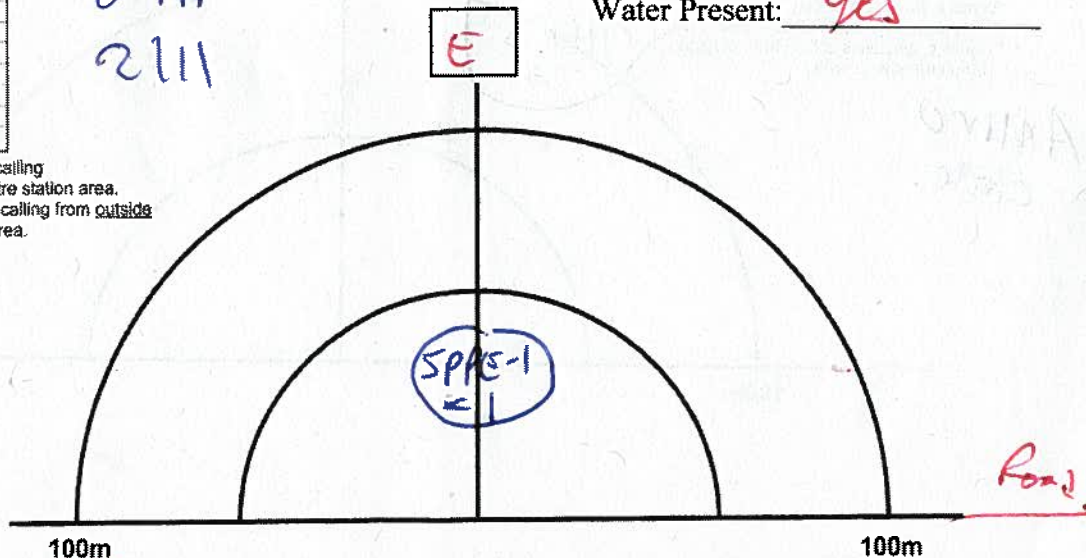
Station

103

UTM:

Habitat: Shallow Marsh / Thicket Swampy

Water Present: yes



SPPE-1

17T

0573257

5029011

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		✓
WOFR		

\* Check if species is calling from inside 100-metre station area.

\*\* Check if species is calling from outside 100-metre station area.

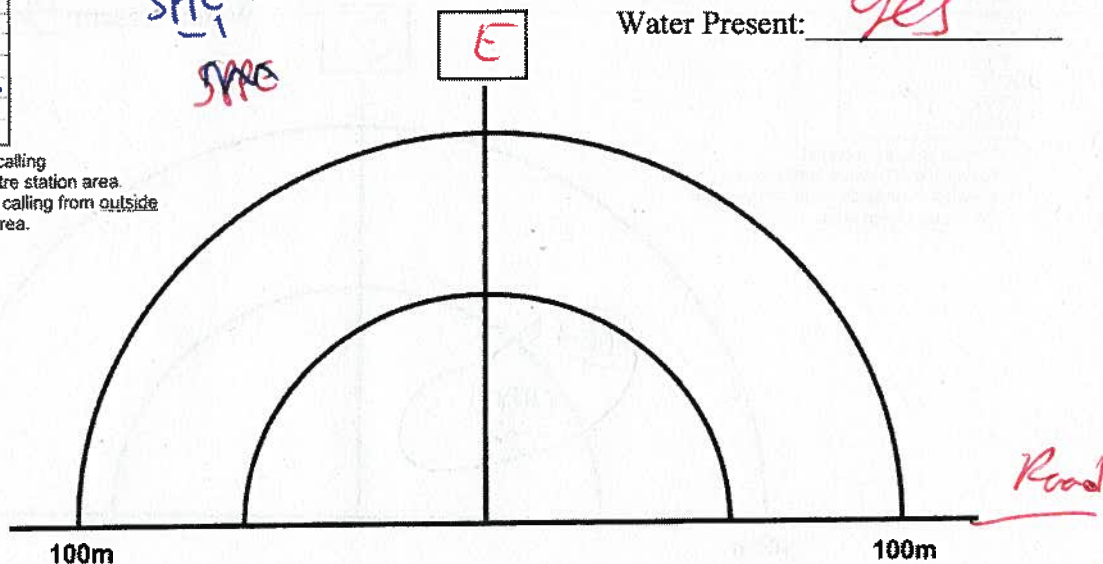
2123

@923m

Station

104

UTM: \_\_\_\_\_

Habitat: Shrub Thicket / SwampWater Present: yesSPPE-1  
SPPE

17T

0571873

5030945

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.

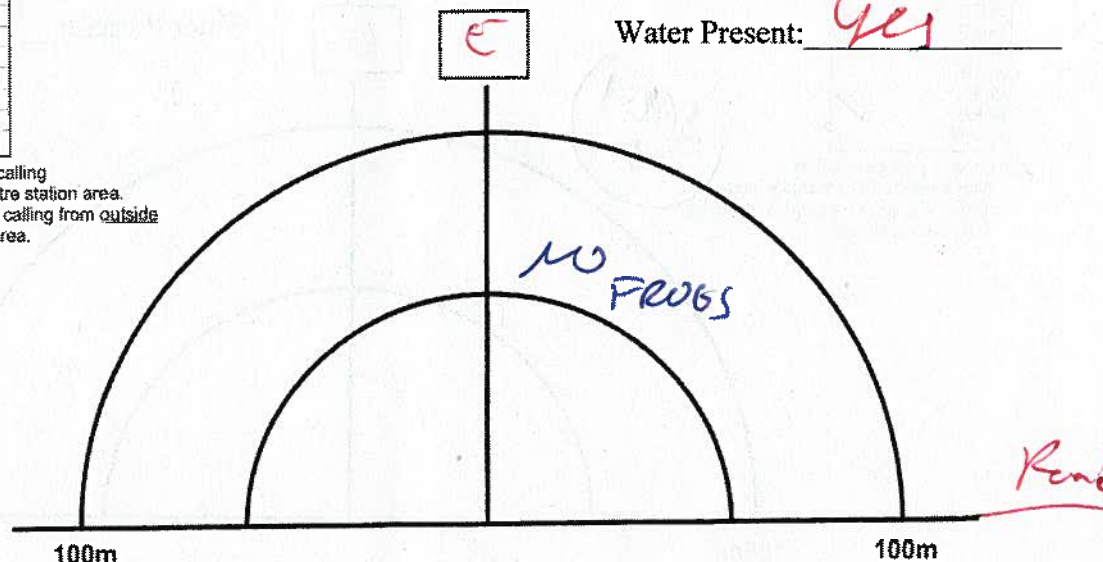
\*\* Check if species is calling from outside 100-metre station area.

2134

Station

105

UTM: \_\_\_\_\_

Habitat: Beaver PondWater Present: yes

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 3 of 8

REV: Mar, 09 Form 003



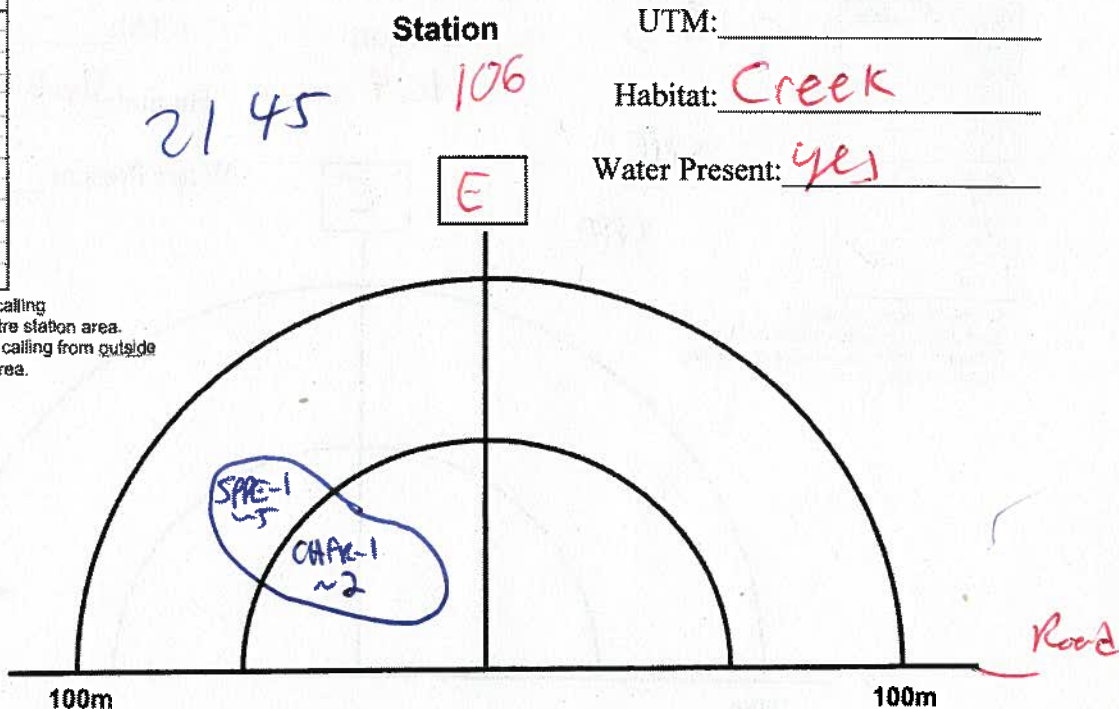
17T

0568999

5031634

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR	✓	
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	✓	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



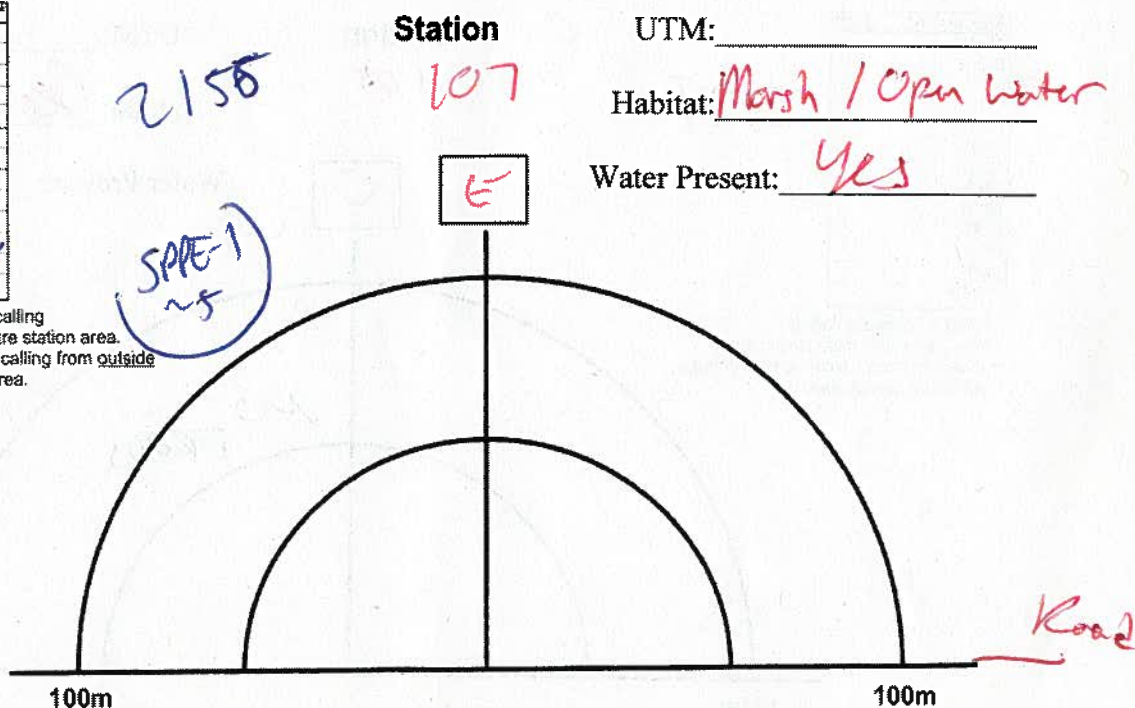
17T

0566364

5034039

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	✓	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



Signature: \_\_\_\_\_  
 (Field Personnel)

Signature: \_\_\_\_\_  
 (Project Manager)

Page 4 of 8

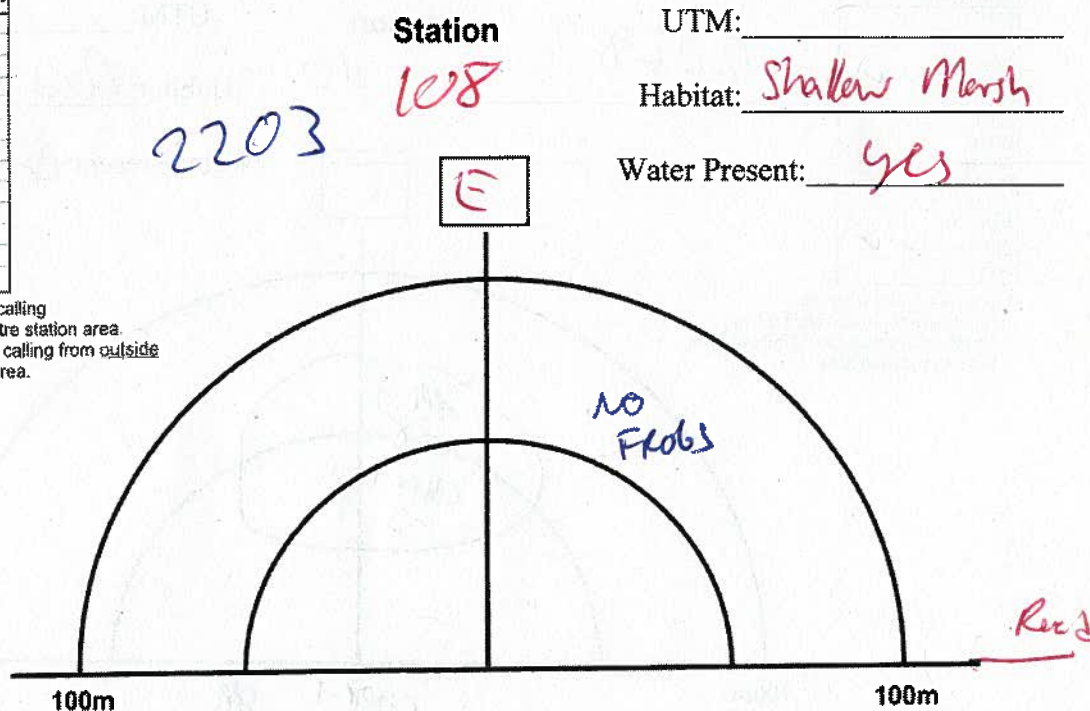
REV: Mar, 09 Form 003



17T 0564112 5036404

Species	In*	Out**
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BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

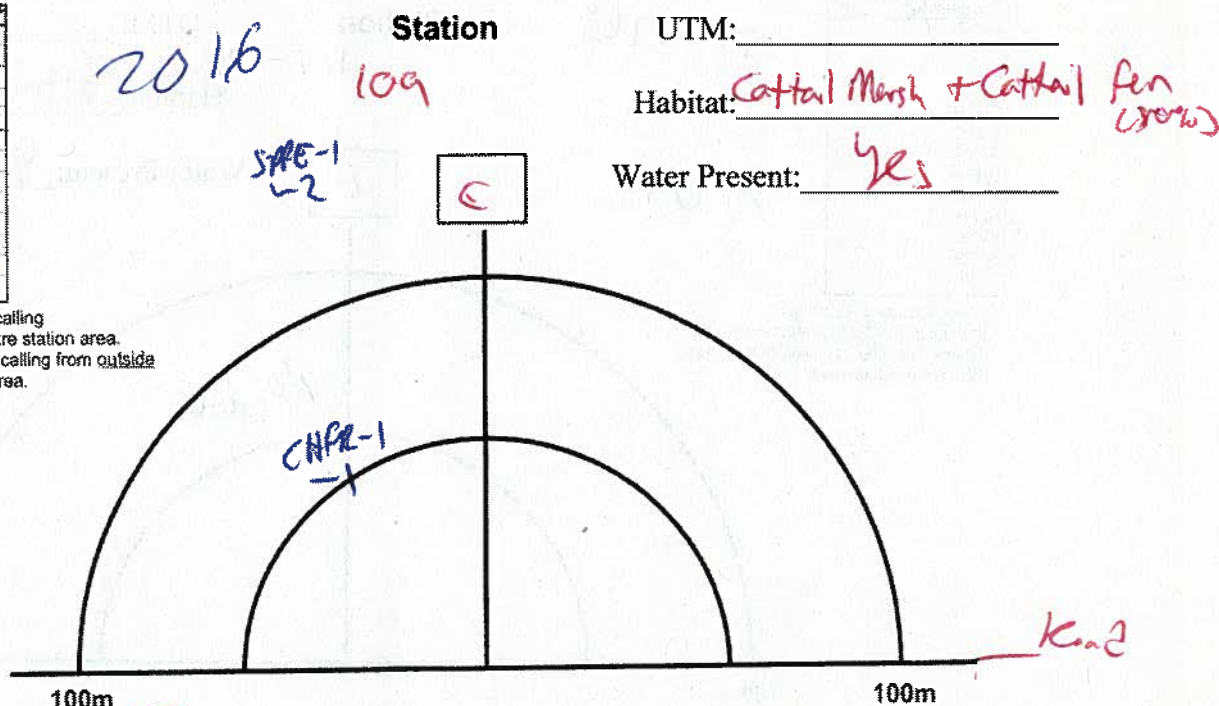
\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



17T 0563158 5037287

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR	✓	
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		✓
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Page 5 of 178 (Field Personnel)

(Project Manager)  
 REV: Mar, 09 Form 003

17T

0562085

5038239

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR	✓	✓
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	✓	✓
WOFR		

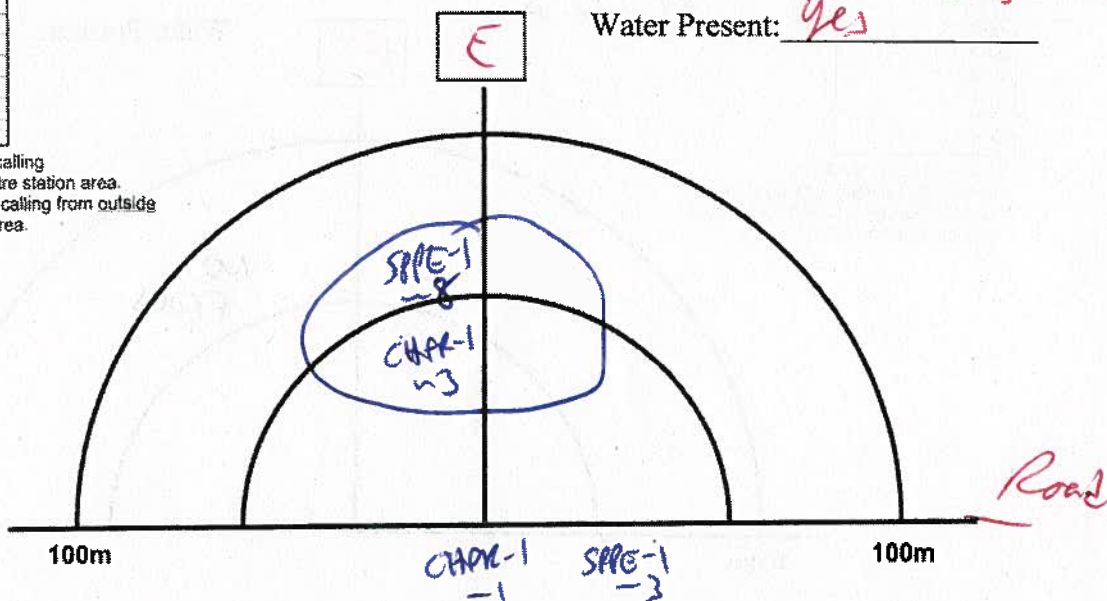
\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

2028

Station

110

UTM:

Habitat: Decid Swamp + Marsh (20%) (10%)Water Present: Yes

17T

0558573

5041768

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

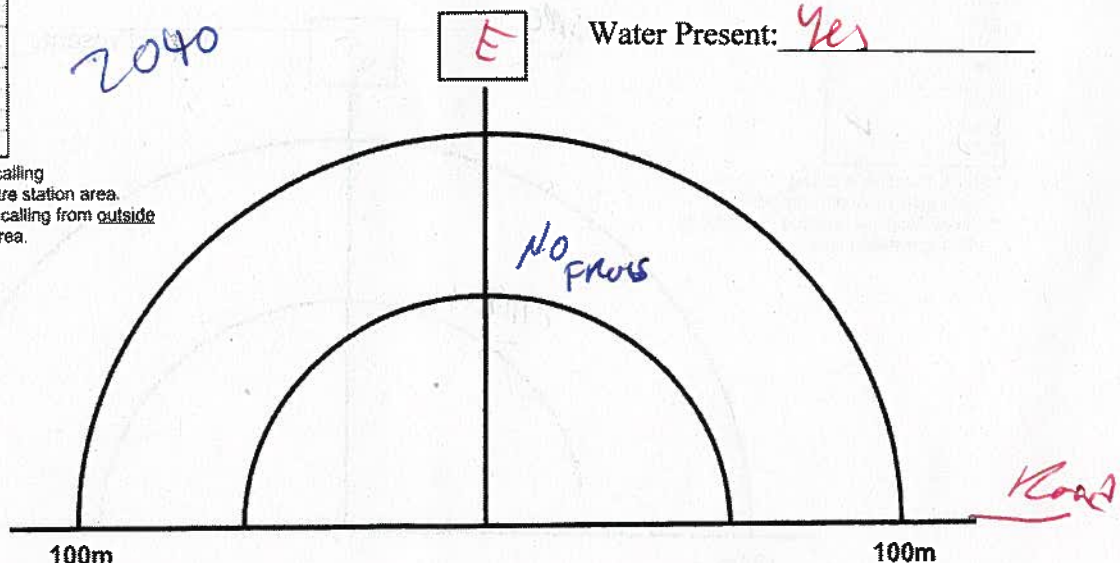
\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

2040

Station

111

UTM:

Habitat: Small Cattail Shallow MarshWater Present: Yes

Signature:

Signature:

Page 6 of 8

(Field Personnel)

(Project Manager)

REV: Mar, 09 Form 003

17T 0558092

504 2256

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

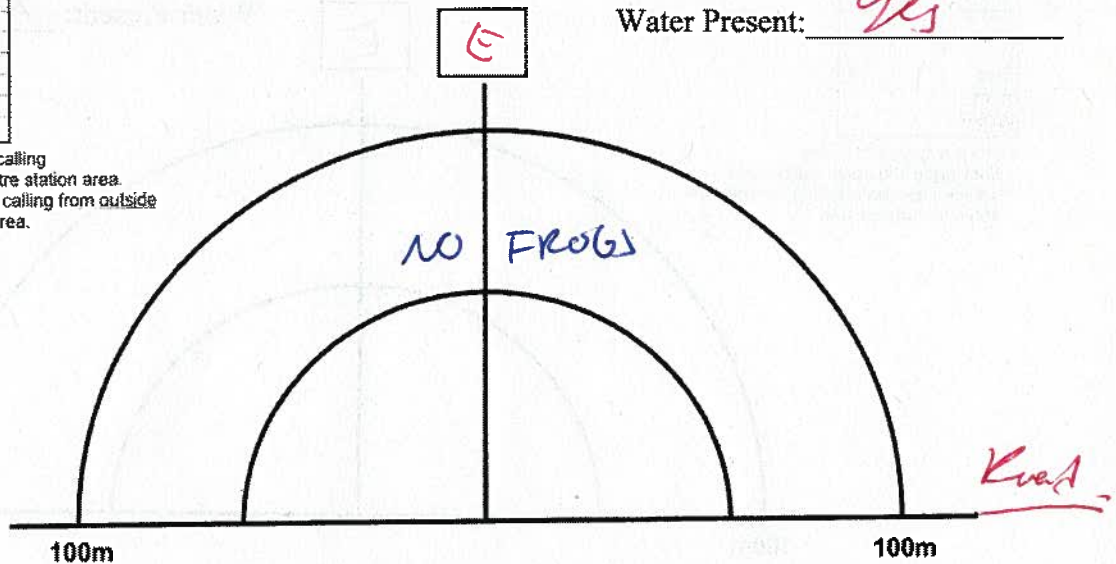
2248

Station 112

UTM: (Bever Meadow?)

Habitat: Open Water / Marsh

Water Present: yes



17T

0556795 5043588

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	✓	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

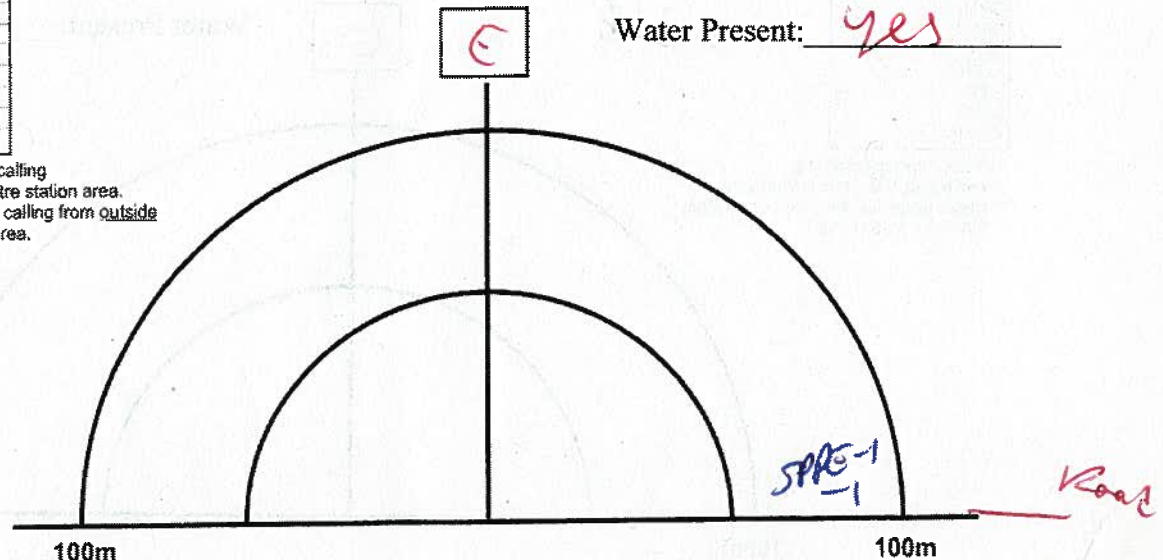
2258

Station 113

UTM: \_\_\_\_\_

Habitat: Open Water + Thicket Swamp

Water Present: yes



Signature: \_\_\_\_\_  
 (Field Personnel)

Signature: \_\_\_\_\_  
 (Project Manager)

Page 7 of 8

REV: Mar, 09 Form 003



17T

0553423

5045694

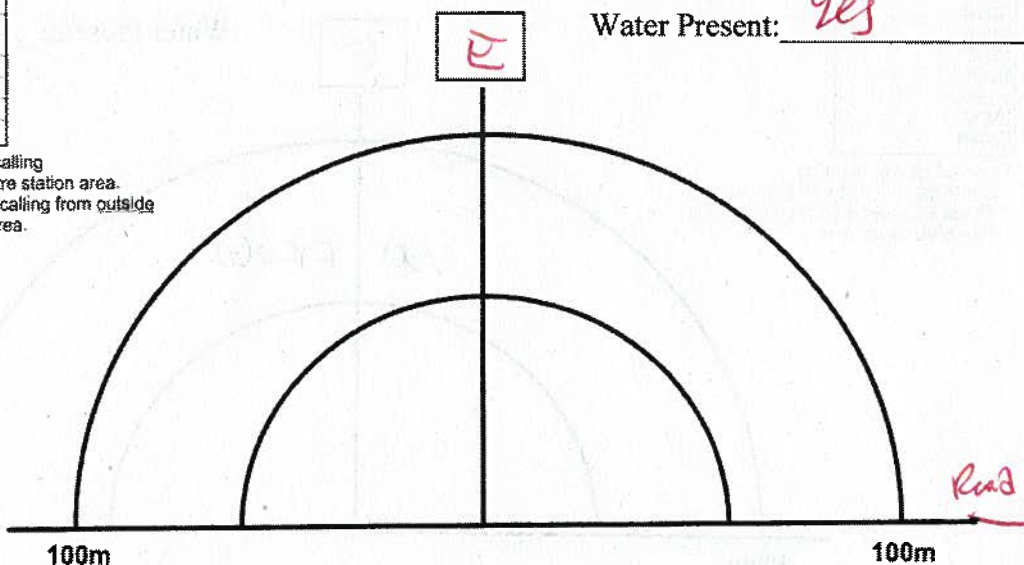
Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

Station

114

UTM:

Habitat: Open Water + MarshWater Present: yes

17T

0551936

5046452

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

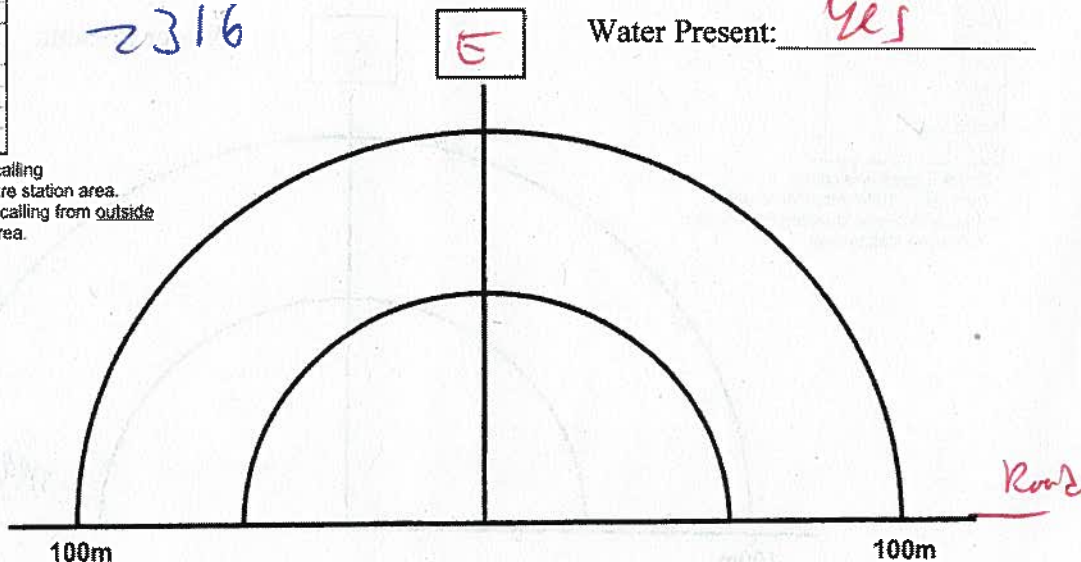
\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

Station

115

UTM:

Habitat:

Water Present: yes

Signature:

(Field Personnel)

Signature:

(Project Manager)

Page

8

of

12

REV: Mar, 09

Form 003



**Stantec**

Stantec Consulting Ltd.  
70-1 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Amphibian Call Survey Observation Form

Project Number 160960824

Project Name: Henry / Nigig

Date Apr. 30 / 13

Field Personnel: N. Burnett, S. Richter

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:
	<u>15°C</u>	<u>2-3 knots</u>	<u>100% - cirrus</u>	<u>None</u>	<u>4-5mm overnight / morning</u>

Visit Number:			
Start Time:	<u>11:10am</u>	End Time:	<u>11:13am</u>

- Record Start Time at Each Station

Species In*	Out**
AMTO	
BCFR	
BULL	
CHFR	
CGTR	
FOTO	
GRTR	
GRFR	
MIFR	
NLFR	
PIFR	
SPPE	
WOFR	

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

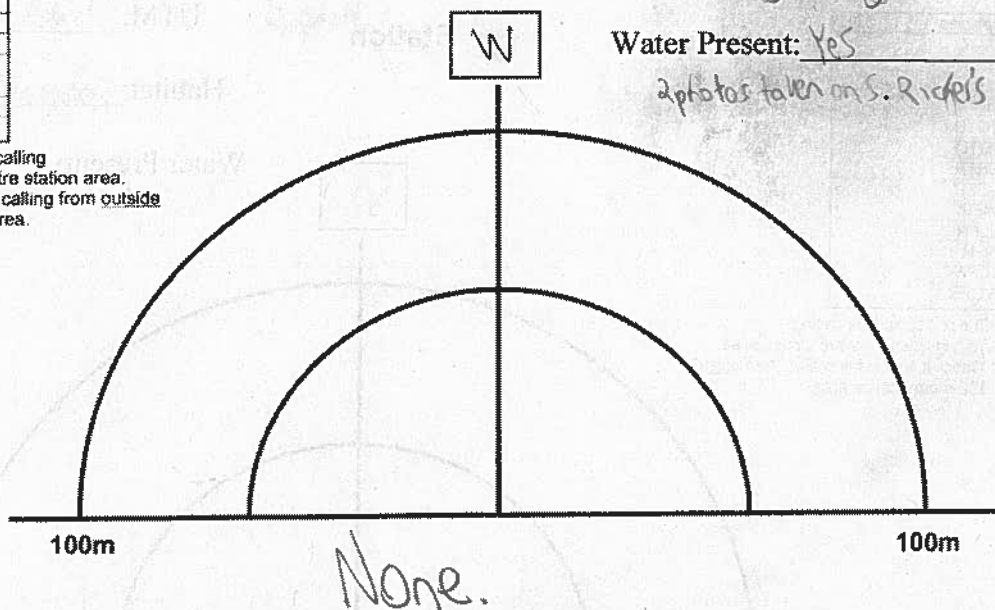
Station Amp. 1

UTM: 17T 522832 5075579

Habitat: Bay + Sedge wetland

Water Present: Yes

2 photos taken on S. Richter's camera



Quality Control: This form is complete ☒ & legible ☒.

Signature: [Signature]  
(Field Personnel)

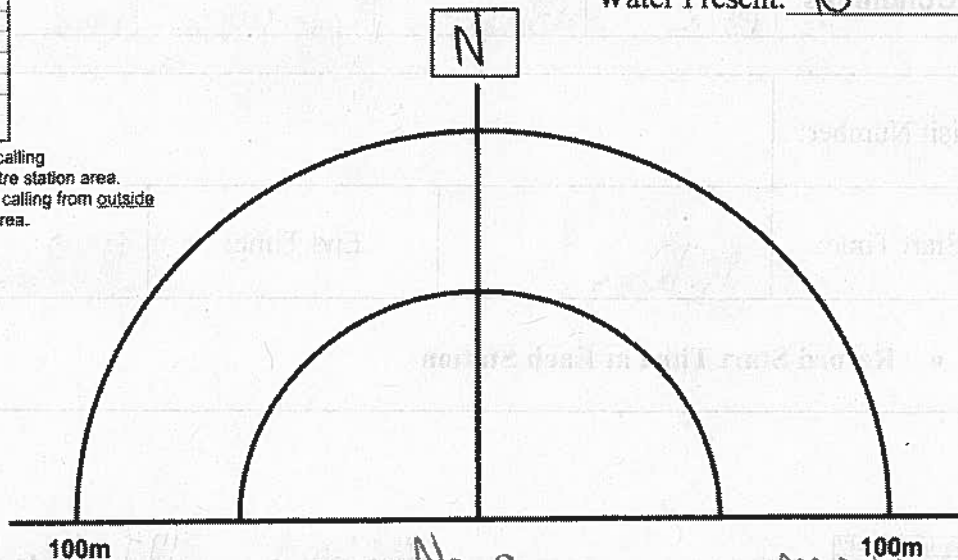
Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 4

REV: Mar, 09 Form 003

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



Apr. 30/13

11:19am - 11:23am

UTM: 523016, 5075247

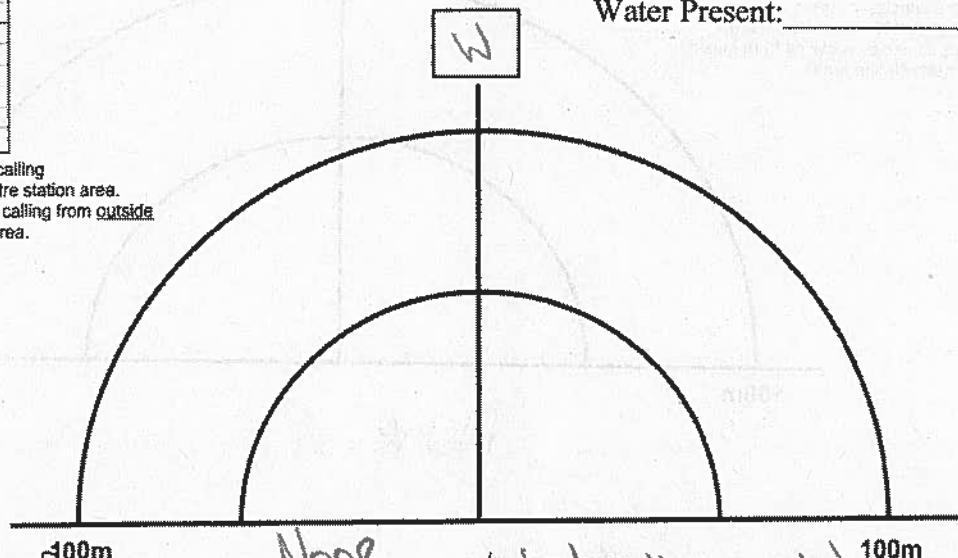
Station Amp. 2

Habitat: Bag and sedge pond

Water Present: Yes

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



Station Amp. 3

UTM: 522773, 5075050

Habitat: sedge-beaker pond

Water Present: \_\_\_\_\_

None.

hydrologically connected to pond 4.



Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		-10
WOFR		

- \* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

Station Amp 4

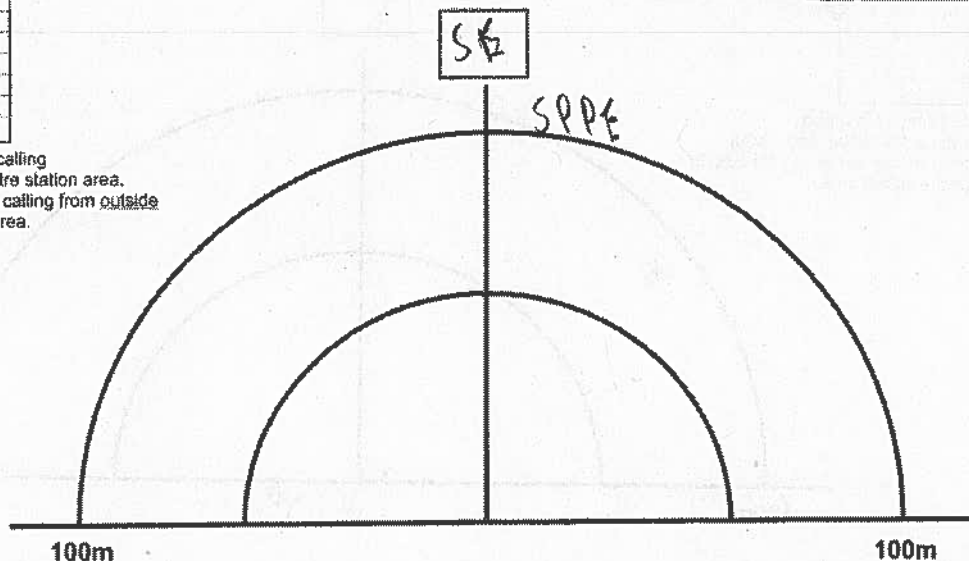
Apr. 30/13

Start Time: 12:21-12:25

UTM: 522603, 5074832

Habitat: Brewer Pond

Water Present: Yes



Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		-6-8
WOFR		

- \* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

Station Amp 5

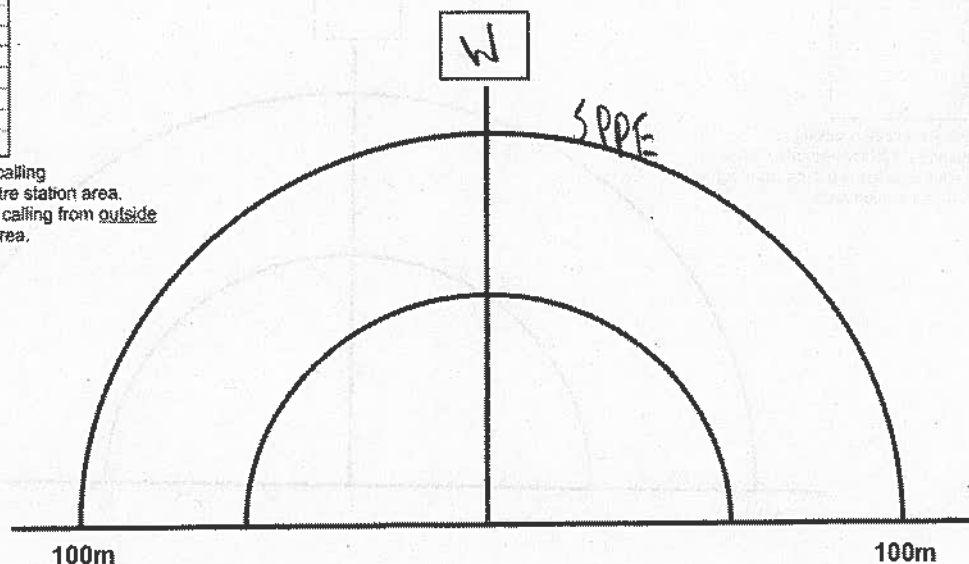
Apr. 30/13

Start Time: 12:30-12:34

UTM: 522514, 5074861

Habitat: Brewer Pond

Water Present: Yes



Quality Control: This form is complete (✓) & legible (✓).

Signature: [Signature]  
 (Field Personnel)

Signature: \_\_\_\_\_  
 (Project Manager)

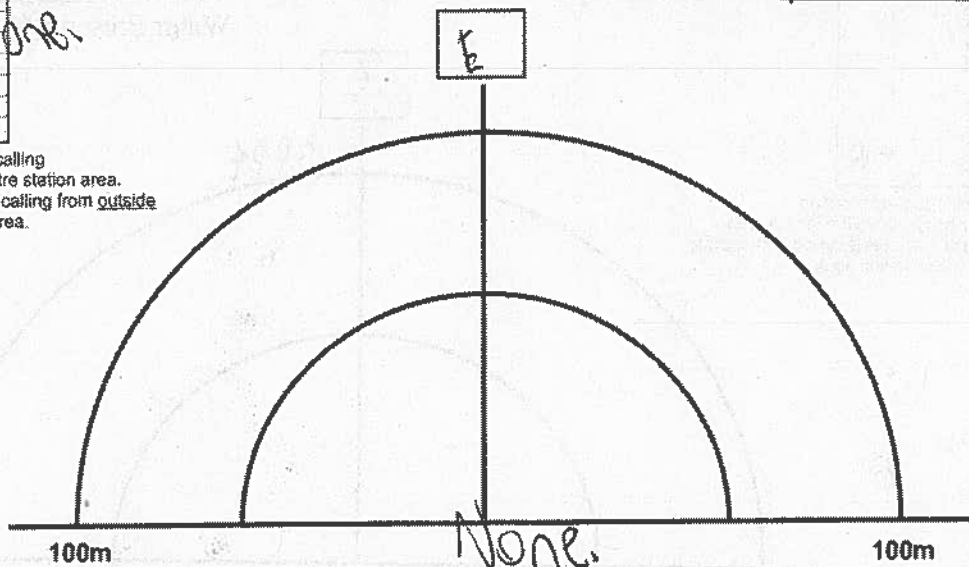
Page 3 of 4

REV: Mar, 09 Form 003

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

None.



Station

Amp: 6

Apr, 30/13

Start Time: 13:18 - 13:20

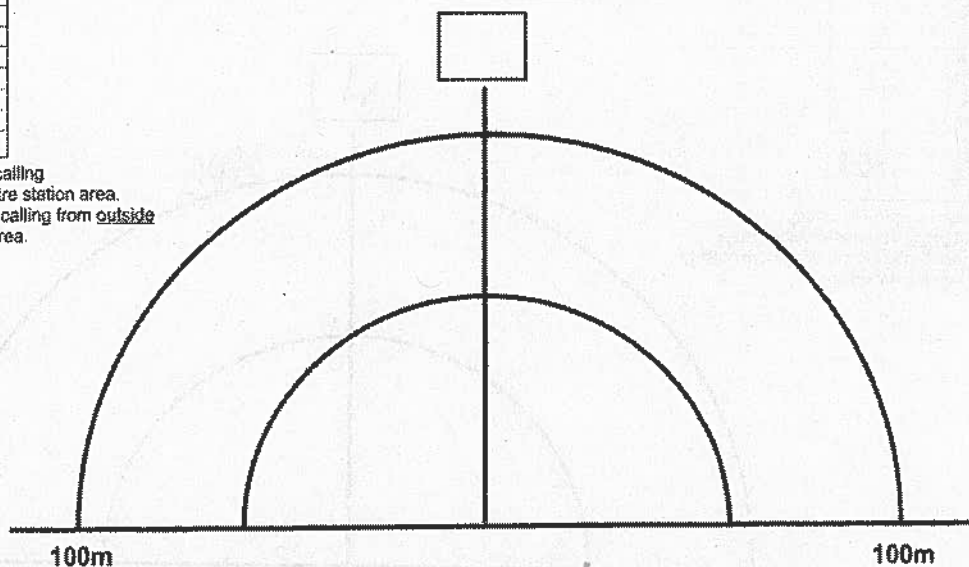
UTM: 522353, 5075151

Habitat: herb forest

Water Present: Yes

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



Station

Start Time: \_\_\_\_\_

UTM: \_\_\_\_\_

Habitat: \_\_\_\_\_

Water Present: \_\_\_\_\_

Quality Control: This form is complete (✓) & legible (✓).

Signature: [Signature]  
 (Field Personnel)

Signature: \_\_\_\_\_  
 (Project Manager)

Page 4 of 4

REV: Mar, 09 Form 003

17T

0550224

5047575

Wed May 1/13

11:19

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR	1-1	
PIFR		
SPPE	1-4	3
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

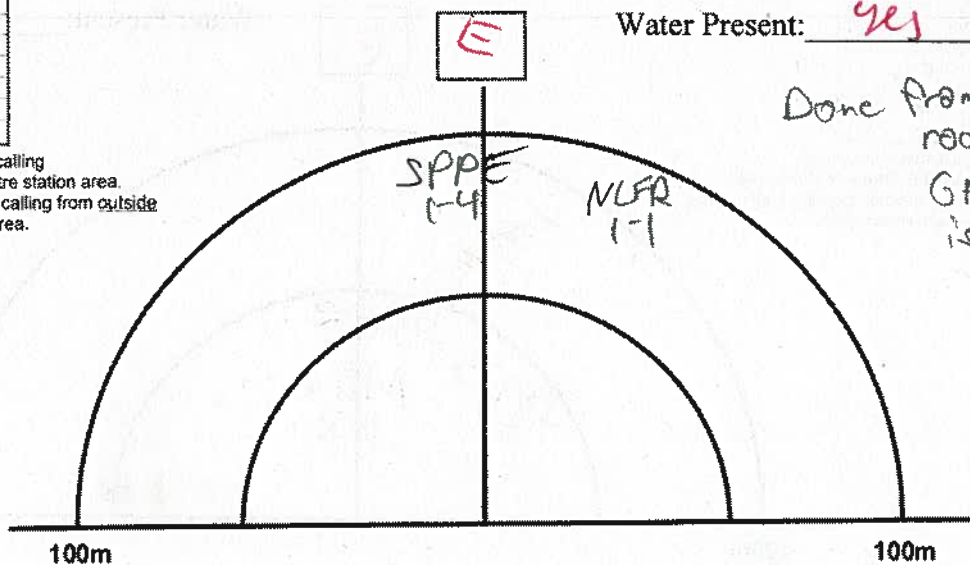
Station

116

UTM: \_\_\_\_\_

Habitat: Lake + Cattail fringe + IslandWater Present: yes

Done from roadside;  
 GAS says point is 50-60m from road?



17T

0548114  
 5051496

Station

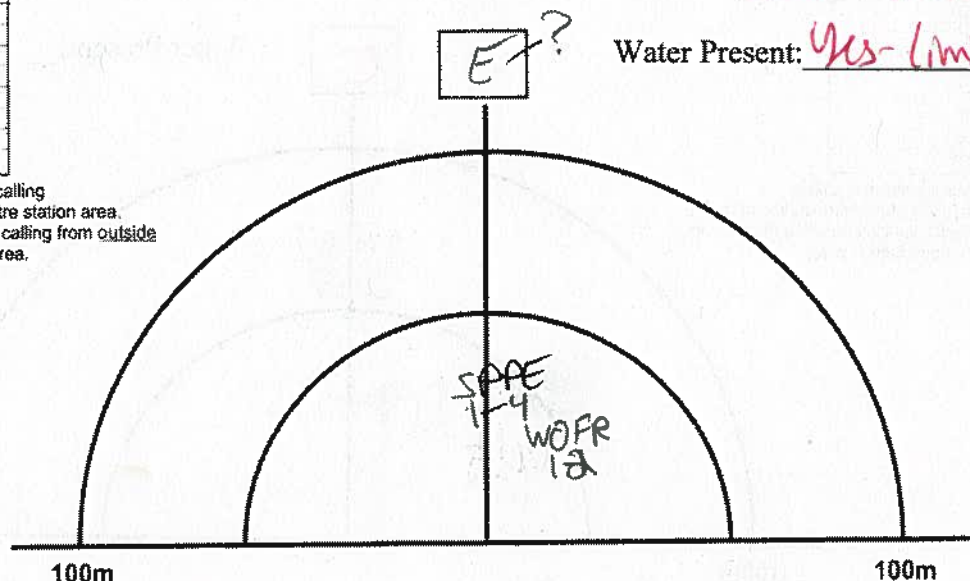
117

UTM: \_\_\_\_\_

Habitat: Black Spruce SwampWater Present: Yes-Limited

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	1-4	
WOFR		2

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 6

REV: Mar, 09 Form 003



177

0547552

5052462

10:59pm

Species	In*	Out**
AMTO	3	
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR	1-2	
PIFR		
SPPE	3	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

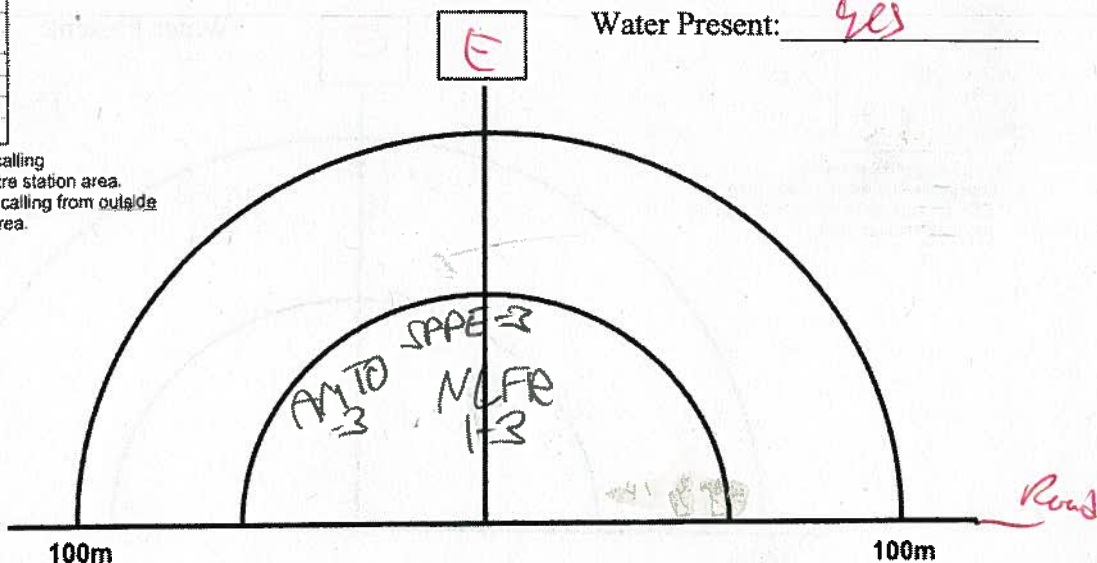
Station

118

UTM:

Habitat: Cattail Marsh Open Water

Water Present:

yes

177 0546987

5054033

Species	In*	Out**
AMTO	2-7	
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR	1-2	
PIFR		
SPPE	3	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

Station

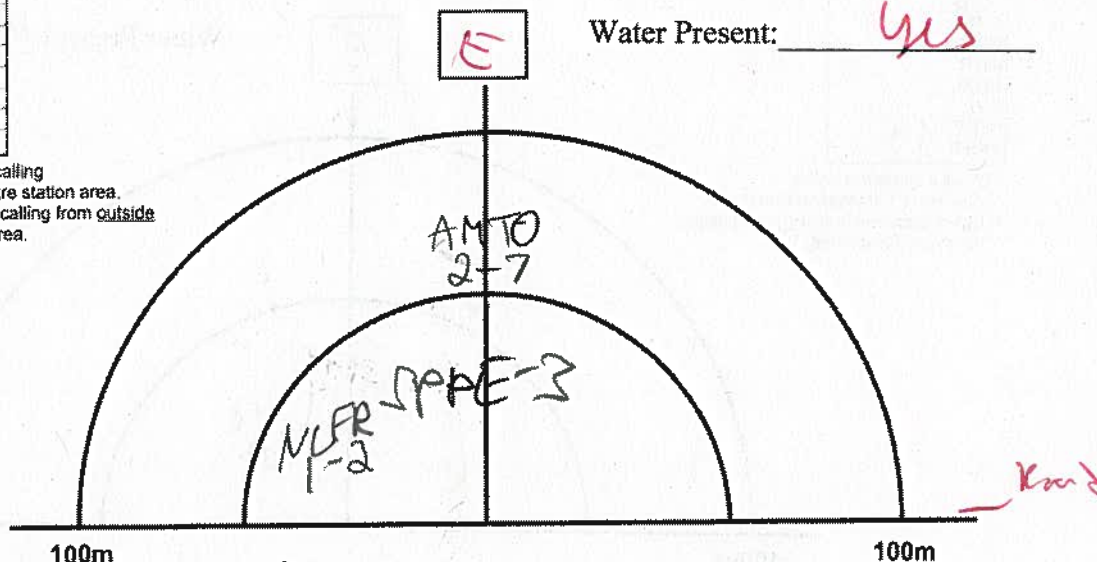
119

UTM:

10:51pm

Habitat: Shallow Marsh

Water Present:

yes

Signature:

Andri  
(Field Personnel)

Signature:

(Project Manager)

Page 2 of 6

REV: Mar, 09 Form 003

17T 0545661

5056374

May 1/13

Species	In*	Out**
AMTO	1-4	
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	2-6	3
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

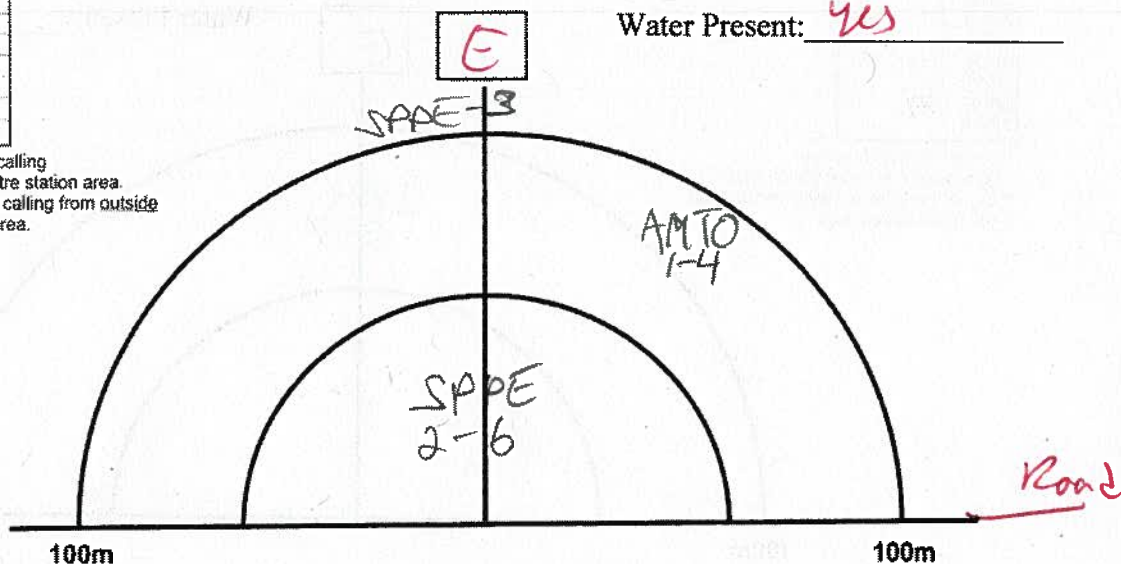
Station

120

UTM: 10:40 pm

Habitat: Barrens 1

Water Present: yes



Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR	1-1	
GRFR		
MIFR		
NLFR	1-4	
PIFR		
SPPE	3	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

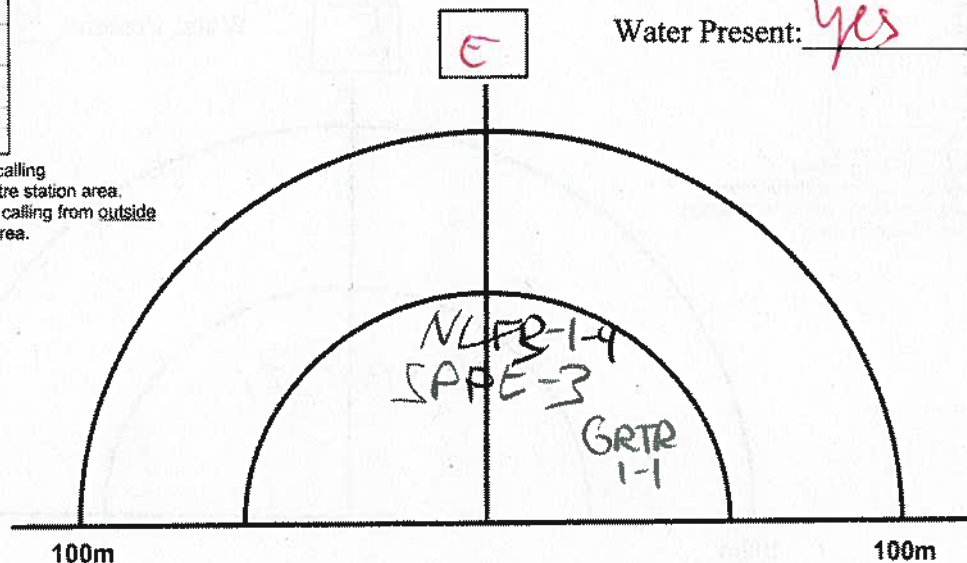

Station

121

UTM: 10:31

Habitat: Creek + Shallow Marsh

Water Present: yes

Signature:  (Field Personnel)

Signature: (Project Manager)

Page 3 of 6

REV: Mar, 09 Form 003

177 0541941  
5061934

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR	1-1	
PIFR		
SPPE	2-7	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
\*\* Check if species is calling from outside 100-metre station area.

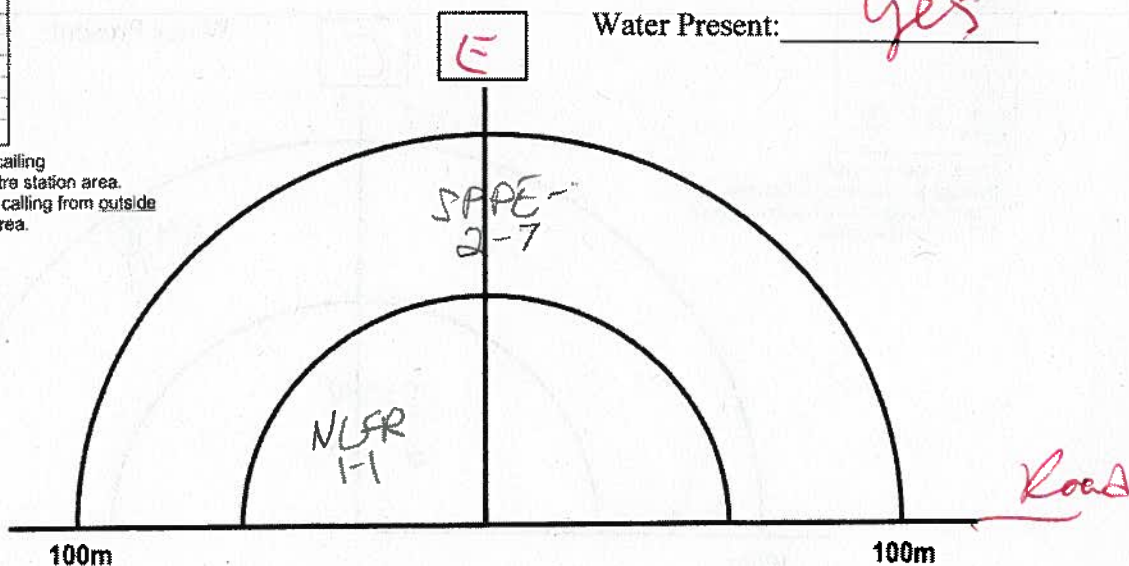
Station

122

UTM: 10:19

Habitat: Sedge Meadow

Water Present: yes



177 0541068  
5063943

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	3	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
\*\* Check if species is calling from outside 100-metre station area.

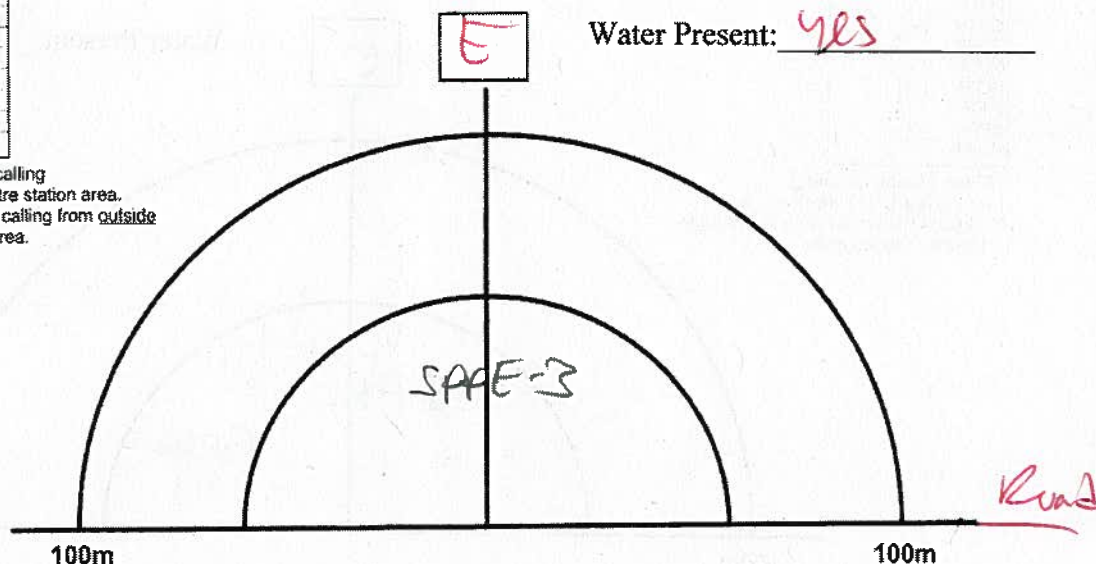
Station

123

UTM: 10:12

Habitat: SPB Wetlands

Water Present: yes



Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)



177 0539904  
5066503

Wed. May 11/13

10:00pm

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR	1-2	
PIFR		
SPPE	3	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
\*\* Check if species is calling from outside 100-metre station area.

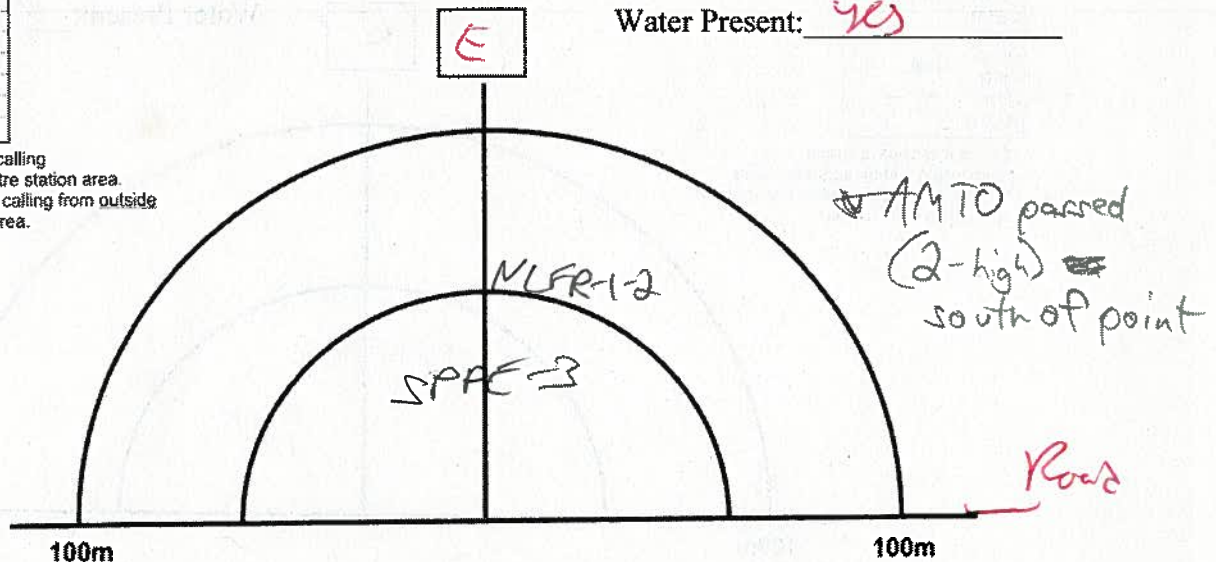
Station

124

UTM: \_\_\_\_\_

Habitat: Large SPB Wetlands

Water Present: yes



177

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR	1-1	
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	3	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
\*\* Check if species is calling from outside 100-metre station area.

Station

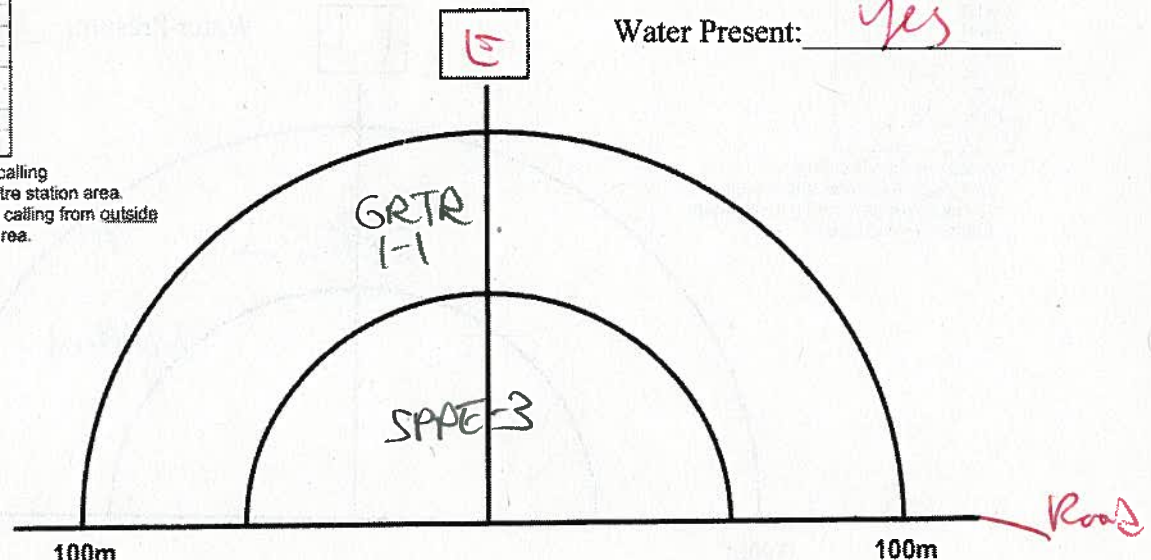
125

time: 9:07pm

UTM: \_\_\_\_\_

Habitat: SPB Wetlands (small)

Water Present: yes



Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 5 of 6

REV: Mar, 09 Form 003

17T 0533531 5079741

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR	1-2	
GRFR		
MIFR		
NLFR	1-2	
PIFR		
SPPE	3	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

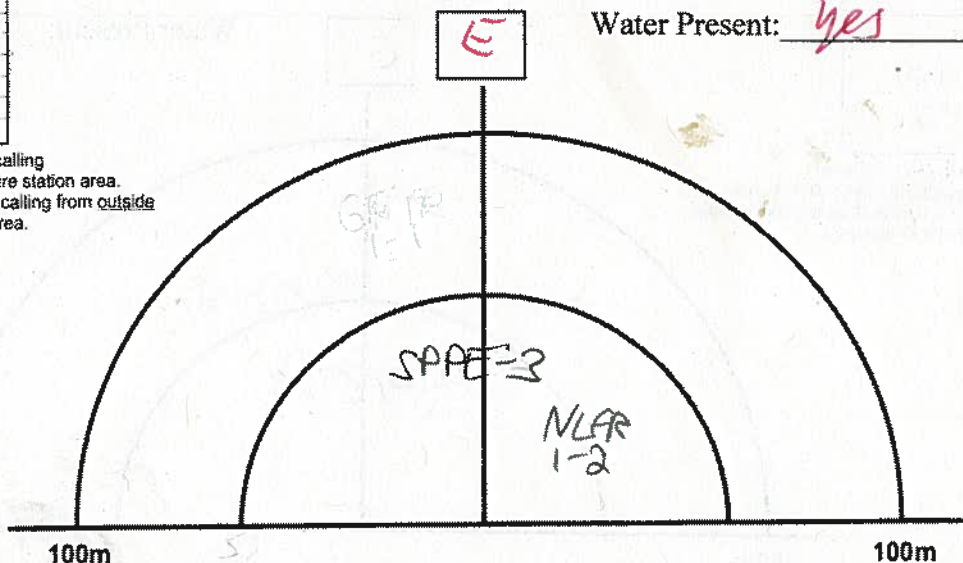
Time 9:27pm

UTM: \_\_\_\_\_

Habitat: ~~Marsh~~ Marsh

Water Present: yes

Station 126



17T

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR	1-1	
PIFR		
SPPE	3	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

0533417  
5080468

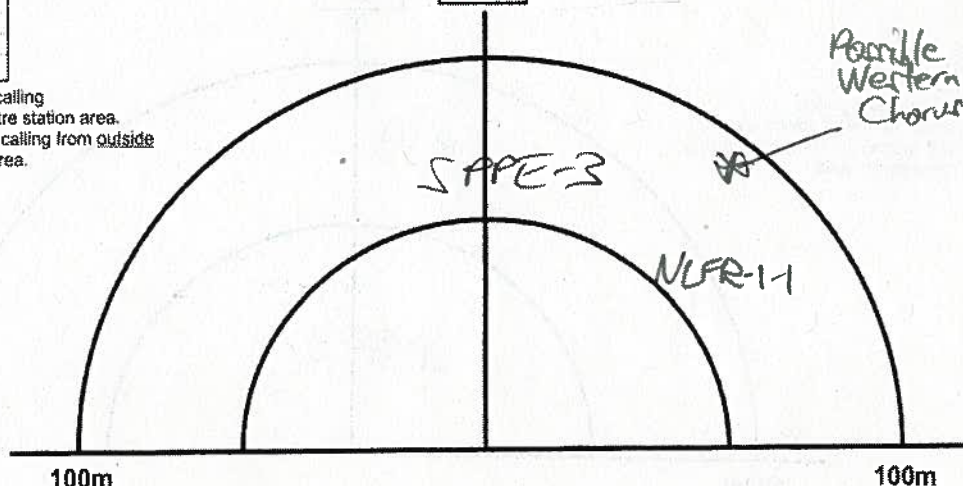
Station 127

UTM: 9:38pm

Habitat: open water (inlet) + shore

Water Present: yes

W



Signature: \_\_\_\_\_  
 (Field Personnel)

Signature: \_\_\_\_\_  
 (Project Manager)

Thurs May 2/2013

Temp 27  
Wind Beauf 2  
Cloud 25%

AMP07  
Station

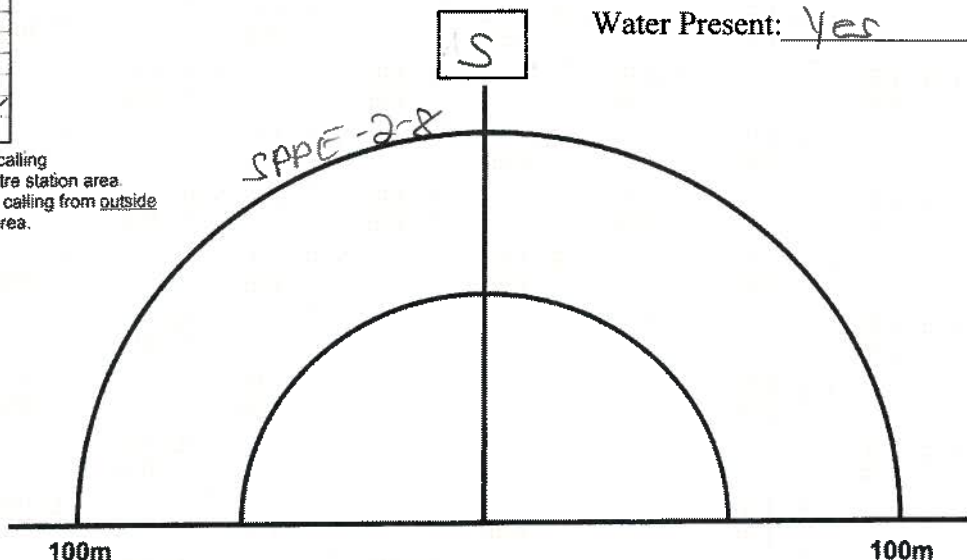
17T 2:58pm  
UTM: 533628, 5072561

Habitat: Channelized Swamp

Water Present: Yes

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		2-8
WOFR		

\* Check if species is calling from inside 100-metre station area.  
\*\* Check if species is calling from outside 100-metre station area.



Species	In*	Out**
AMTO		1-4
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		1-1
PIFR		
SPPE		1-5
WOFR		

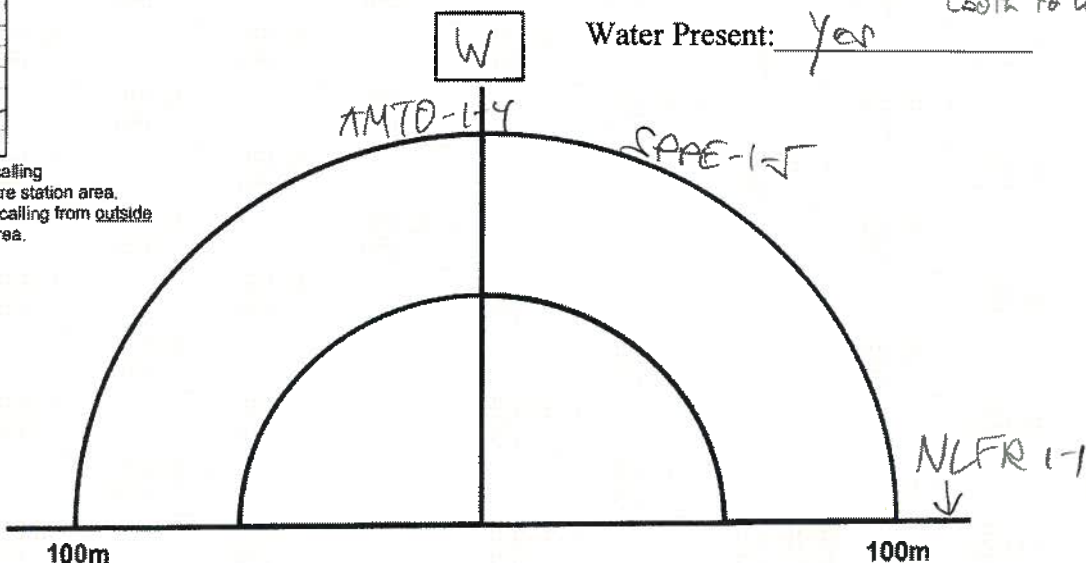
\* Check if species is calling from inside 100-metre station area.  
\*\* Check if species is calling from outside 100-metre station area.

AMP08  
Station

4:12pm  
17T  
UTM: 532329 5078617

Habitat: Excavated & Naturalized ponds  
(both to W & E)

Water Present: Yes



Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 2

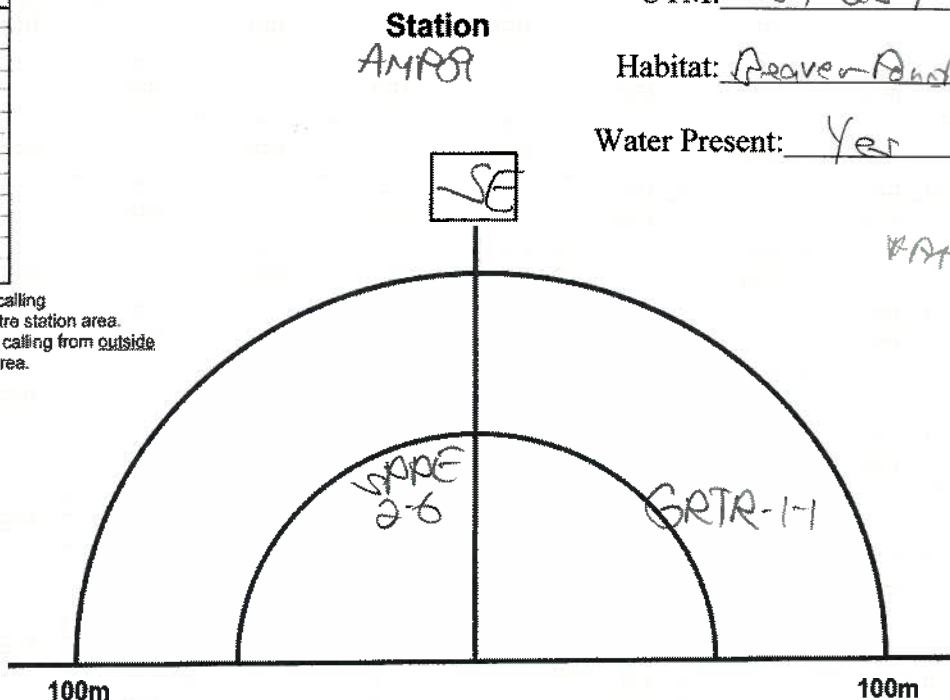
REV: Mar, 09 Form 003



Thurs May 2/13

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR	1-1	
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	2-6	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



4:25pm  
 UTM: 531224 5078809

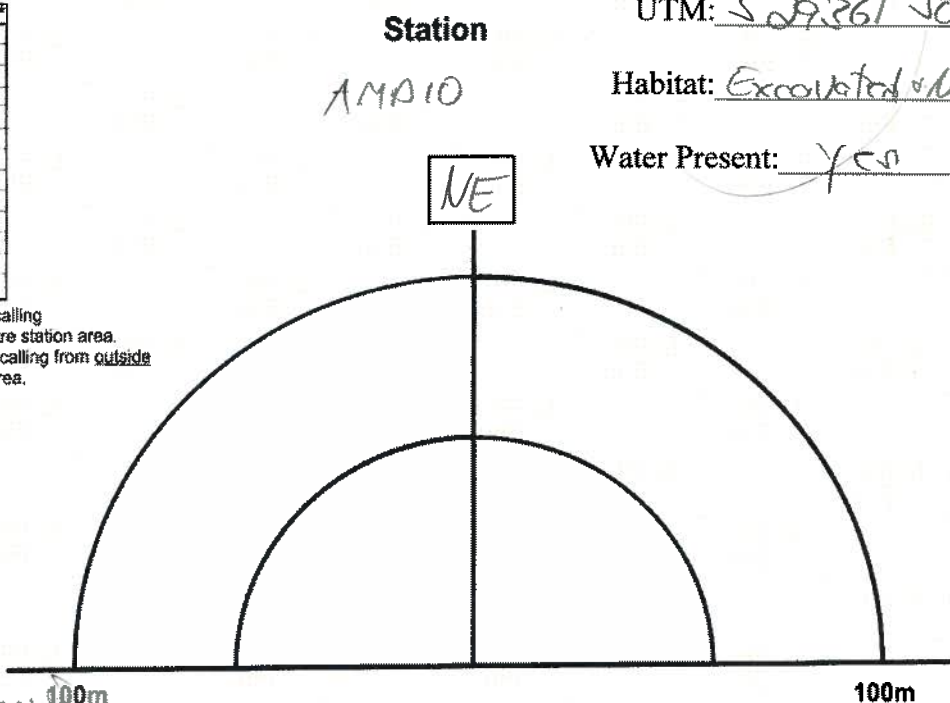
Habitat: Beaver Pond

Water Present: Yes

KATU on log

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR	1-1	
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



4:47  
 UTM: 529261 5078022

Habitat: Excavated & Naturalized Ponds

Water Present: Yes

Tues May 7 2013  
 Ag Nene Henvey Inlet/Nigig  
 Ag # 166960824

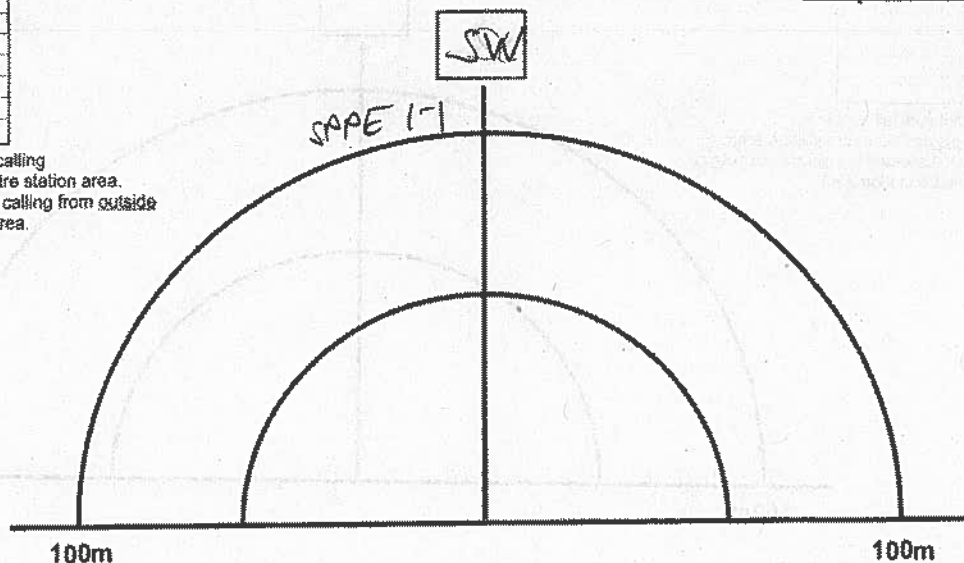
Sarah Richert  
 Brian Miller

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		1-1
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

Station  
 AMP 11

Start Time: 1:13 pm  
 UTM: 17T 529766 5076925  
 Habitat: Wet sedge meadow  
 Water Present: Yes

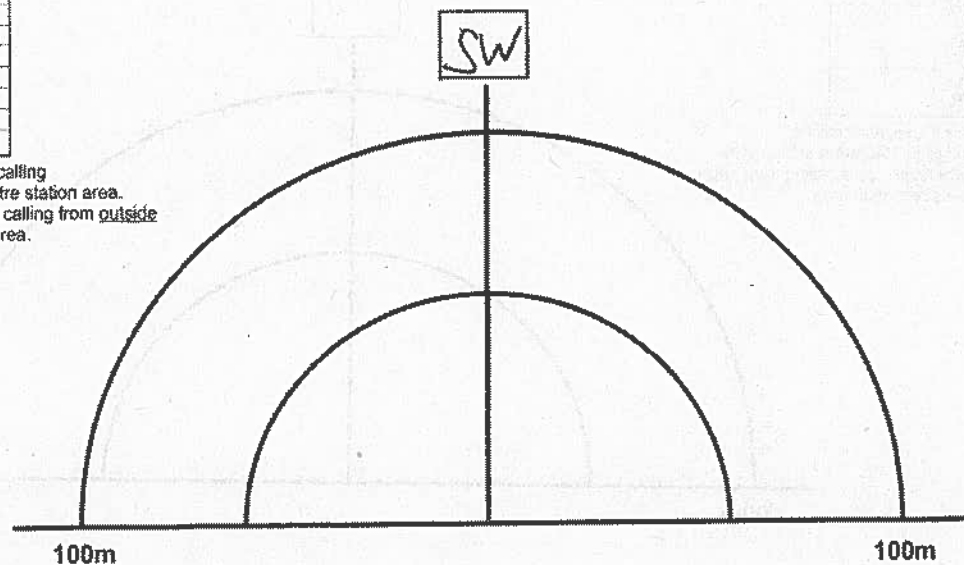


Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

Station  
 AMP 12

Start Time: 2:18 pm  
 UTM: 529 737; 5076603  
 Habitat: floating sedge mat bog/pen  
 Water Present: Yes



Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
 (Field Personnel)

Signature: \_\_\_\_\_  
 (Project Manager)

Page 1 of 1

REV: Mar, 09 Form 003

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

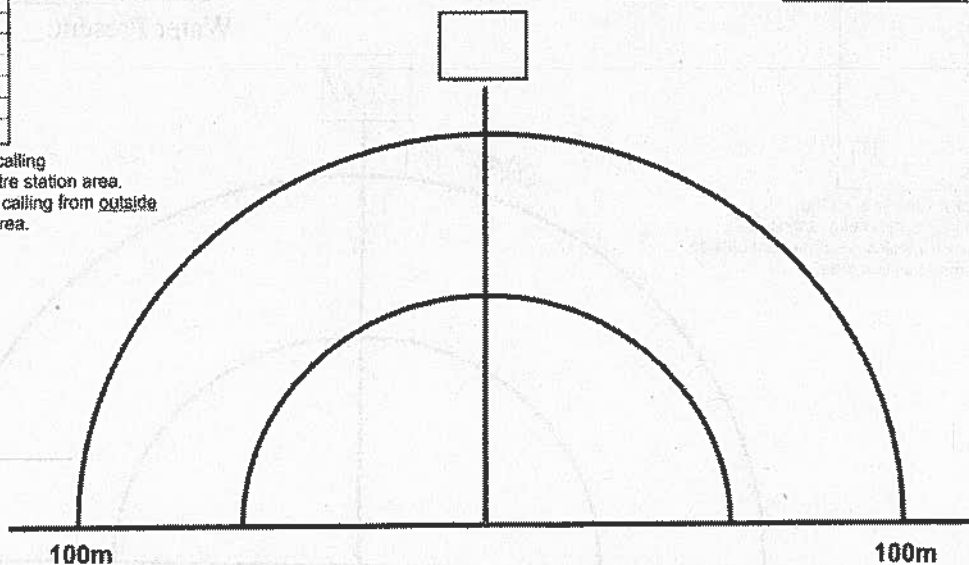
Station

Start Time: \_\_\_\_\_

UTM: \_\_\_\_\_

Habitat: \_\_\_\_\_

Water Present: \_\_\_\_\_



Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

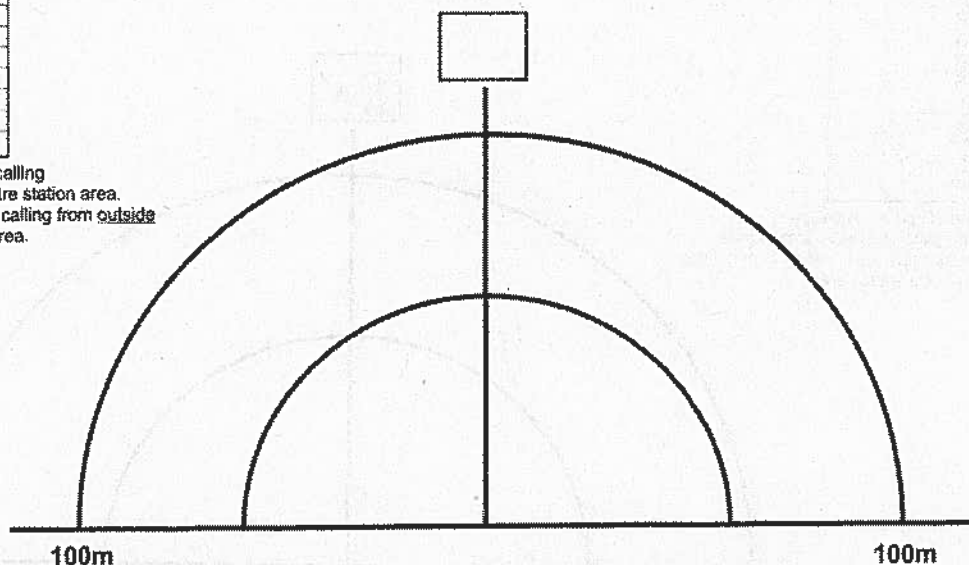
Station

Start Time: \_\_\_\_\_

UTM: \_\_\_\_\_

Habitat: \_\_\_\_\_

Water Present: \_\_\_\_\_



Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: Mar, 09 Form 003



Personnel: S. Richer & B. Miller  
 Proj Name: N. Bay/Henvey Inlet  
 Proj # 160960824

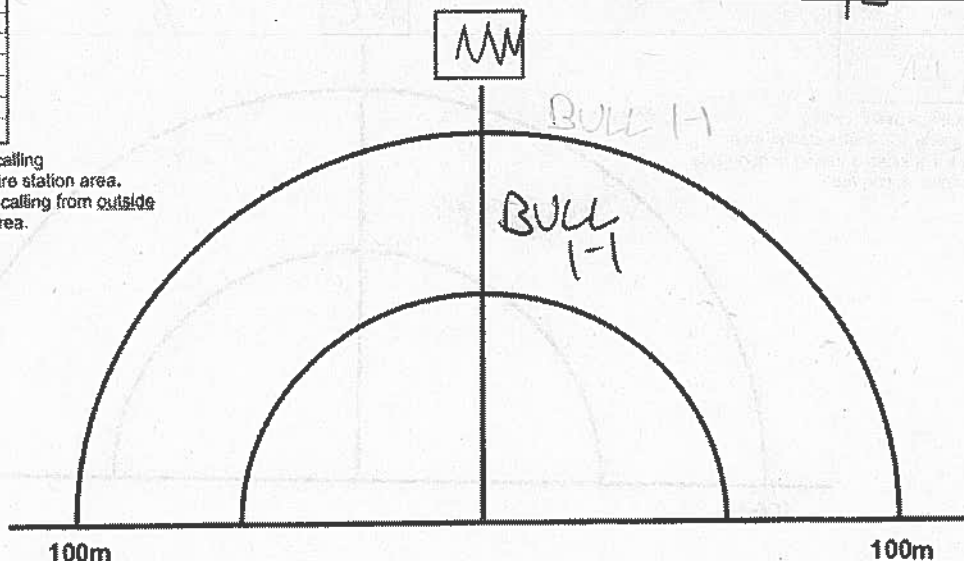
Wed May 8 2013

Species	In*	Out**
AMTO		
BCFR		
BULL	1-1	
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

- \* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

Station  
AMP13

Start Time: 1:46  
 UTM: 528058 5079022  
 Habitat: Beaver Pond, Shallow Marsh  
 Water Present: Yes



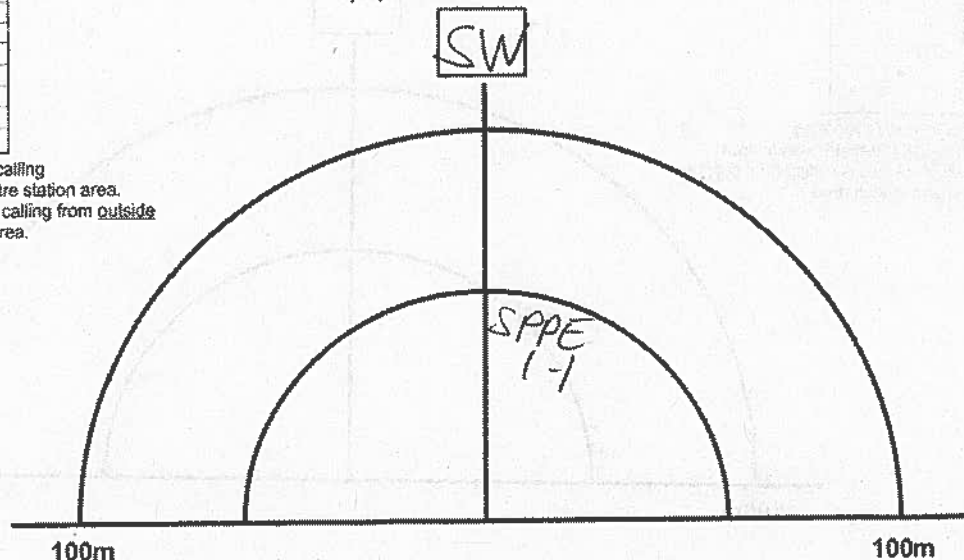
Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	1-1	
WOFR		

- \* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

Station

AMP14

Start Time: 2:44 pm  
 UTM: 527574 5079489  
 Habitat: Enormous sedge fen  
 Water Present: yes



Quality Control: This form is complete ( ) & legible ( )

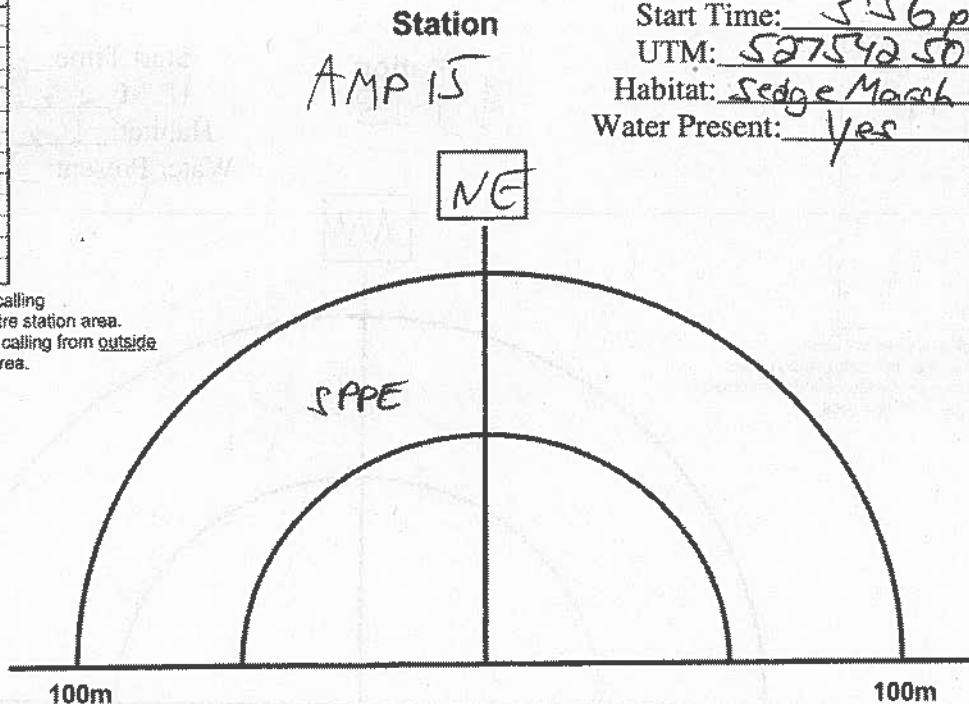
Signature: [Signature]  
 (Field Personnel)

Signature: \_\_\_\_\_  
 (Project Manager)

Wed May 8 2013  
 Personnel: S Ribicco & Miller  
 Proj Name: Migig/Henvey Inlet  
 Proj # 160960824

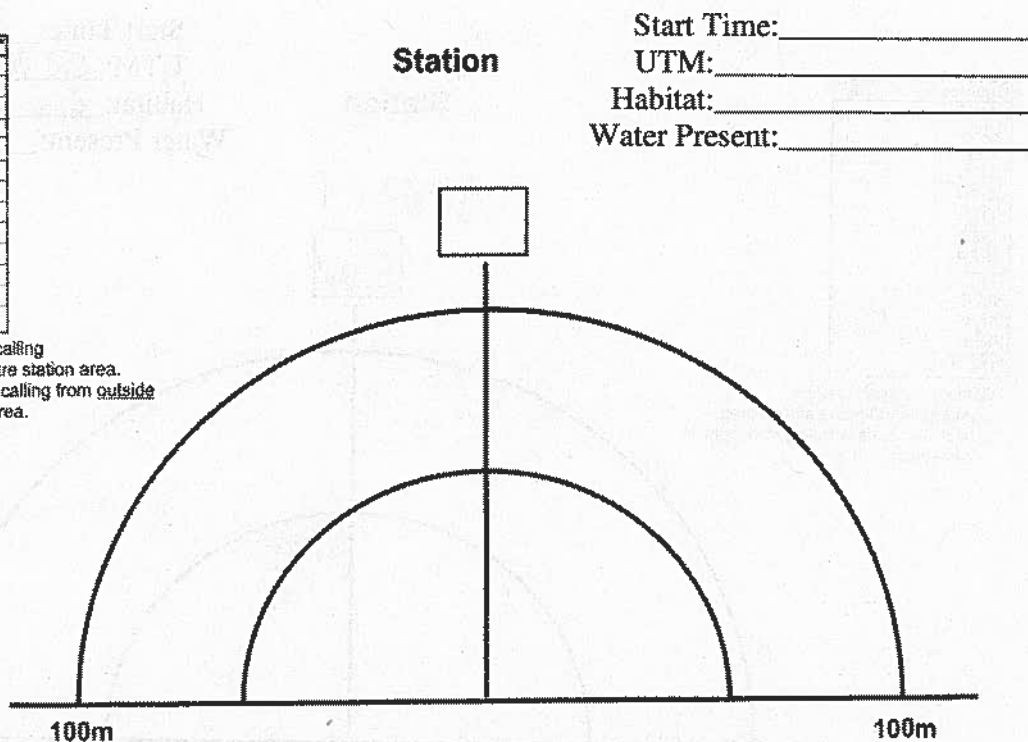
Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	1-1	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 2 of 2

REV: Mar, 09 Form 003

Thurs May 9 2013  
 Personnel: R. Richert & B. Miller  
 Proj # 160960824  
 Proj Name: Nigig/Henvey Inlet

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

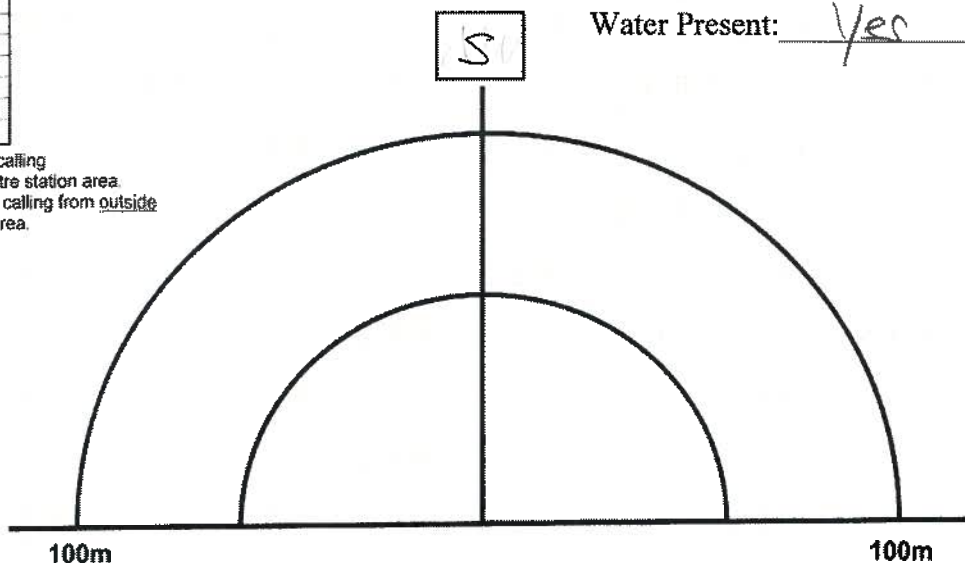
Station  
 AMP16

Time: 8:20am

UTM: 523790 5080839

Habitat: Beaver Pond/Shallow Marsh

Water Present: Yes



Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	1-2	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

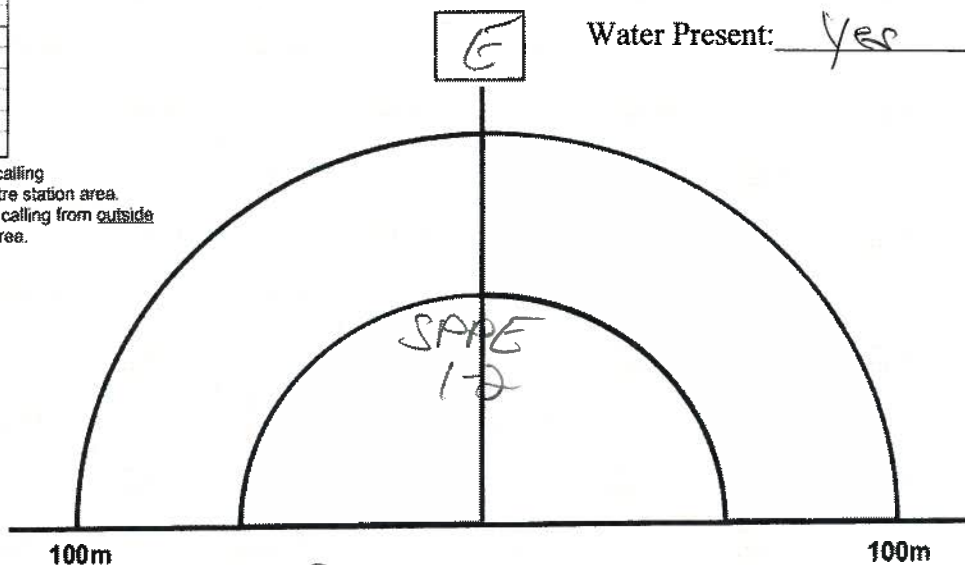
Station  
 AMP17

Time 9:24am

UTM: 524878 5080998

Habitat: Beaver Pond/Shallow Marsh

Water Present: Yes



Signature: [Signature]  
 (Field Personnel)

Signature: \_\_\_\_\_  
 (Project Manager)



**Stantec**

Stantec Consulting Ltd.  
70-1 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Amphibian Call Survey Observation Form

Project Number 160960824 Project Name: Nigig  
Date Apr 22, 2013 Field Personnel: GH BM

Weather Conditions: Temp: 9-15°C Wind: 3-4 S Cloud: 0-30% PPT: / PPT in last 24 hrs: /

Visit Number:	<u>1 - CAFR Search</u>		
Start Time:	<u>1200</u>	End Time:	<u>1725</u>

• Record Start Time at Each Station

17T 0578486 5077735

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
\*\* Check if species is calling from outside 100-metre station area.

Station 1231 UTM: \_\_\_\_\_  
128 Habitat: Sphagnum Pools in Barrens  
Water Present: Limited

S

100m 100m

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 6

REV: Mar, 09 Form 003

175

0528332  
5077726

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

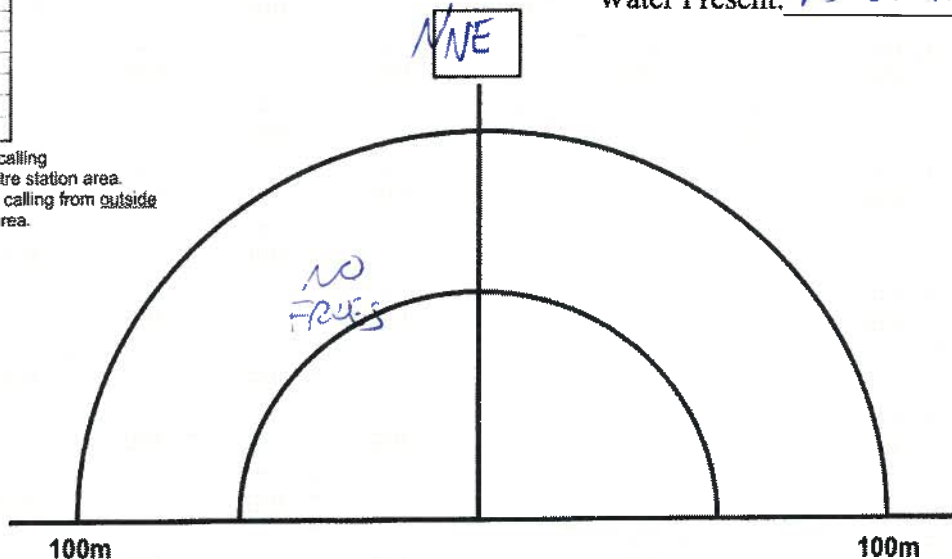
\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

1245

Station

129

UTM: \_\_\_\_\_

Habitat: Sphagnum Pools in JPSWater Present: Yes Limited

175 0528349 5077510

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

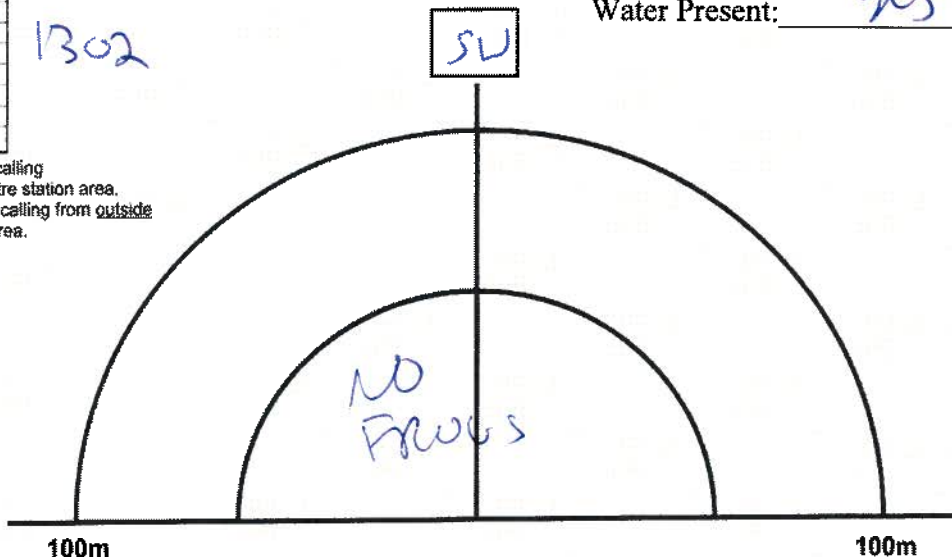
\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.

1302

Station

130

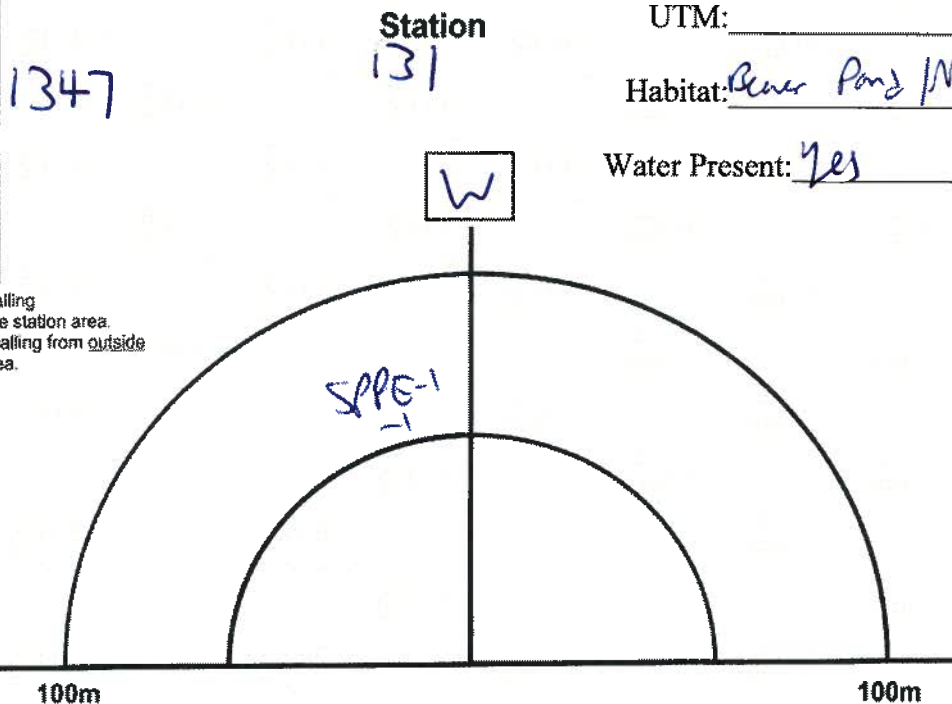
UTM: \_\_\_\_\_

Habitat: Beaver PondsWater Present: yes

17T 0528262 5077215

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE	✓	
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



UTM: \_\_\_\_\_

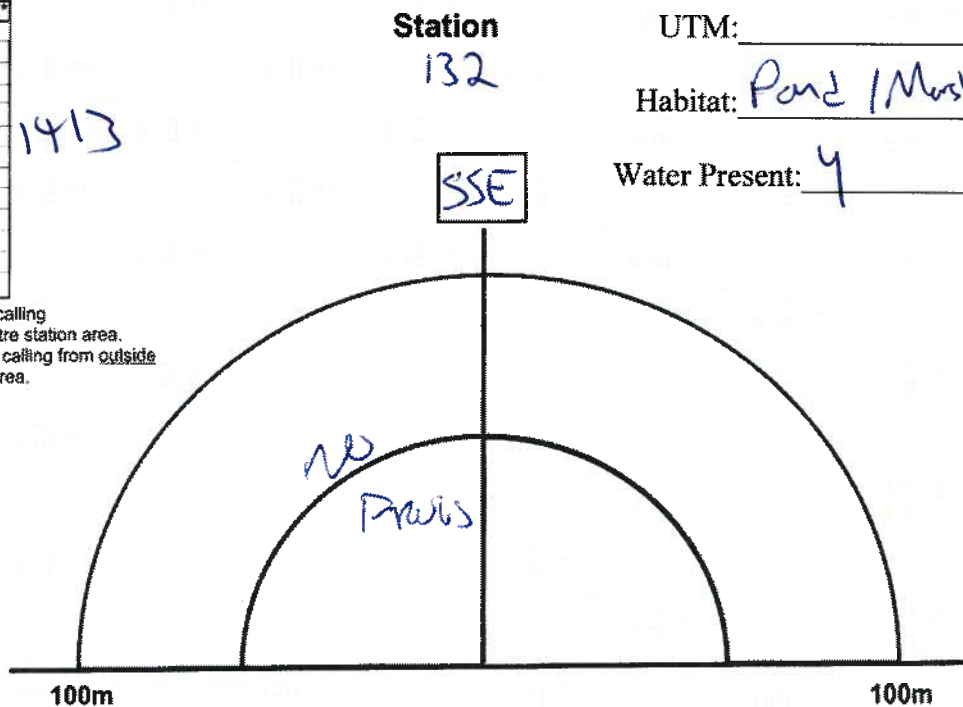
Habitat: Pond / Marsh / Pools of Water

Water Present: Yes

17T 0528149 5076939

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



UTM: \_\_\_\_\_

Habitat: Pond / Marsh

Water Present: Y

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Page 3 of 6 (Field Personnel)

(Project Manager)

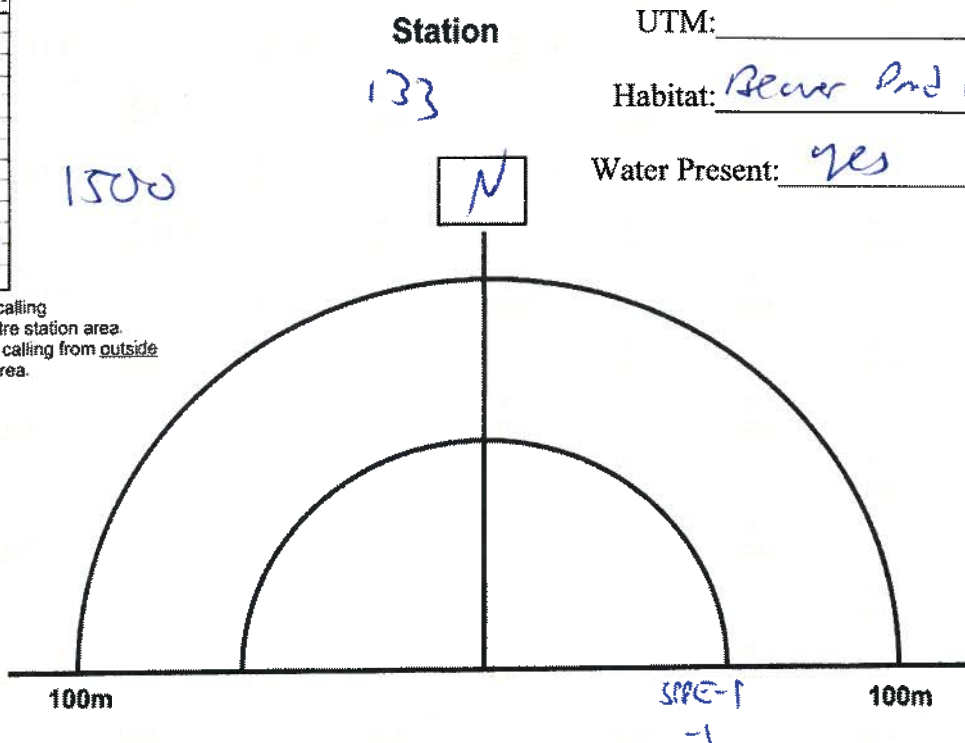
REV: Mar, 09 Form 003



17T 0527998 5077357

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		✓
WOFR		

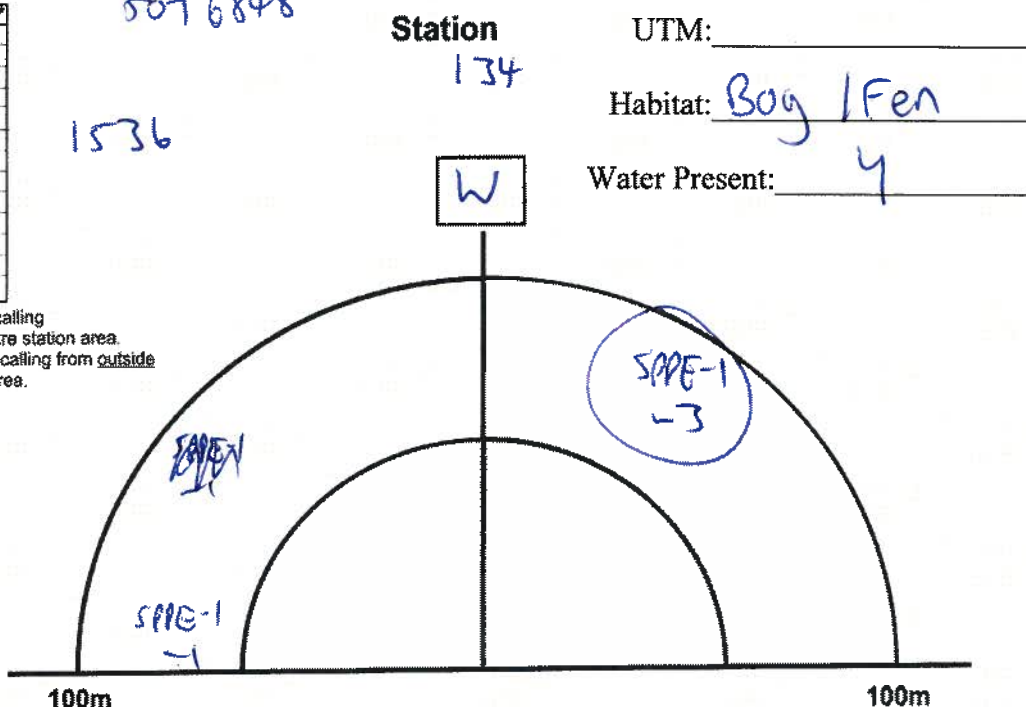
\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



17T 0527931 5076848

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		✓
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



Signature: \_\_\_\_\_  
 (Field Personnel)

Signature: \_\_\_\_\_  
 (Project Manager)

17T 0527615

5076750

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.

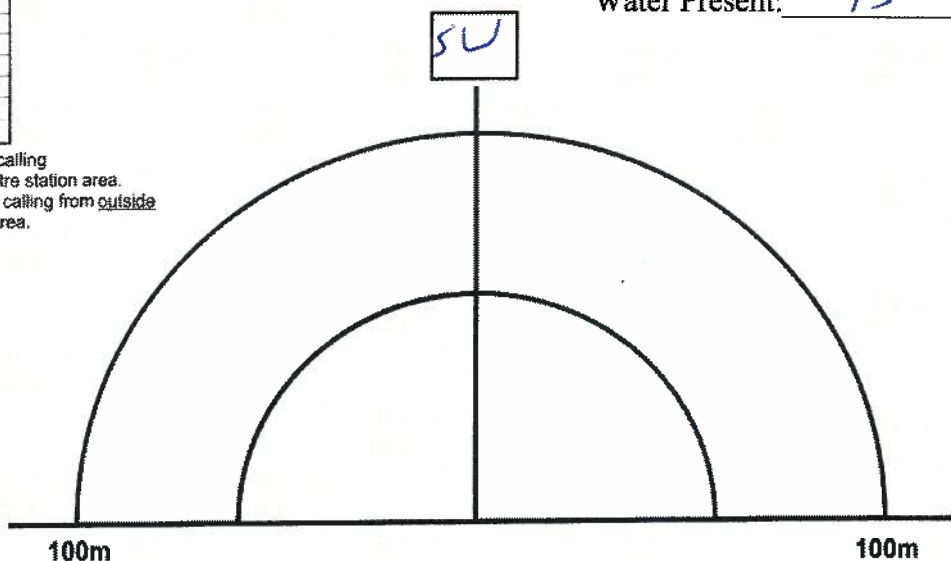
\*\* Check if species is calling from outside 100-metre station area.

1603

Station

135

UTM: \_\_\_\_\_

Habitat: Beaver PondWater Present: Yes

17T 0527288 5076723

Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.

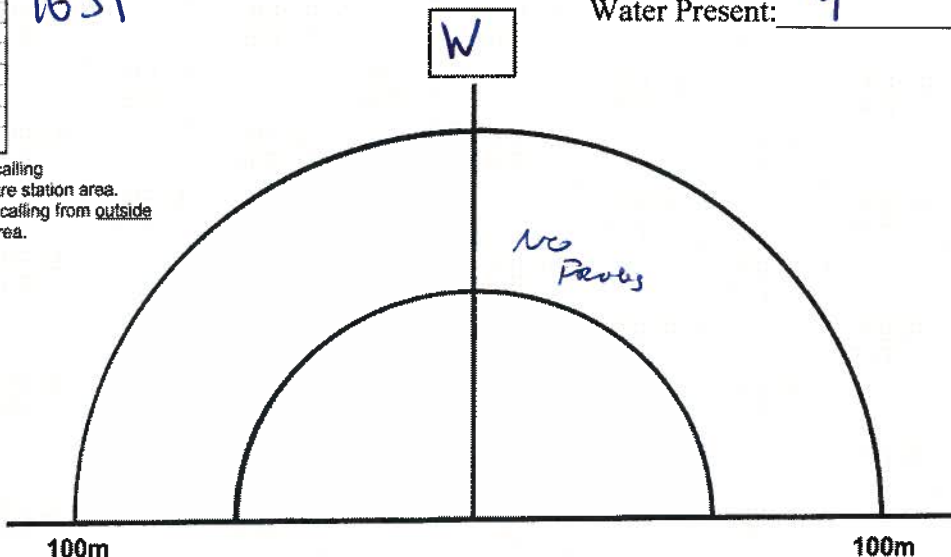
\*\* Check if species is calling from outside 100-metre station area.

1631

Station

136

UTM: \_\_\_\_\_

Habitat: Beaver Pond + Stream / lowlandWater Present: Y

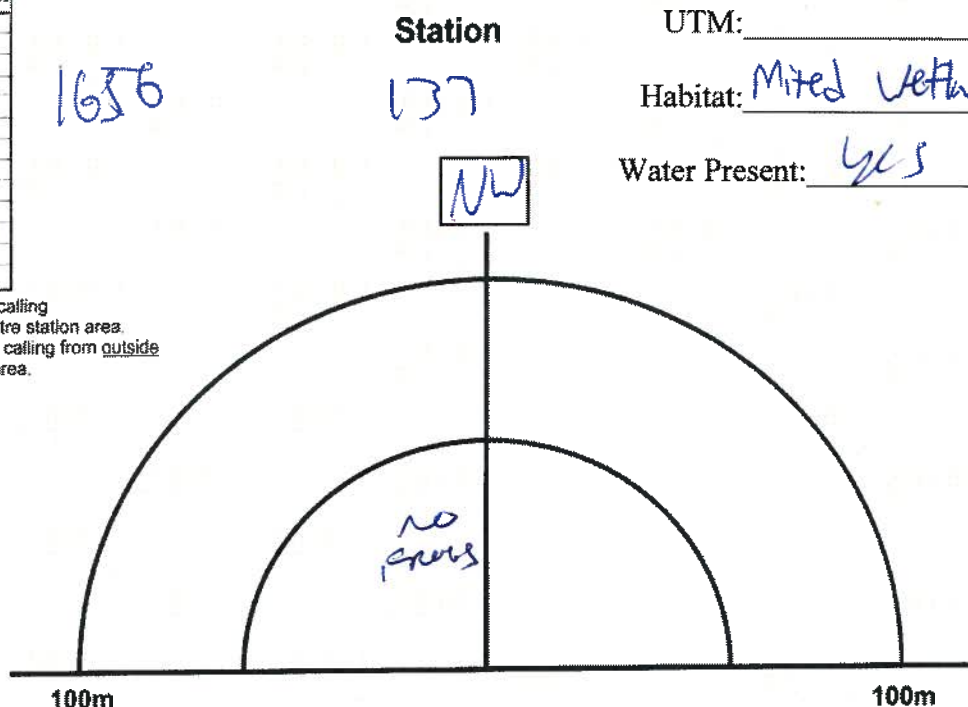
(Field Personnel)

(Project Manager)

177 0526999 5076555

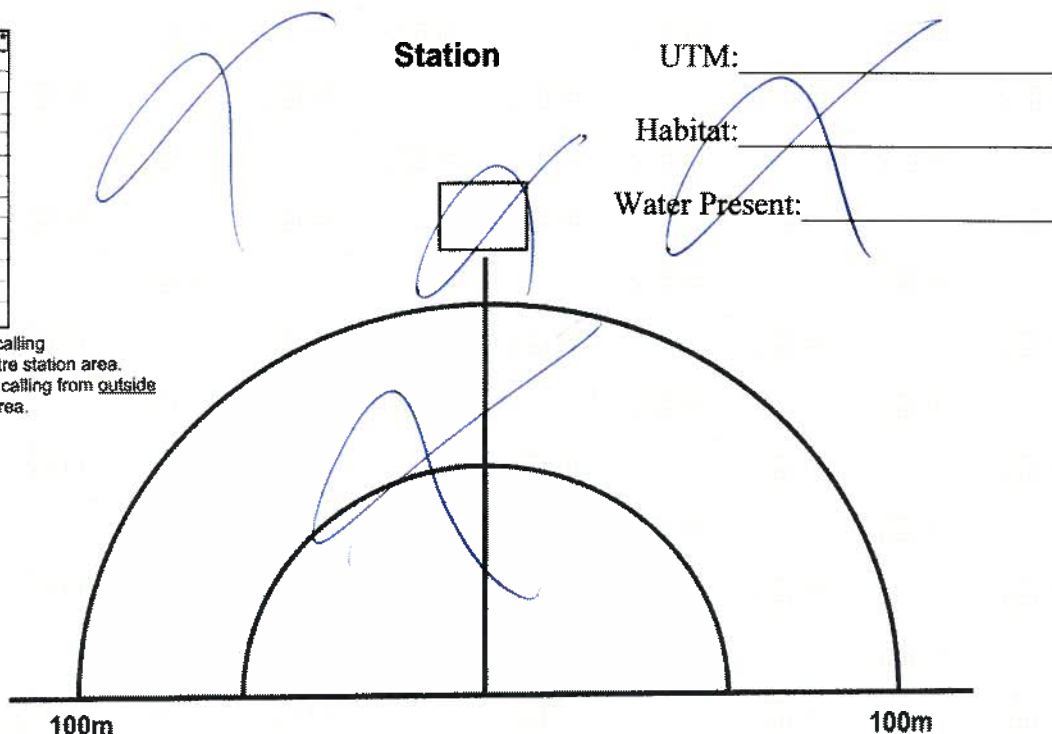
Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

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 \*\* Check if species is calling from outside 100-metre station area.



Species	In*	Out**
AMTO		
BCFR		
BULL		
CHFR		
CGTR		
FOTO		
GRTR		
GRFR		
MIFR		
NLFR		
PIFR		
SPPE		
WOFR		

\* Check if species is calling from inside 100-metre station area.  
 \*\* Check if species is calling from outside 100-metre station area.



Signature: \_\_\_\_\_  
 (Field Personnel)

Signature: \_\_\_\_\_  
 (Project Manager)

Page 6 of 6

REV: Mar, 09 Form 003



**Stantec**

Stantec Consulting Ltd.  
70-1 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Reptile Survey Observation Form

Project Number 160960824Project Name: Nigig Henvey InletDate / Time: May 23 2013 ThursField Personnel: Pete Read & Sarah Richer

Weather Conditions:	Temp: <u>6°C</u>	Wind: <u>25 km/hr 37 km/hr gusts</u>	Cloud: <u>100</u>	PPT: <u>0 to light rain</u>	PPT in last 24 hrs: <u>heavy rain</u>
---------------------	------------------	--	-------------------	-----------------------------	---------------------------------------

LOCATION	START/END TIME	SPECIES <i>confirmed</i>	HABITAT DESCRIPTION	OTHER NOTES <i>potentials</i>
S1	8:14 8:20	PATU <i>roadkill</i>	- Dinner Lake, lake with marsh perimeter	- COLO pair observed, nest with eggs confirmed approx 80-110m from road (potential BLTU) MASN ██████ SNTU STTU (mud) FLSK Pointed Turtle roadkilled
S2	8:30 8:35	PATU (2) <i>roadkill</i> *SNTU	- wetland with open water - rock + forest boundary	█████, BLTU, MASN,
S3	8:38 8:55	SNTU (4) <i>roadkill</i> BLTU	- lake with marshy shores - rock + forest edge <i>drains under road</i>	BLTU, SNTU, Stinkpot, MASN # at roadside # nesting turtle evidence
S4	9:09 9:15	SNTU	- beaver dammed lake/pond - edge marshy - forest edge	BLTU, SNTU, MUTH, ██████ MASN along edge
S5	9:17 9:20		beaver pond, marshy perimeter	SNTU, ██████, BLTU
S6	9:25		some cattail marsh surrounded by mixed forest swamp	█████ (marginal), BLTU

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: Pete Read  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)Page 1 of 7

REV: May 07 FORM 005



LOCATION	TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES <i>potential</i>
S7	9:30 9:35		black spruce (dead standing) / leather leaf bog	BLTU, [redacted] MASN <sup>edge</sup>
S8	9:41 9:47		cattail marsh w mixedwood / tree swamp / forest on east, further north along road, large wetland	BLTU, [redacted] SNTU surrounding upland is MASN
S9	9:51 9:55		cattail / leather leaf bog / fen on east side, part of larger complex	[redacted], BLTU, MASN <sup>upland</sup>
S10	10:14 10:19		lake culverted under road, more wetland / beaver pondy habitat on east side	SNTU, [redacted], MUTU, BLTU, MASN habitat in uplands around
S11	10:31 10:36	turtle sp remains (small, can't identify)	part of previous point's lake, different connection, on east side, beaver pond + big dam, marshy upland mixedwood	BLTU, SNTU, MUTU (maybe) MASN habitat in uplands [redacted]
S12	10:37 10:43	turtle bones	portion of parallel water system small "lake", swampy edge	[redacted] - BLTU,
S13	10:44 10:49		- small pond with marshy / swamp edge - forest surround	[redacted], BLTU.
S14	10:50 10:55		- creek system empties into pond / lake (marshy sides) - forested & rocky sides	[redacted], BLTU, SNTU, MUTU, MASN?
S15	11:02 11:07		channelized wetland - flows east, marshy on both sides (edge / marsh), rocky upland on south side + mixedwood forest on north side	MASN on upland; maybe MUTU?
S16	11:10 11:17		alder swamp; steep sides from road to water; swamp opens to larger lake	BLTU, SNTU, MUTU (maybe), Map Turtle
S17	11:23		is arm of a lake, shrubby low border along Hwy on east side	BLTU, SNTU, MUTU, [redacted] MAP Turtle,
S18		SNTU juvenile jaw injury recover	Shanawaga River, steep sandy & rocky sides	SNTU, MUTU

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page

2

of

7

REV: May 07 FORM 005





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Stantec Consulting Ltd.  
70-1 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Reptile Survey Observation Form

Project Number 160960824

Project Name: Nigig Henvey Inlet

Date / Time: May 23 / 2013 Thurs

Field Personnel: Read + Richer

Weather Conditions:	Temp: <u>4</u>	Wind: <u>20 km/h</u>	Cloud: <u>100%</u>	PPT: <u>light rain</u>	PPT in last 24 hrs: <u>heavy</u>
---------------------	----------------	----------------------	--------------------	------------------------	----------------------------------

LOCATION	START/END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
S 19	12:52 12:56	SNTU adult roadkill	slow flowing creek, marshy on road side, steep but short slope on road side, bordered	SNTU, BLTU, MASN <i>upland surrounding</i>
S 20	12:59 1:03		beaver pond on east side with wetland/marsh perimeter	SNTU, BLTU, <span style="background-color: black; color: black;">[REDACTED]</span>
S 21	1:10 1:14		cattail marsh on shrubby borders, rocky upland surrounding	BLTU, MASN, FLASK
S 22	1:25 1:28		creek/stream bordered by sedge marsh + dead tamarack/shrub bog	BLTU, <span style="background-color: black; color: black;">[REDACTED]</span> , SNTU, FLASK + MASN on rocky upland
S 23	1:29 1:32		beaver pond	BLTU, SNTU, FLASK + MASN on rocky upland
S 24	1:39		small lake - rocky/forest edge - some cattail + shrubby edge - broad sandy area by road to the north	BLTU, SNTU, <span style="background-color: black; color: black;">[REDACTED]</span> , HOSNose?, MUTU, MPTU, MASN, FLASK
S 25	2:00 2:05		small river goes under road - slowish on E. - brushy along sides - rocky too (sucker creek)	SNTU, BLTU, MASN, FOSN?, MUTU?

Quality Control: This form is complete ( ) & legible ( ).

Signature: Peter Read  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 3 of 7

REV: May 07 FORM 005

0010 119 202  
8959-284 (507) 400-111-111  
Crossed out to be counted from 111-111-111



LOCATION	TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES potential
S 26	2:06		- several small wetlands connecting to large Moose Lake - marshy + swampy	MUTH, SNTU, [REDACTED], BLTU, MASN.
S 27	2:19	dead SNTU	- very small marsh but great habitat cattails lily pads - bordered by forest	SNTU, [REDACTED], BLTU.
S 28	2:40	dead SNTU	- stream on east - marsh on west - suitable habitat	SNTU
S 29	2:45		- lake channel lake - forest/rocky - some edge of wetlands bushes	BLTU, SNTU, MUTH, MASN
S 30	2:49	SNTU Predated eggs	- marsh - grasses - beaver dam - edge of forest - culvert - high sides	[REDACTED], BLTU, MASN
S 31	3:01	* BLTU	- 6 mile lake - mostly rocky shores - some veg along edge	BLTU, SNTU, MUTH, [REDACTED], MASN, FL SK, MAP? FOX SN?
S 32 a+b	3:07		- large beaver pond with standing dead trees + cattails - fairly steep forested slopes rocky too	BLTU, SNTU, MUTH, [REDACTED], MASN, FL SK.
S 33	3:22		- small cattail marsh surrounded by forest - some open water (marginal)	BLTU, [REDACTED]
S 34	3:24	dead unidentified turtle	- large pond, marsh, grass, forest edge - rocky slopes - nesting bits - sandy banks + gravel pit	BLTU, SNTU, MUTH, [REDACTED], MASN, FL SK
S 35	3:43	dead PATU	- wetland with open water cattails - beaver pond steep sides forest around	BLTU, SNTU, [REDACTED], MASN, FL SK, Hog?
S 36	3:54		- small beaver pond - marsh with grassy meadow - sides rocky + forest	[REDACTED], BLTU, SNTU, MASN, FL SK.
S 37	3:57		- small grassy pond with grasses - border rocky, forest	[REDACTED], BLTU, SNTU, MASN, FL SK

Quality Control: This form is complete ( ) & legible ( )

Signature: Peter Read  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 4 of 7

REV: May 07 FORM 005



**Stantec**

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70-1 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Reptile Survey Observation Form

Project Number 160960824Project Name: Nigig / Henvey InletDate / Time: May 23/2013Field Personnel: Pete Read & Sarah Richer

Weather Conditions:	Temp: <u>4</u>	Wind: <u>20</u>	Cloud: <u>100</u>	PPT: <u>0</u>	PPT in last 24 hrs: <u>heavy rain</u>
---------------------	----------------	-----------------	-------------------	---------------	---------------------------------------

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
S 38	4:19	unidentified turtle remains	- beaver pond, channelized, with grassy/rocky areas, both sides bordered by rocky uplands with mixed woods	BLTU, [redacted], MASN FLSK on uplands
S 39	4:40	unidentified turtle remains + painted (dead)	- new beaver meadow & pond - forest surround	recorded BLTU on map [redacted]
S 40	4:46		- beaver pond 100 m away - creek between road & pond - also ponds along road good habitat. - bordered forest & rocky areas	- [redacted] BLTU coming to road
S 41	4:53	predated turtle nest	- slow meandering stream with grassy marsh along - border rocky & forest	- BLTU, [redacted], SNTU
S 42	4:59		- several marsh areas surrounded by rocky areas	BLTU, [redacted] MASN,
S 43	5:00 5:13	remains of 1 painted 4 BLTU incl 1 baby	- beaver pond & drainage - swampy/marshy - bordered by rocky & forested areas	BLTU, SNTU, [redacted] MUTH, MASN, FLSK
S 44	5:18		- sedge-y grassy marshes, cattails, meandering series of open water channel	BLTU, MASN & FLSK maybe on either side in rocky uplands - SNTU, marginal [redacted]

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: Pete Read  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)Page 5 of 7

REV: May 07 FORM 005



May 23/2013 Herp studies South to Nobel

Species	Tally	
S 1	566436	5033965 (loon nest)
S 2	565843	5034590
S 3	565304	5035146
S 4	564333	5036177
S 5	564117	5036904
S 6	563507	5036981
S 7	563176	5037279
S 8	561805	5038504
S 9	561537	5038746
S 10	560246	5039953
S 11	558992	5041342
S 12	558506	5041842
S 13	558033	5042320
S 14	557938	5042426
S 15	557265	5043107
S 16	556816	5043563
S 17	556410	5043921
S 18	555912	5044248
S 19	554557	5045111
S 20	553444	5045689
S 21	552478	5046181
S 22	551955	5046447
S 23	551388	5046762
S 24	550219	5047558
S 25	548653	5049709
S 26	547903	5051953
S 27	547562	5052456
S 28	547176	5053258
S 29	547103	5053585
S 30	546997	5053981
S 31	546793	5054808
S 32	546442	5055560
	+ 546242	5055759

Pg. 6 of 7

Signature:

*A. M. J.*

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Project Manager)

REV: 2011-05-03 / FORM 014





**Stantec Consulting Ltd.**  
1 - 70 Southgate Drive  
Guelph, ON  
Canada N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Migratory Bird Survey Observation Form

Project Number:

Project Name:

Date: \_\_\_\_\_

Field Personnel:

**Weather Conditions:**

TEMP (°C):

WIND:

CLOUD:

PPT:

PPT (in last 24 hrs):

Start Time:

End Time:

Start Point UTM:

End Point UTM:

**Habitat:** *Chamaecrista* is a native plant of the Americas, ranging from the United States to Argentina. It is commonly found in open, sunny areas, such as fields, roadsides, and disturbed land. It is also a common weed in agricultural areas.

Transect:

Feature #:

[illegible]Pg.        of       

Quality Control: This form is complete ☐ & legible ☐.

**Signature:**

**Signature:**

(Field Personnel)

(Project Manager)

REV: 2011-05-03 / FORM 014

South to Nobel

**Signature:**

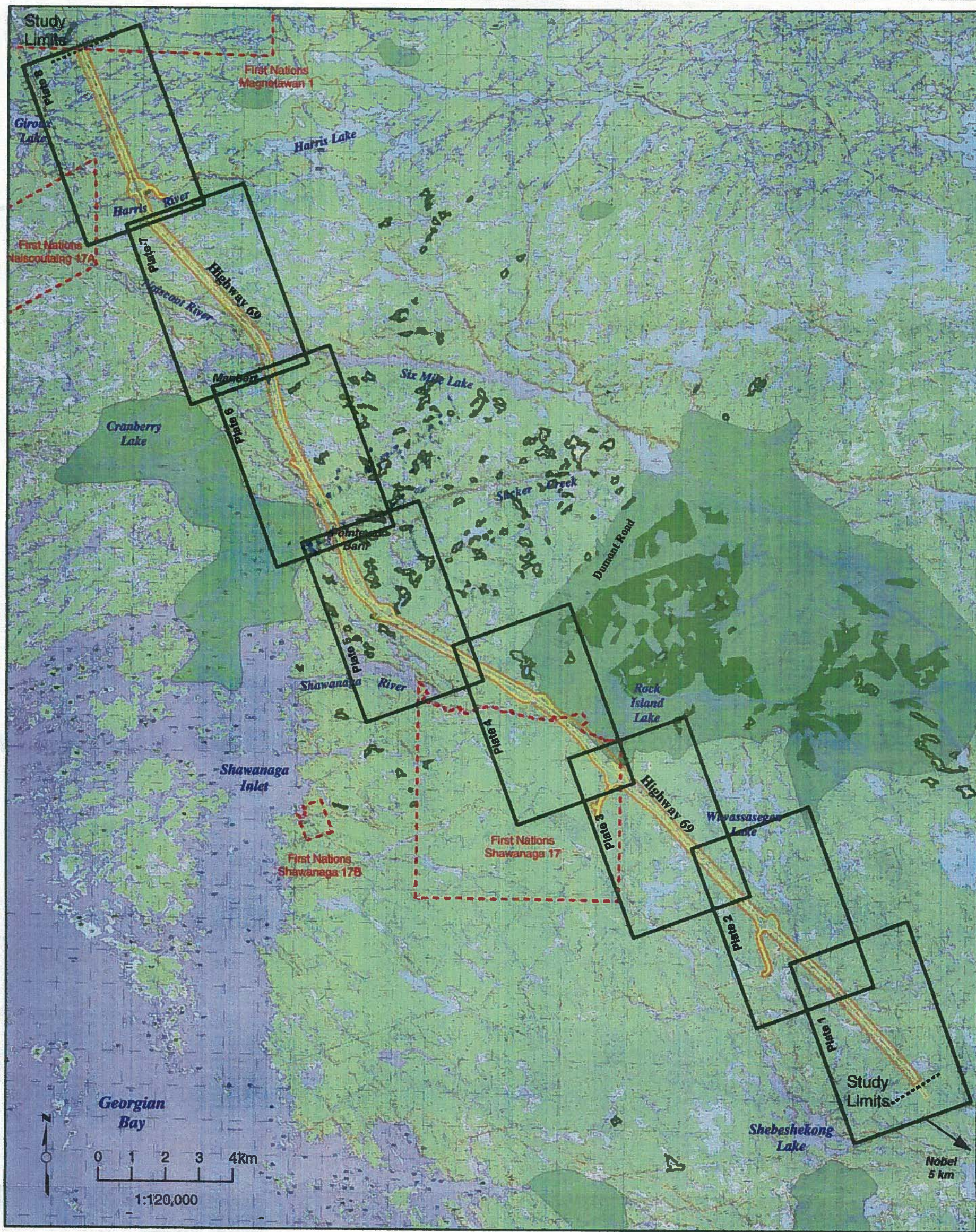
(Field Personnel)

**Signature:**

REV: 2011-05-03 / FORM 014



# PREVIOUS SAR (REPTILE) OBSERVATIONS IN HWY CORRIDOR - SOUTH SECTION -



## Legend for Detail Sheets

### Species Observations

Species of Conservation Concern

- Habitat
- Sighting

Secure Species

- Habitat
- Sighting

Unknown Species Nests

- Unknown Heron Nest(s)
- Unknown Raptor Nest(s)

Habitat observations refer to specific habitat types.

For herptiles they are hibernaculum and gestation sites.

For birds and raptors they are nesting sites.

Data Sources - MNR NRVIS, Ecoplans Limited Fieldwork 2003, 2004, 2005

Species Observations Data Sources  
Data source code noted after species code (ie EMRa)

Code	Data Source
a	MNR Observations
b	Ecoplans field work
c	Reptile Awareness Program Data
d	Element Occurrence species records (NHIC)

### Proposed Alignment

- Centre Line
- Right of Way of Preferred Route
- Service Road
- First Nations Lands
- Study Corridor
- Aquatic feeding area (Ecoplans fieldwork)
- Aquatic feeding area (MNR NRVIS)
- Deer yard
- Core deer yard area

### Species Observations Labels

#### Raptors of Conservation Concern

RSH Red Shouldered Hawk

#### Secure Raptors

CH Cooper's Hawk  
NG Northern Goshawk  
OSP Osprey  
RTH Red Tailed Hawk  
BWH Broadwinged Hawk

#### Secure Birds (Non-raptors)

CT Common Tern  
G Gulf  
GBH Great Blue Heron  
PW Prairie Warbler

#### Reptiles of Conservation Concern

MS Milk Snake  
BT Blandings Turtle  
FS Five Lined Skink

#### Insects of Conservation Concern

RST Rusty Snaketail  
OD Ocellated Darter

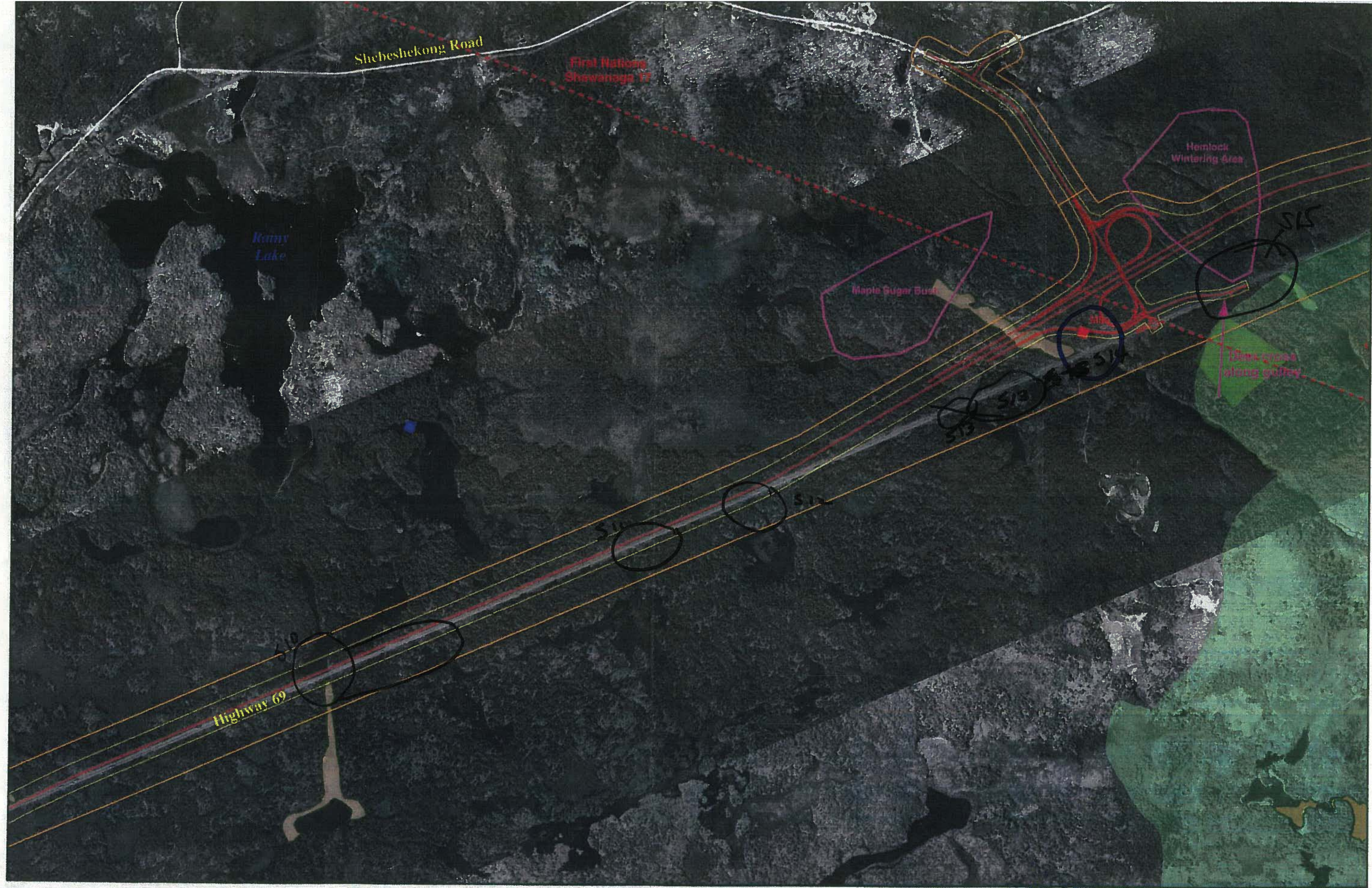








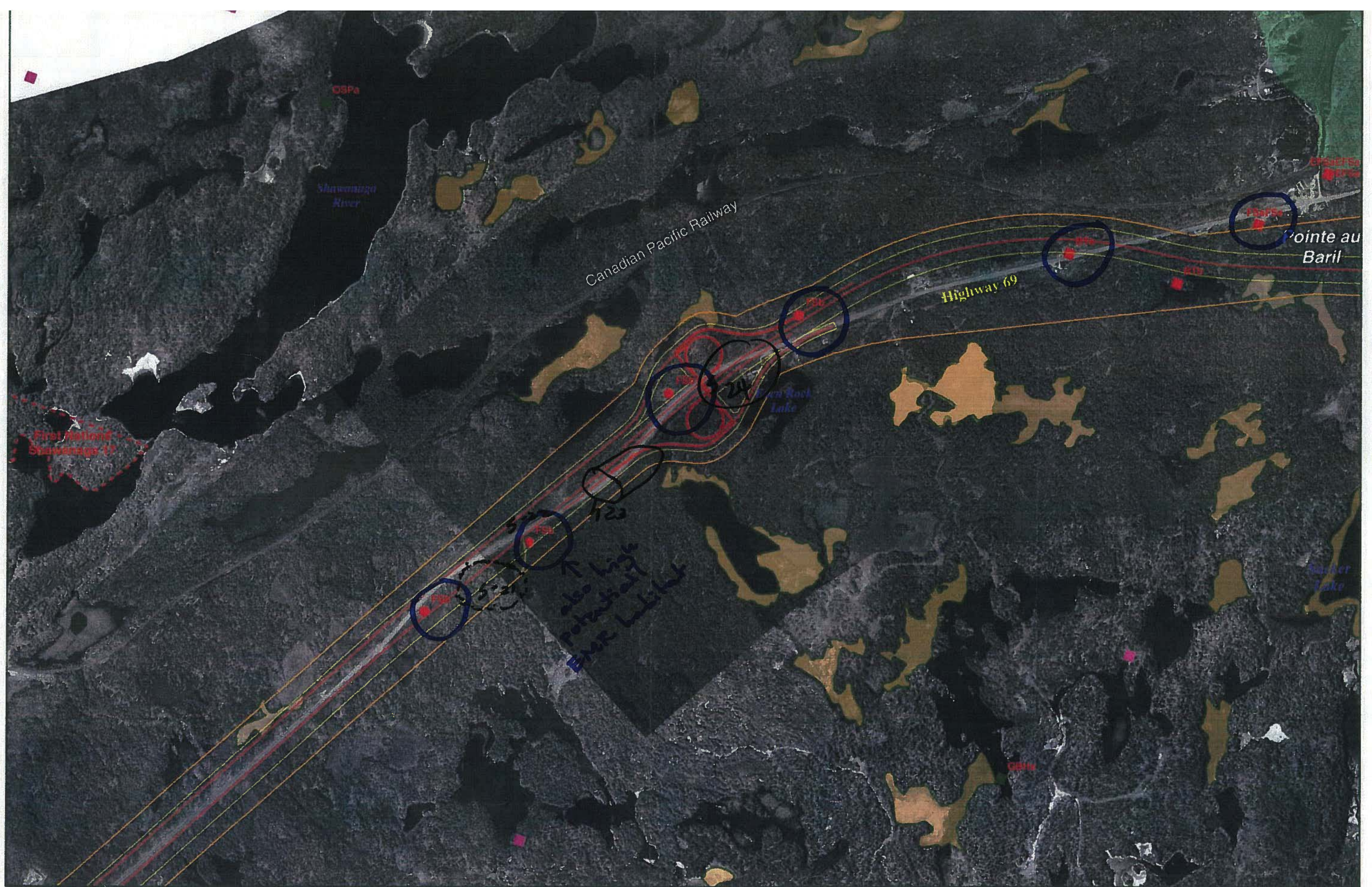




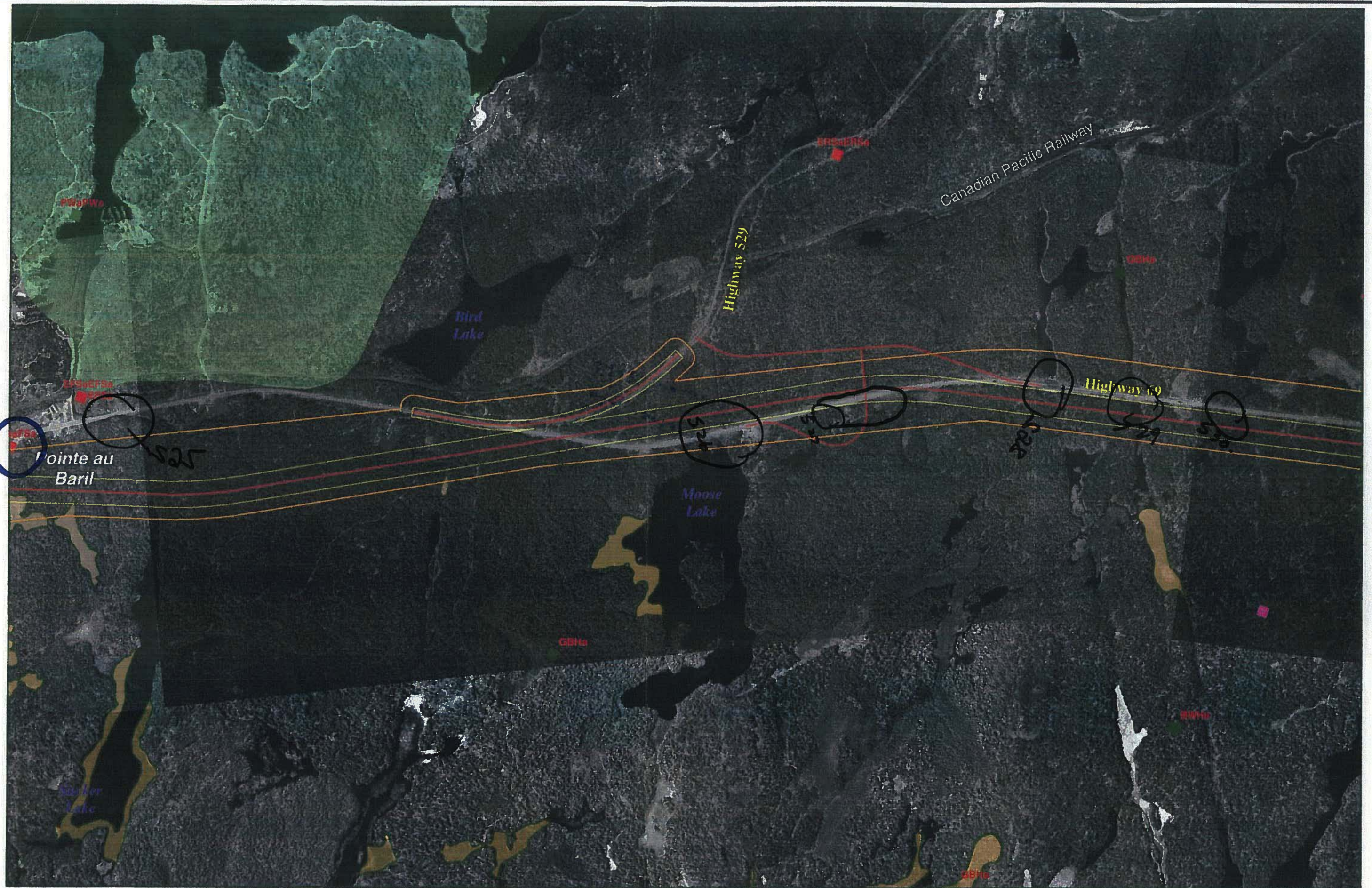












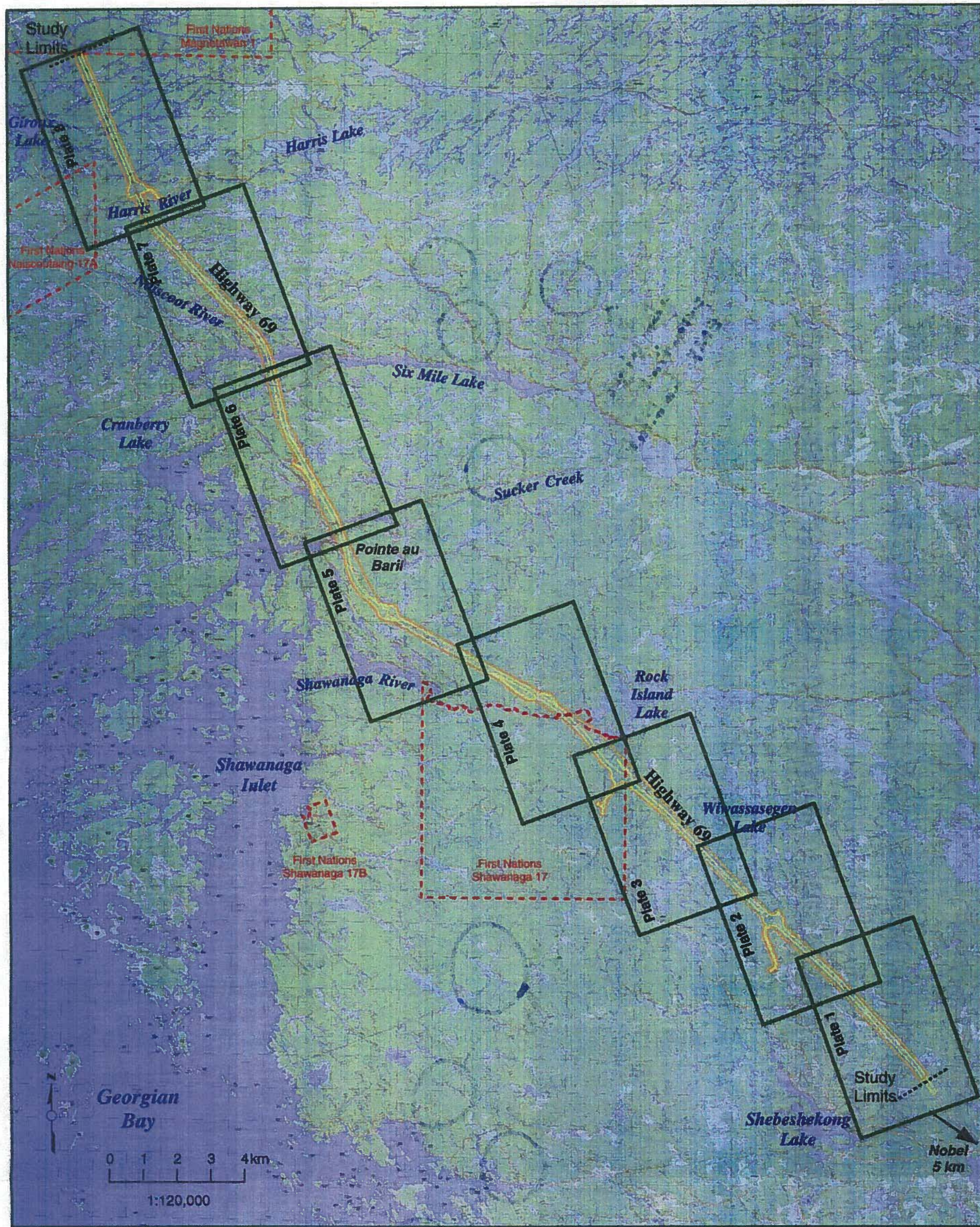












### Legend for Detail Sheets

#### Proposed Alignment

- Centre Line
- Right of Way of Preferred Route
- Service Road
- Study Corridor
- First Nations Lands

- Vegetation Units (Ecoplans 2003 - 2005)
- Vegetation Units with high potential for EMR hibernation habitat
- Vegetation Units with high potential for EMR gestation and/or foraging habitat
- Vegetation Units with low potential for EMR hibernation, gestation and/or foraging habitat

- 93 Area with high potential for EMR hibernation habitat
- 93 Area with high potential for EMR gestation and/or foraging habitat
- 93 Area with low potential for EMR hibernation, gestation and/or foraging habitat

#### EMR Observations

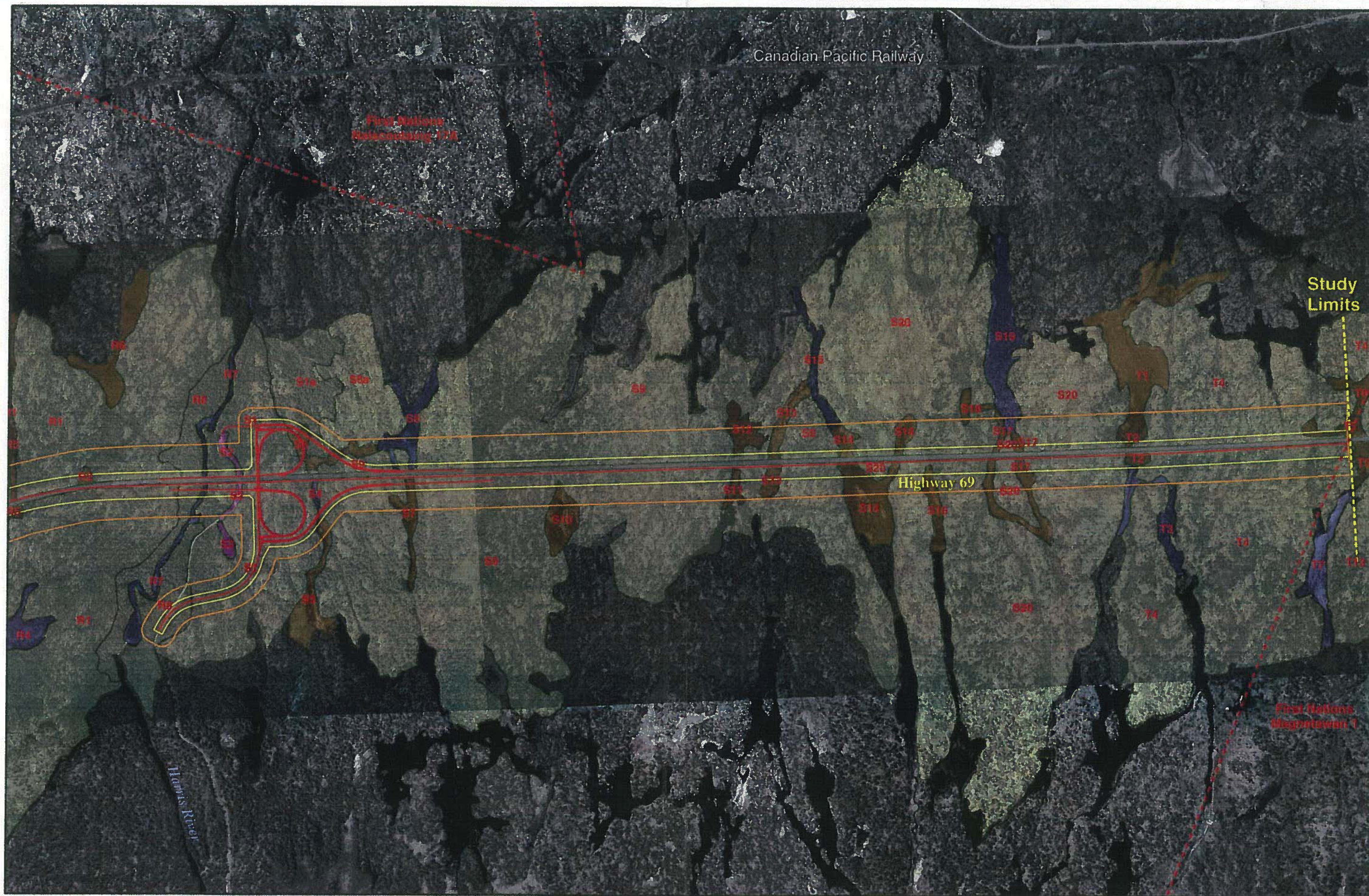
- Habitat
- Sighting

Habitat observations refer to hibernaculum and gestation sites.

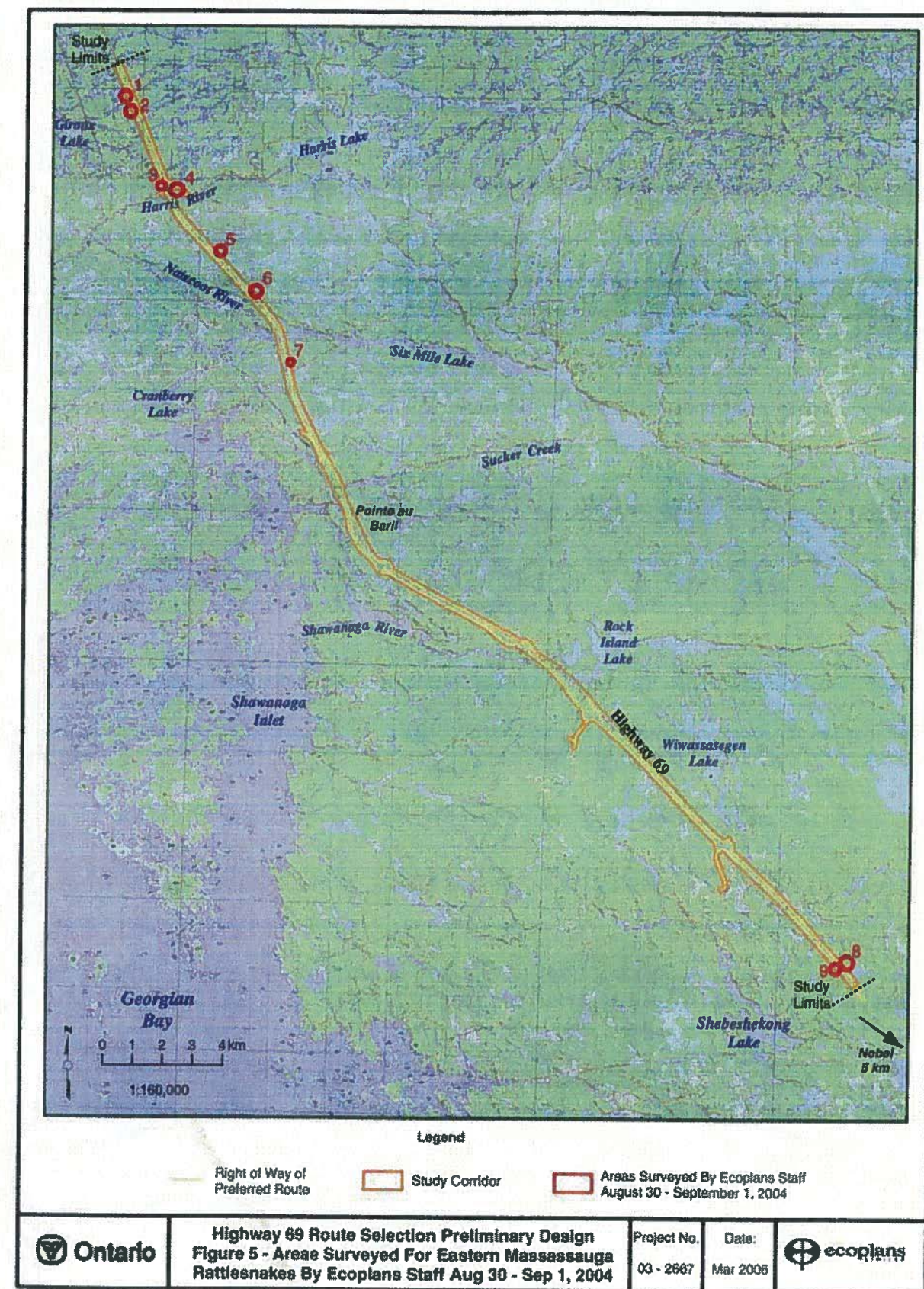
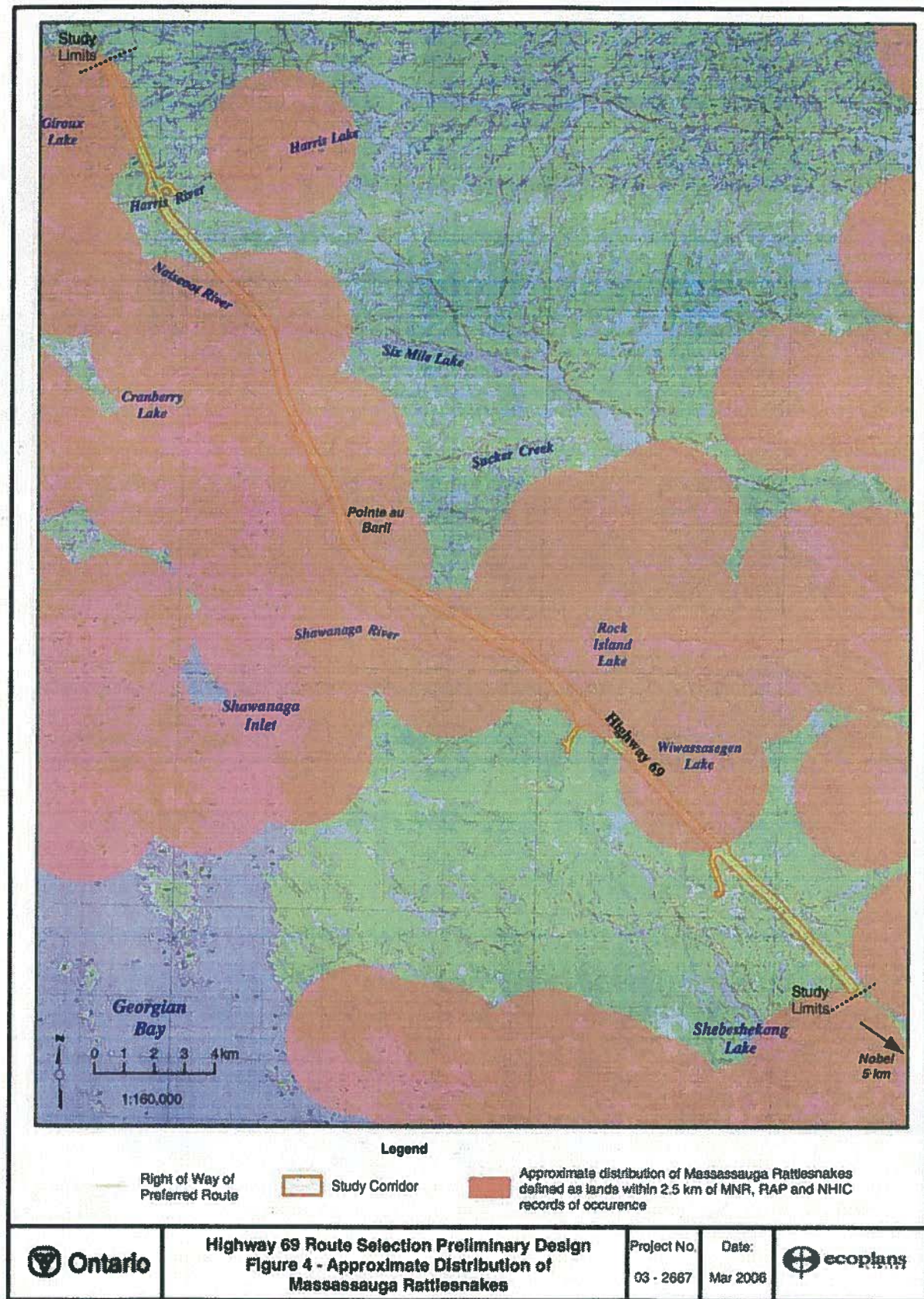
Species Observations Data Sources  
Data source code noted after species code (ie EMRa)

Code	Data Source
a	MNR Observations
b	Ecoplans field work (2003, 2004, 2005)
c	Reptile Awareness Program Data
d	Element Occurrence species records (NHIC)











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## Reptile Survey Observation Form

Project Number 160960824Project Name: Nigig/Henvey, LakeDate / Time: May 22 2013 WedField Personnel: S Ricker + P Read

Weather Conditions:

Temp:

16°C

Wind:

Beauf 1

Cloud:

100%

PPT:

Mist + Fog, light rain

PPT in last 24 hrs:

code 3/4  
some heavy rain

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES <i>possible species</i>
N1	1:31 1:45	-	- channel of water with wetland - surrounded by rock	- Blanding, - mass. sh + skink
N2	2:00 2:15	-	- lake & marsh, rock edges.	- BLTU, MASN, FL SK,
N3	2:18 2:33	-	- marshy pond, rock barren bordered	- BLTU, MASN, FL SK,
N4	2:40 2:45	-	- Beaver pond surrounded by rock barren, large beaver dam + beaver lodge + lots of basking rocks + logs	- BLTU, MASN, FL SK,
N5	2:45 2:50	Turtle 	- creek channel, marsh edge, beaver dam, basking rocks + logs - rocky outcrops around	- BLTU, MASN, FL SK
N6	2:55 3:00	-	- wetland with basking logs.	- BLTU, MASN, FL SK
N7	3:02 3:07	-	- channel drainage - high rocky sides - beaver dam - basking logs	- BLTU, MASN, FL SK, SNTU

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: Pete Read  
(Field Personnel)Signature: [Signature]  
(Project Manager)Page 1 of 2

REV: May 07 FORM 005



LOCATION	TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES possible species
N 8	3:10 3:15		- channel with marsh - opens to open water - rocky edges	BLTU, MASN, [REDACTED]
N 9	3:17 3:20		- channel with beaver dams open ponds - rocky edges	BLTU MASN [REDACTED]
N 10	3:23 3:26		- <del>ponds</del> ponds back from road - marshy areas	BLTU MASN [REDACTED]
Plate 3 N 11	4:30 4:35	*BLTU SNTU MASN confirmed	- pond along tracks with marsh - creek at corner	MASN, BLTU, [REDACTED] SNTU, Hognose
Plate 4 N 12	4:39 4:44	<del>BLTU</del> rocky waterways RK	- channel → wetlands along side - bordered with woods - *BLTU + SNTU confirmed	BLTU, SNTU, [REDACTED] MASN,
N 13	4:46 4:50		- inlet - forest & rocky edges. ← *confirmed for BLTU + SNTU	BLTU, SNTU, [REDACTED] MASN, FOSN?, Hognose
N 14	4:50 4:58	*BLTU, MASN, SNTU confirmed	- Key River at Hwy 69; mosaic of river, mixed woods, open grassy slopes, rocky outcrop areas, and watery ditches on east side of Hwy on North side of bridge	Foxsnake found at Key River in 2011 + stinkpot
N 15	5:00 5:05	* SNTU BLTU confirmed	- open lake - forest & rock - marshy edges	[REDACTED], MASN, Stinkpot
N 16	5:07 5:12	* BLTU, SNTU	Grundy lake - forest surrounded - marshy edges	MASN, Stinkpot, Hognose
N 17	5:12 5:17		- cattail marsh	BLTU, MASN, SNTU

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Signature: Peter Read  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 2 of 3

REV: May 07 FORM 005

May 22 2013

Viggo Høy  
PJ # 160960524**Other Bird Species**

Please record any flock behavior (i.e. gulls, crows, blackbirds), raptors or any significant species.

Pete Read &amp; Richer

Species	No. of Individuals	Location (e.g. in water puddle, agr. field near puddle, mowed lawn, etc.)	Behaviour (i.e. height/direction of flight, feeding, etc.)
N1		541081 5063903	
N2		540854 5064405	
N3		540458 5065275	
N4		540197 5065851	
N5		539998 5066300	
N6		539949 5066404	
N7		539727 5066895	
N8		539554 5067274	
N9		539428 5067560	
N10		539173 5068429	
plate 3 N11		534069 5077649	
N12		533605 5079472	
N13		533420 5080458	
N14		533762 5082199	
N15		533187 5083643	
N16		532322 5086400	
N17		532350 5087384	

page 3 of 3

Signature: \_\_\_\_\_

  
 (Field Personnel)
Quality Control: This form is complete ☐ & legible ☐.

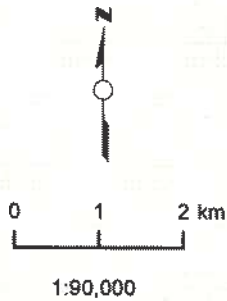
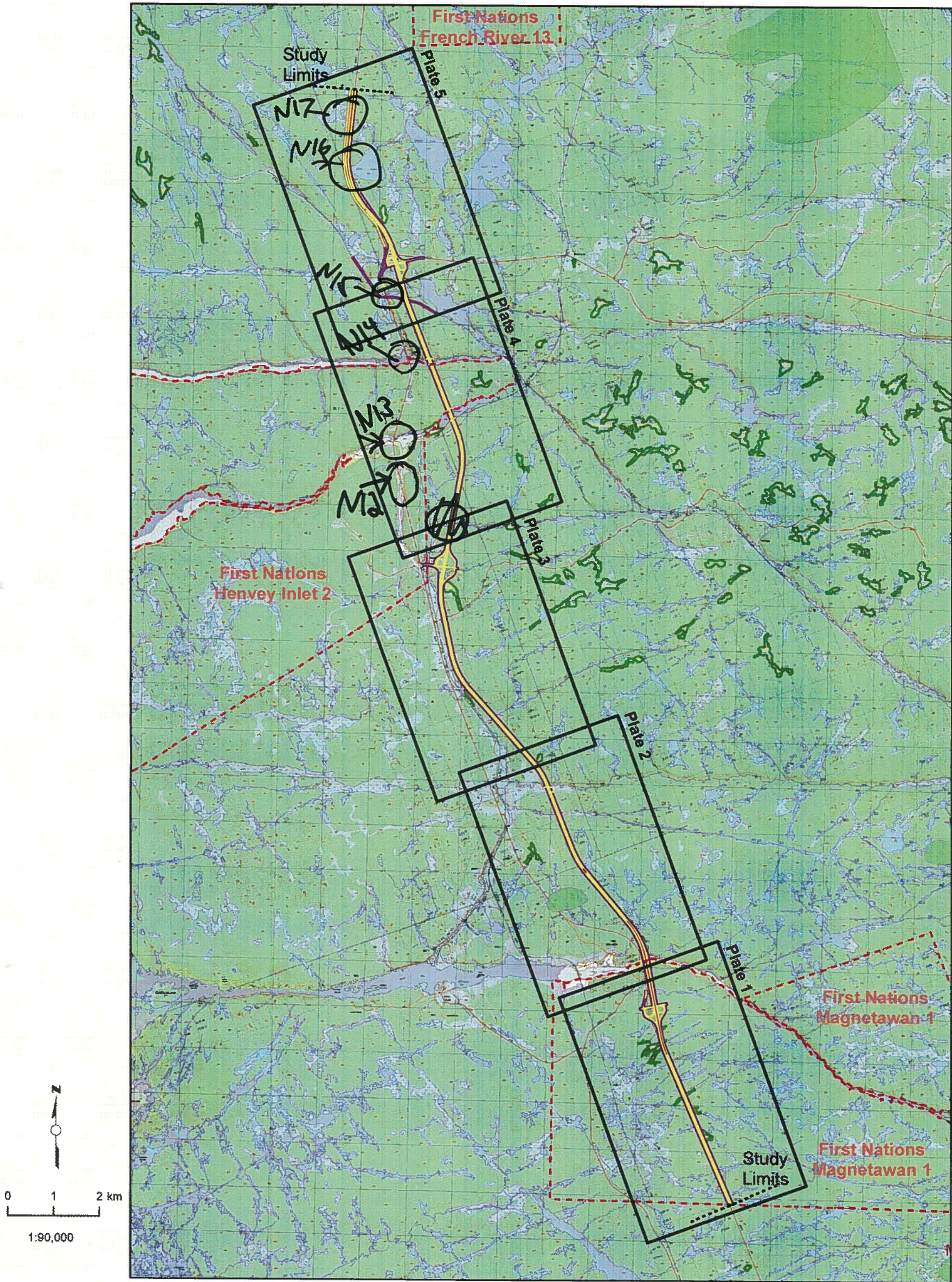
Signature: \_\_\_\_\_

(Project Manager)

REV: 2011-05-05 / FORM 010b



# PREVIOUS SAR (REPTILE) OBSERVATIONS IN HWY CORRIDOR - NORTH SECTION -



**Species Observations**

**Species of Conservation Concern**

- Habitat
- Sighting

**Secure Species**

- Habitat
- Sighting

Habitat observations refer to specific habitat types.

For snakes they are gestation sites.

For turtles and birds they are nesting sites.

Species Observations Data Sources

Data source code noted after species code (ie EMR)

Code	Data Source
a	MNR Observations
b	Ecoplans field work 2003, 2004, 2005
c	Reptile Awareness Program Data
d	Element Occurrence species records (NHIC)

**Secure Raptors**

- NG Northern Goshawk
- OSP Osprey

**Secure Birds (Non-raptors)**

- SHC Sandhill Crane

**Insects of Conservation Concern**

- PSP Pepper and Salt Skipper

## Legend for Detail Sheets

**Labels**

**Reptiles of Conservation Concern**

- EMR Eastern Massasauga Rattlesnake
- EHS Eastern Hognose Snake
- ST Spotted Turtle
- BT Blandings Turtle
- FS Five Lined Skink
- MS Milk Snake
- SP Sinker
- Unknown
- UTS Unknown Turtle Species

**Other Areas Assessed for Potential as EMR Habitat**

- Assessed - Low or moderate habitat potential
- Assessed - High potential as EMR foraging and/or gestation habitat
- Assessed - High potential as EMR hibernation habitat

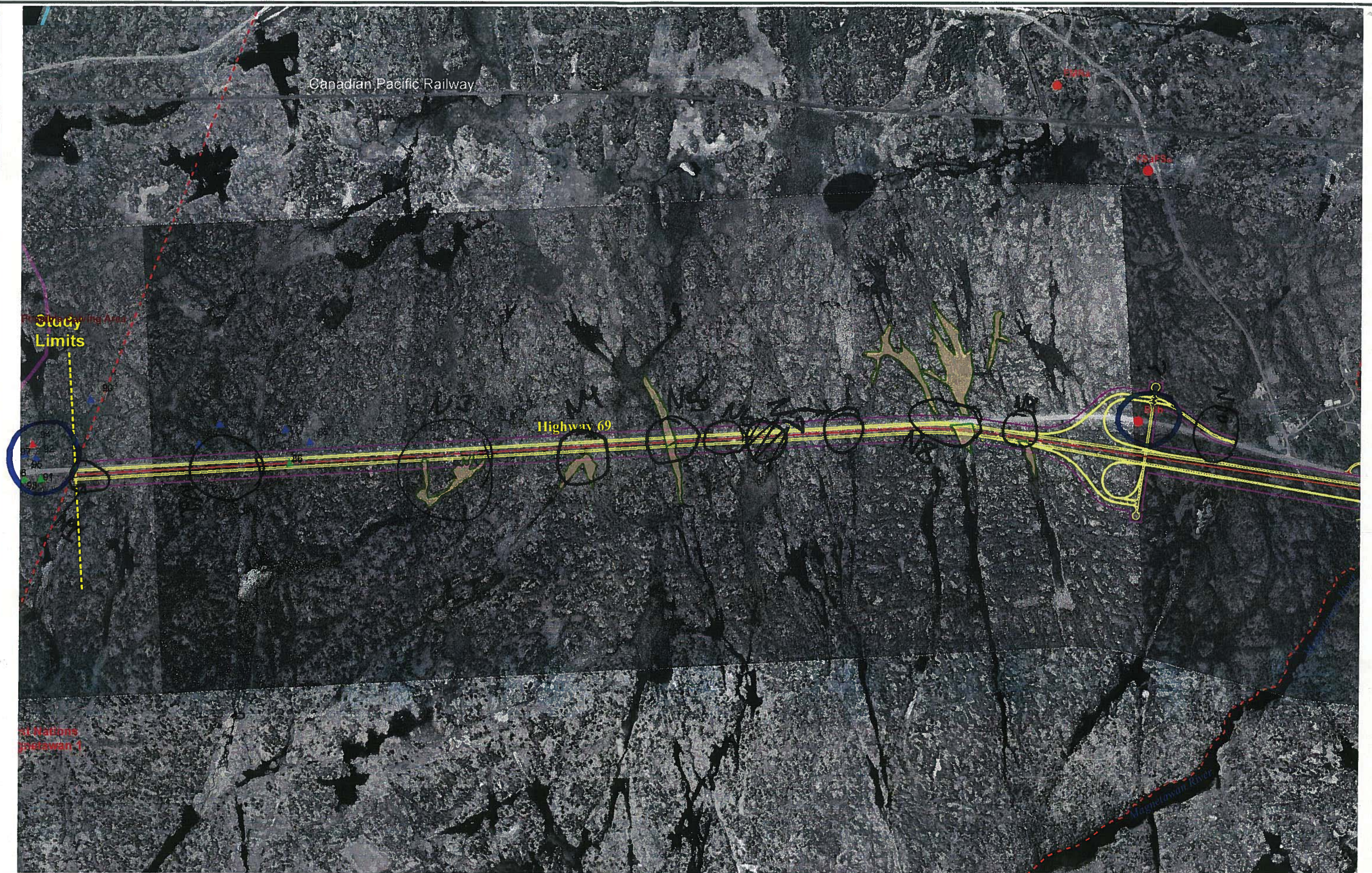
**Snake Habitat Potential - Local Knowledge (Revised)**

- EMR Observed
- EMR Never Observed
- EHS Occasionally Observed

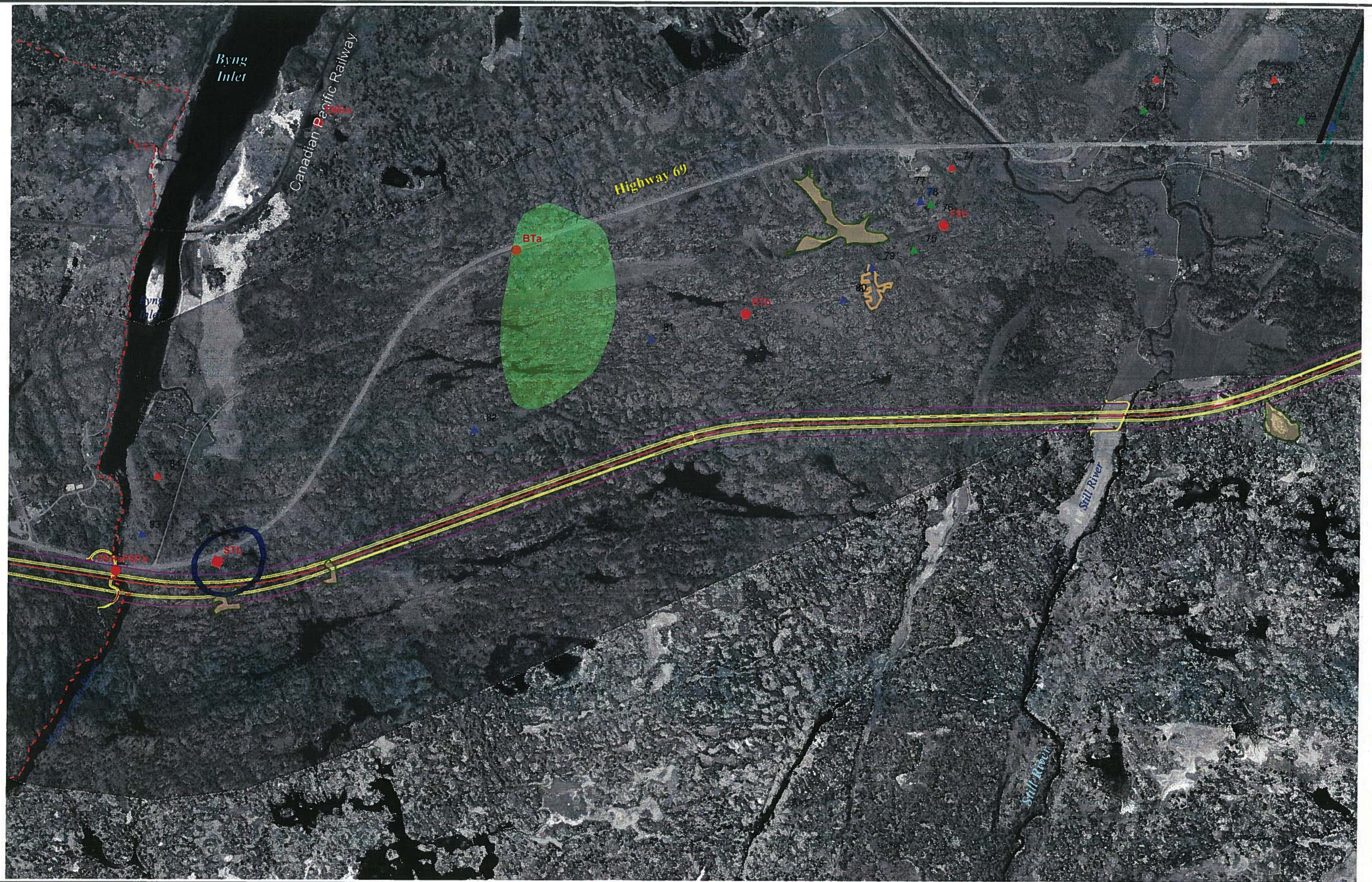
**First Nations Lands**

- Moose aquatic feeding area (Ecoplans fieldwork)
- Moose aquatic feeding area (MNR NRVIS)
- Deer yard
- Core deer yard area
- Observation from PIC
- Vegetation Unit with high potential for EMR hibernation habitat





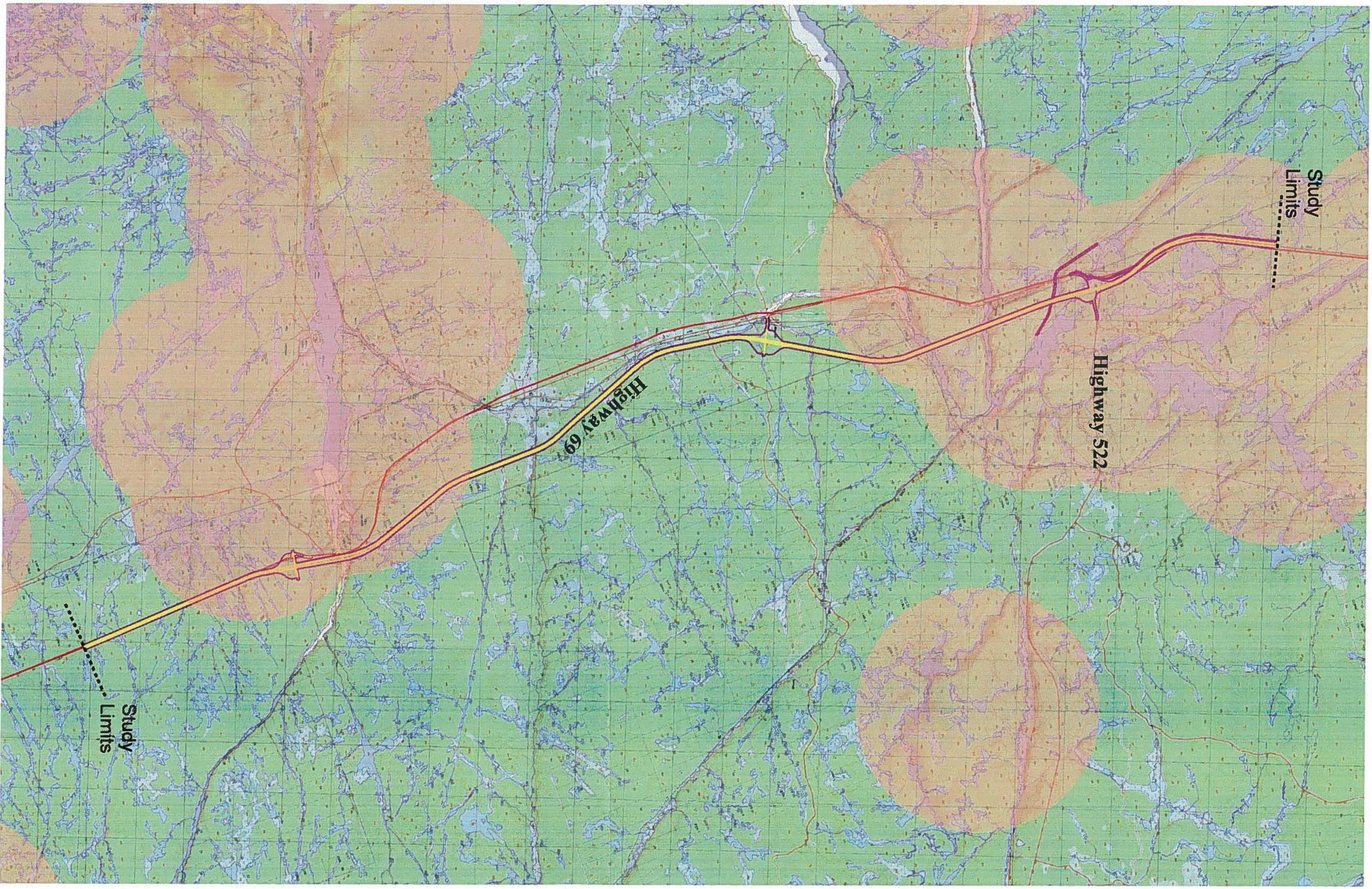












- Legend**
- Centre Line Existing Highway 69
  - Edge of Pavement Proposed Highway 69
  - Proposed Right of Way
  - Approximate distribution of Eastern Massasauga Rattlesnakes defined as lands within 2.5 km of MNR records of occurrence

0 1 2 3km  
1:80,000





**Stantec**

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Guelph, Ontario, Canada  
N1G 4P5  
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Fax: (519) 836-2493

## Reptile Survey Observation Form

Project Number 160960824Project Name: Nigig / HenveyDate / Time: May 24 2013Field Personnel: J Richer & P Read

Weather Conditions:	Temp: <u>12-16</u>	Wind: <u>2-3</u>	Cloud: <u>&lt;50%</u>	PPT: <u>0</u>	PPT in last 24 hrs: <u>light to heavy</u>
---------------------	--------------------	------------------	-----------------------	---------------	---

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION										OTHER	NOTES	FOSS	HO6	MART	FLAT	Mikroto
1	2:42		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
2				✓	✓		✓		P	✓	✓	✓	✓	✓					
3								✓	L	✓	✓	✓	✓	✓	✓			✓	✓
4					✓				P	✓	✓	✓	✓						
5				✓			✓	✓		✓	✓	✓	✓					✓	✓
6								✓	L		✓	✓	✓	✓	✓	✓		✓	✓
7							✓	✓			✓								J?

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: Peter Read  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)Page 1 of 2

REV: May 07 FORM 005



REV: May 07 FORM 005



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Revised: 2013-04-01 By: amhb

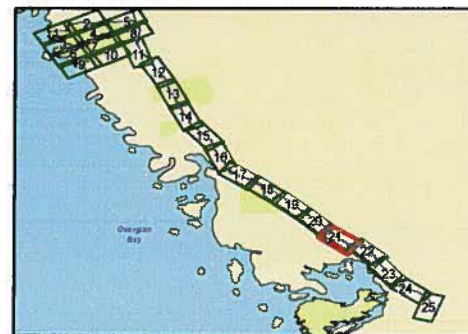


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## Legend

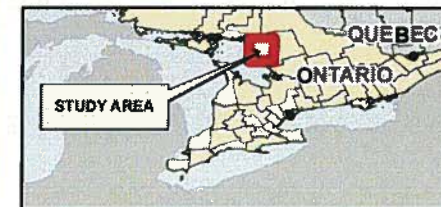
- |                                    |                       |
|------------------------------------|-----------------------|
| <b>Potential Transmission Line</b> | Railway               |
| Proposed Route                     | Trail                 |
| North Substation                   | Contour(5m)           |
| Route Marker                       | Watercourse           |
| <b>Existing Features</b>           | First Nations Reserve |
| City or Town                       |                       |
| Hydro Station                      |                       |
| Existing Transmission Line         |                       |
| Highway                            |                       |
| Major Road                         |                       |
| Local Road                         |                       |

\*Location of transmission line within the highway corridor is unknown at this time.



## Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
3. Imagery Sources: Esri, DigitalGlobe, GeoEye, I-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
21

**DRAFT**

Title

**Proposed Route -  
Photo Mosaic**

April 2013  
Project No.



\\stc\proj\900720\dwg\mxd\Territorial\Final\H0110090770\_FieldMap\_Tiled\_PhotoMosaic\_20130401.mxd  
Released: 2013-04-01 By: amh/b



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## Legend

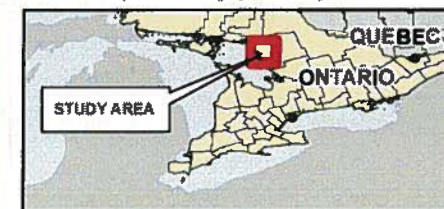
- |                                    |                       |
|------------------------------------|-----------------------|
| <b>Potential Transmission Line</b> | Railway               |
| Proposed Route                     | Trail                 |
| North Substation                   | Contours(5m)          |
| Route Marker                       | Watercourse           |
| <b>Existing Features</b>           | First Nations Reserve |
| City or Town                       |                       |
| Hydro Station                      |                       |
| Existing Transmission Line         |                       |
| Highway                            |                       |
| Major Road                         |                       |
| Local Road                         |                       |

\*Location of transmission line within the highway corridor is unknown at this time.



## Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
22

**DRAFT**

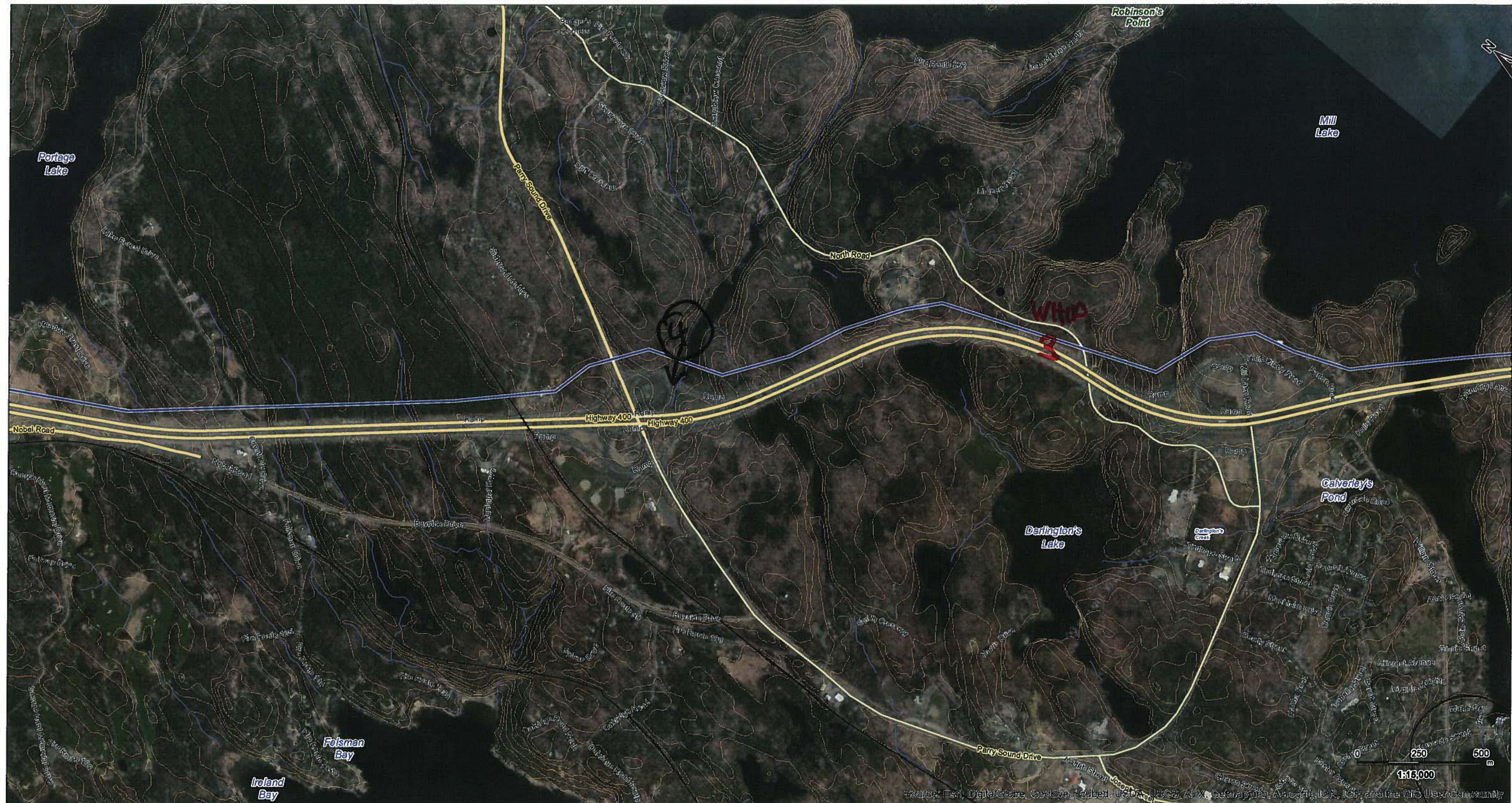
Title

**Proposed Route -  
Photo Mosaic**

April 2013  
Project No.



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Revised: 2013-04-01 By: amh



### Legend

- |                                    |                       |
|------------------------------------|-----------------------|
| <b>Potential Transmission Line</b> | Railway               |
| Proposed Route                     | Trail                 |
| North Substation                   | Contours (5m)         |
| Route Marker                       | Watercourse           |
| <b>Existing Features</b>           | First Nations Reserve |
| City or Town                       |                       |
| Hydro Station                      |                       |
| Existing Transmission Line         |                       |
| Highway                            |                       |
| Major Road                         |                       |
| Local Road                         |                       |

\*Location of transmission line within the highway corridor is unknown at this time.



### Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
23

**DRAFT**

Title  
**Proposed Route -  
Photo Mosaic**

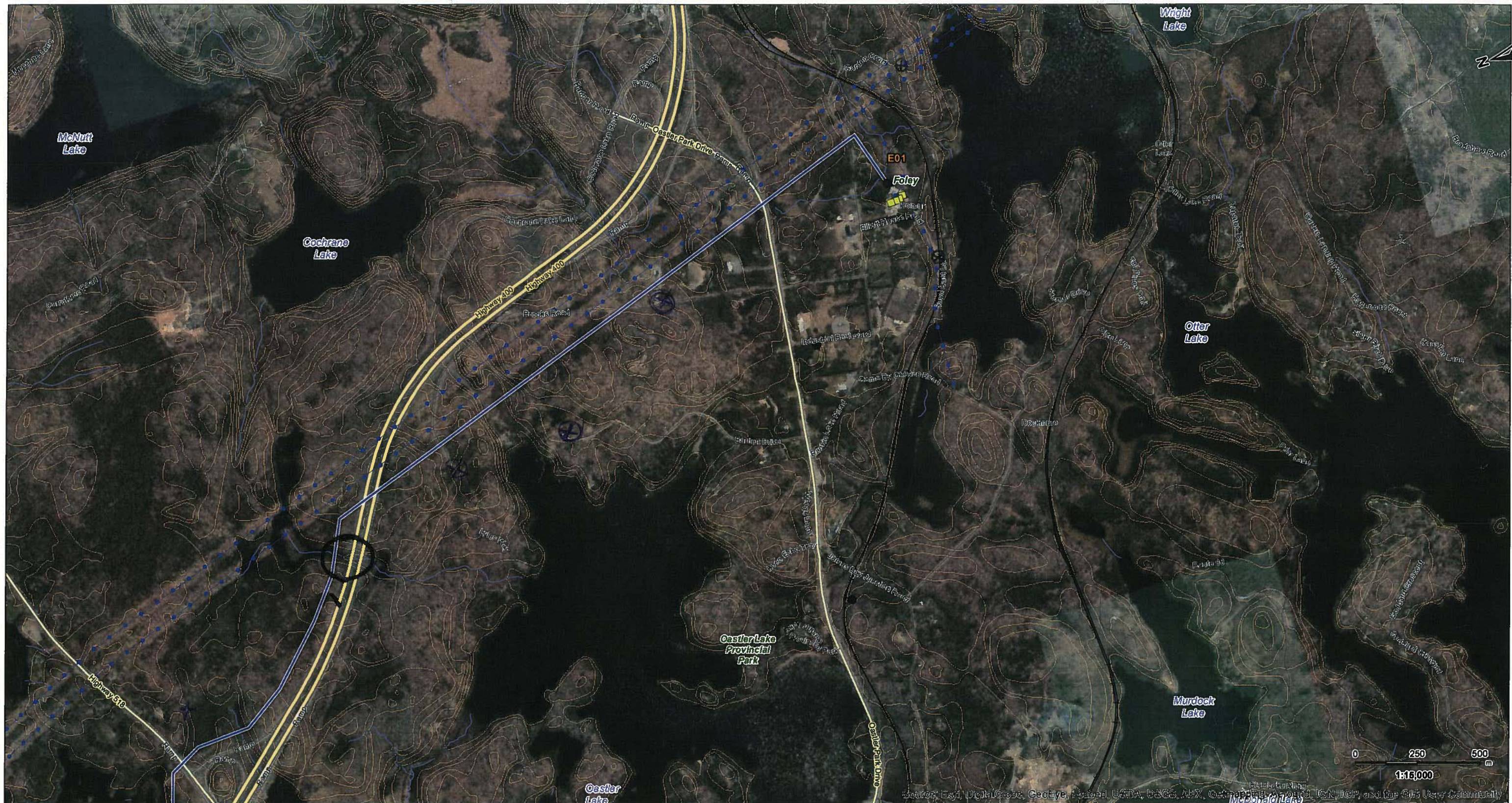
April 2013  
Project No.







\\stntec\00000770\drawings\4\4\TerraSat\4\4\Work\18060770\_FldMap\_Tiled\_PhotoMosaic\_20130401.mxd  
Revised: 2013-04-01 By: swr/bs

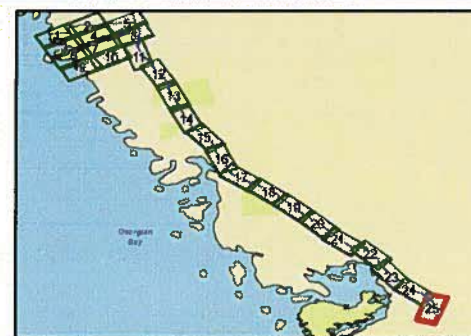


Stantec

## Legend

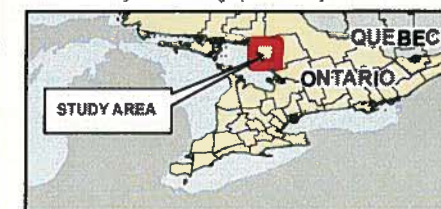
- |                             |                       |
|-----------------------------|-----------------------|
| Potential Transmission Line | Railway               |
| Proposed Route              | Trail                 |
| North Substation            | Contours (5m)         |
| Route Marker                | Watercourse           |
| Existing Features           | First Nations Reserve |
| City or Town                |                       |
| Hydro Station               |                       |
| Existing Transmission Line  |                       |
| Highway                     |                       |
| Major Road                  |                       |
| Local Road                  |                       |

\*Location of transmission line within the highway corridor is unknown at this time.



## Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
25

**DRAFT**

Title

**Proposed Route -  
Photo Mosaic**

April 2013  
Project No.



**Stantec**

Stantec Consulting Ltd.  
70-1 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

**Significant Observation Form***Reptile*Project Number 160960824Project Name: AligaDate: June 4, 2013Field Personnel: A. Taylor / M. Cameron**Weather Conditions:**

Temp:

17

Wind:

3

Cloud:

50

PPT:

/

PPT in last 24 hrs:

/

Species	Time	Evidence	UTM/location	Description and comments
BLTE	16:30	H	179 525572 5075439	- flying / foraging over marsh
HOME♂	16:35	H	525677 5075425	in marsh

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

REV: May, 08

FORM 33



**Stantec**

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Fax: (519) 836-2493

**Significant Observation Form**

545am - 630pm

Project Number

160960821

Project Name:

Nizy

Date:

Jun 4, 13

Field Personnel:

B Holden

**Weather Conditions:**

Temp:

4°C - 16°C

Wind:

1-2-3-4

Cloud:

5-10

PPT:

✓

PPT in last 24 hrs:

✓

Description of area searched (map attached):

Area "A" - PC 201 -

Features found:

171

Species	Time	Evidence	UTM	Description and comments
GSHF - Nests	0622	Reokery	0526328 5078519	Sev. Nests in Beaver Pond to the W. of UTM's
EAWP	0807	SM	0525934 5079390	SM on far side of Beaver Pond (E. of UTM).
CAWA ♂	1146	SM	0524603 5086730	Singing in suitable habitat

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature:

(Field Personnel)

Signature:

(Project Manager)

REV: May, 08

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Fax: (519) 836-2493

**Significant Observation Form**

Project Number <u>160960824</u>		Project Name: <u>Nyng</u>	
Date: <u>June 5, 2013</u>		Field Personnel: <u>A. Taylor / M. Cameron</u>	
Weather Conditions:	Temp: <u>10-17°C</u>	Wind: <u>3</u>	Cloud: <u>50%</u>
		PPT: <u>/</u>	PPT in last 24 hrs: <u>/</u>

Species	Time	Evidence	UTM/location	Description and comments
WOTH	9:20	S	127 527880 5074127	- Form
PRWA6	16:40	S	525816 5075460	- Displaying over large area - Likely unpaired male
CONI	16:55	S	525422 5075424	- displaying

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

REV: May, 08

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Tel: (519) 836-6050  
Fax: (519) 836-2493

**Significant Observation Form**Project Number 160960824Project Name: NugigDate: June 6, 2013Field Personnel: A. Taylor / M. Cameron

Weather Conditions:	Temp: <u>10-15°C</u>	Wind: <u>3</u>	Cloud: <u>80</u>	PPT: <u>—</u>	PPT In last 24 hrs: <u>—</u>
---------------------	----------------------	----------------	------------------	---------------	------------------------------

Species	Time	Evidence	UTM/location	Description and comments
EAWP	6:05	S	525853 5076584	-poplar woodland
WOTH	6:35	S	526285 5076403	
BWHA	6:55	S	526328 5076374	-calling over wetland
WOTH	7:10	S	526280 5076545	
WOTH	8:39	S	527005 5076800	
CONI	9:20	H	527271 5076646	-flushed from rock barren
BWHA	15:05	S	526048 5076339	-poplar forest -no nest observed
CONI	21:35	S	528011 5077974	-calling -poplar forest / rock barren

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

REV: May, 08

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Fax: (519) 836-2493

**Significant Observation Form**Project Number 180960924Project Name: WjyDate: Jun 6/13Field Personnel: BH**Weather Conditions:**

Temp:

6-18°C

Wind:

J-E

Cloud:

100%

PPT:

✓

PPT in last 24 hrs:

✓

Description of area searched (map attached):

Features found:

17T

Species	Time	Evidence	UTM	Description and comments
CAWA	0830	SM	0529895 5078530	
CAWA	0940	SM	0529822 5078608	
CAWA	1010	SM	0529511 5078475	
CAWA	1135	SM	0528616 5078303	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

REV: May, 08

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Fax: (519) 836-2493

**Significant Observation Form**Project Number 160960824Project Name: N. GrosDate: June 7, 2013Field Personnel: R. Taylor / M. Cameron

<b>Weather Conditions:</b>	Temp: <u>10-17°C</u>	Wind: <u>2</u>	Cloud: <u>50%</u>	PPT: <u>          </u>	PPT in last 24 hrs: <u>          </u>
----------------------------	----------------------	----------------	-------------------	------------------------	---------------------------------------

Species	Time	Evidence	UTM/location	Description and comments
WOTH	6:30	S	528464 5077137	
WOTH	8:05	S	528790 5076553	
Stork nest			529050 5075730	- in open marsh - unoccupied
OSPY	12:30	S	529038 5075845	
WOTH	13:05	S	529713 5076698	

Quality Control: This form is complete (\_\_\_) &amp; legible (\_\_\_).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

REV: May, 08

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Tel: (519) 836-6050  
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**Significant Observation Form**Project Number 160960824Project Name: NigdyDate: Jan 7, 13Field Personnel: B. Noftner

Weather Conditions:	Temp: <u>9-19°C</u>	Wind: <u>3-E</u>	Cloud: <u>100-60-80</u>	PPT: <u>/</u>	PPT in last 24 hrs: <u>/</u>
---------------------	---------------------	------------------	-------------------------	---------------	------------------------------

Description of area searched (map attached): Mix of Ara B/A

Features found:

17T

Species	Time	Evidence	UTM	Description and comments
<u>CAVA</u>	<u>0744</u>	<u>SM</u>	<u>0528209</u> <u>5078949</u>	
<u>CAVA</u>	<u>0840</u>	<u>SM</u>	<u>0527935</u> <u>5080068</u>	<u>200m W. of this</u> <u>UTM</u> <u>↓</u>
<u>CAVA</u>	<u>0937</u>	<u>SM</u>	<u>0527097</u> <u>5081001</u>	
<u>CAVA</u>	<u>1324</u>	<u>SM</u>	<u>0527818</u> <u>5078710</u>	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

REV: May, 08

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**Significant Observation Form**

5:30 am - 2 pm

Project Number 160960824Project Name: NigizDate: Jun 8, 13Field Personnel: B Holden

Weather Conditions:	Temp: <u>8-18°C</u>	Wind: <u>1-2 E</u>	Cloud: <u>100-90-100</u>	PPT: <u>/</u>	PPT in last 24 hrs: <u>/</u>
---------------------	---------------------	--------------------	--------------------------	---------------	------------------------------

Description of area searched (map attached):

Area "B"

Features found:

177

Species	Time	Evidence	UTM	Description and comments
<u>CAVA</u>	<u>0550</u>	<u>SM</u>	<u>0579192</u> <u>5079411</u>	
<u>CAVA</u>	<u>1111</u>	<u>SM</u>	<u>0527905</u> <u>5080490</u>	<u>150m SE of UTM</u>
<u>Bear Den</u>	<u>1245 pm</u>	<u>Hair, etc</u>	<u>050528639</u> <u>5079345</u>	<u>Winter Den - Large.</u>
<u>Unknown Den</u>	<u>1 pm</u>	<u>Uter Den</u>	<u>0528677</u> <u>5079296</u>	<u>Perhaps too small for Black Bear? - very deep.</u>

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

REV: May, 08 FORM 33



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**Significant Observation Form**Project Number 160960824Project Name: Nigig/Henvey InletDate: See belowField Personnel: SEicher

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:

Description of area searched (map attached):

Features found:

Species	Time	Evidence	(17T)UTM	Description and comments
Snapping Turtle	11:47am Apr 30 2013	OR photo taken	522773 5075058	adult, submerged in shallow water, inland marsh/pond
Blanding's Turtle	12:10 pm Apr 30 2013	OR photo taken	522671 5074966	adult, on land, approx 1m from water
Snapping Turtle	1:11 pm Apr 30/2013	OR photo taken	522443 5074984	adult, basking on log in large beaver pond
Blanding's Turtle	1:50 pm Apr 30/2013	OR moved before pic was taken	522347 5075863	adult, in very small inland pool (size of a small house) (consided)
Five-lined Skink	Apr 30 2013 2:00 pm	OR photo taken	522468 5075992	adult female, basking
Blanding's Turtle	8:22 am May 1 2013	OR photo taken	525556 5073401	adult, basking, inland small wetland
Blanding's Turtle nest	Found May 2 7:00 am	OR photo taken	529532 5078465	disturbed on Beckanah Rd, sandy area; eggshells empty, still in ground - hatched?
Blanding's Turtle	May 2 2013 3:30 pm	OR, photo taken	523816 5078607	adult, basking
Blanding's Turtle	May 2 2013 4:46 pm	OR, photo not taken	529440 5078037	adult, basking, moved before I could get a pic
	May 3 2013 9:36 am	OR photo taken		male, basking, potentially beginning to travel over land
2 Snapping Turtles	May 3 2013 11:30 am	OR photo taken	523861 5081045	2 mating at water's surface
Smooth Green Snake	May 3 2013 11:18 am	OR photo taken	523819 5080864	crawled up into a juniper bush
	May 3 am 2013 11:36	OR photo taken		adult female, basking
Blanding's Turtle	May 7 2013 2:30 pm	OR photo taken	529576 5078284	adult, basking on road Beckanah
Blanding's Turtle	May 8 2013 8:35 am	OR photo taken	523089 5076266	adult swimming in shallow water near shore
Massasauga Rattlesnake	10:31 am May 9 2013	OR photo taken	527183 5081709	in tall dry grassy floodplain area, very dull & dusty looking

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 6

REV: May, 08 FORM 33



	Species	Time	Evidence	UTM	Description and comments
	Smooth Green Snake	1:08pm May 9 2013	OB, photo taken, dead	529498 5077982	dead on Beckanon Road
MASN	Massasauga Rattlesnake	12:13pm May 14 2013	OB, photo taken	525263 5075698	coiled, resting; it is quite cool, approx 70°, came across it accidentally
	Massasauga Rattlesnake	May 15 2013 12:06pm	OB, <del>photo</del> photo taken	526936 5077230	juvenile, <del>was taken</del> basking
BLTU	Blanding's Turtle	May 15 2013 1:25	CA, OB, photo taken	532379 5078851	juvenile or subadult; dead, some flesh (head, feet) still p.
SNTU	Snapping Turtle	May 16 2013 9:00am	OB, photo not taken	524895 5080998	adult, basking on log
MASN		May 16 2013 10:06am	OB, picture	527032 5081612	adult, alder thickets grassy floodplain area
MASN		May 16 2013 10:26am	OB, picture	526870 5081680	adult, grassy floodplain
MASN		May 24 2013 10:47am	OB, picture	525143 5077208	adult, basking in lichen/rock/mossy barrens
BLTU		May 24 2013 11:25am	OB, no picture	525017 5076731	adult, moved from mainland into inlet, too fast to take a pic
SNTU		May 24 2013 4:23pm	OB, no picture	566913 5033340	adult, rescued off of highway & released into nearby wetland
BLTU		May 25 2013 8:41am	OB, photo taken	524965 5081001	adult, basking in pond with other BLTUs
MASN		May 30 2013 8:57am	OB, no photo	523790 5080884	moved too quick for photo; yearling, very tiny
MASN		May 30 2013 9:14am	OB, photo	523777 5081083	adult, the fattest I've ever seen; maybe gravid female?
2	BLTUs	May 30 2013 10:55am	OB, photo taken	524943 5081008	adults (two) basking on same log
BLTU		May 30 2013 10:58	OB, no photo	524955 5081008	adult, basking on grassy hummock/tuft
2	BLTUs	May 30 2013 10:59	OB, no photo	524929 5081034	adults, basking on a log
2	BLTUs	May 30 2013 11:07	OB, no photo	524926 5081023	adults, basking far away on log, distinctive shell shape
BLTU		<del>May 30</del> May 30 2013 11:37am	OB, no photo	523994 5081431	adult, moving from mainland into the Key River too quick for pic
BLTU		June 4 2013 3:07pm	OB, too far for photo	532783 5080227	adult basking on log in large wetland-pit
BLTU		June 5 2013 12:15pm	OB, photo taken	523169 5076383	basking on a rock island at edge of water/inlet

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

REV: May, 08 FORM 33



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**Significant Observation Form**Project Number 160960824Project Name: Nigig/Henvey InletDate: See belowField Personnel: SRicher**Weather Conditions:**

Temp:

Wind:

Cloud:

PPT:

PPT In last 24 hrs:

Description of area searched (map attached):

Features found:

Species	Time	Evidence	UTM	Description and comments
Five-lined skink	June 5 2013 1:14 pm	OB, too quick to photograph	528472 5078338	Adult male at rocky by landing, end of Reckanah Road
BLTU Blanding's Turtle	June 6 2013 11:06 am	OB, camera not working	531103 5080750	12 in total, barking throughout wetland, OB w Brian Miller, at point X <sup>9</sup> on Henvey 2 IR
OSFL Olivier-sided Flycatcher	June 6 2013 12:02 pm	heard singing repeatedly	530742 5080510	heard singing "quick three beers" -OB with Brian Miller
BLTU (7)	June 6 2013 1:16 pm	OB, camera not working	530385 5079844	all adults, barking throughout wetland -OB with Brian Miller
SNTU Snapping Turtle	June 6 2013 1:16 pm	OB, camera not working	530385 5079844	one, barking at same wetland as above 7 Blanding's -OB with Brian Miller
CONI Common Nighthawk	June 7 2013 8:52 am	OB flying off the ground	523241 5079024	-OB with Brian Miller -adult spooked from assumed on-ground roosting spot, no nest found
CONI	June 7 2013 11:48	OB flying off the ground	523238 5078846	-OB with Brian Miller -adult spooked from ground on our approach, no nest found
BLTU	June 7, 2013 2:21 pm	OB photographed by Reckanah Road	529514 5078211	-adult in small roadside puddle/ditch along Reckanah Road

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: SRicher

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)



Species	Time	Evidence	UTM	Description and comments
<del>Smooth</del> Green Snake	June 7 2013 2:48	obs photographed	532343 5078712	<del>obs</del> with Brian Miller basking on Groundhog's Corner Road by where it intersects with Beckanon
MASN	June 15 2013 7:37am	obs photographed	526691 5073341	adult in grassy forested wetland; nearly stepped on it, rattled, didn't strike
FAWP Eastern Wood Pewee	June 16 2013 1:00pm	heard singing repeatedly	522285 5076496	on Cash Island, by 2013 Hawk watch point S (clock with cottage)
MASN	June 17 2013 11:56am	obs photographed	529478 5077343	in <del>dead</del> Mixed woods, hid under log; tapped on log, no rattle heard
SVTU	June 18 2013 11:35am	predated nests, <sup>eggs</sup> shells several;	532449 5078909	at least 4 of them were predated today, approx minimum 7-10 both <del>related</del> <sup>related</sup> <del>snapping</del> <sup>snapping</sup> nests;
FAWP	June 18 2013 11:53am	heard singing repeatedly	532753 5079493	near breeding bird point count Z2
OSFL pair	June 20 2013 7:45am	heard singing a "pip-pip-pip" agitated pair	530563 5079619	same wetland where 1 SVTU + 7 BLTU were obs on June 6 2013
Smooth Green Snake	June 22 2013 3:02pm	obs photographed	530798 5078697	-obs with Brandon Holden -basking on Beckanon Road
Snapping Turtle SVTU	June 22 2013 4:20pm	obs photographed	531043 5078720	-possibly nesting on <del>Beckanon</del> <sup>Beckanon</sup> Road, as parking in vehicle interrupted it
Red shouldered Hawk	June 4 2013 9:32am	observed soaring	532506 5076804	-obs with Brian Miller

Page 4 of 6

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

REV: May, 08 FORM 33



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**Significant Observation Form**Project Number 160960824Project Name: Nigig/Henvey InletDate: See belowField Personnel: Richer

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT In last 24 hrs:

Description of area searched (map attached):

Features found:

Species	Time	Evidence	UTM	Description and comments
COMI Common Nighthawk	<del>8:30am</del> May 29 2013 9:28am	obs flying off of ground on our approach	530742 5078733	Obs with Katherine & James
EWPW Eastern Whippoorwill	May 29 2013 9:54pm	obs flying off of ground on our approach	528977 5078051	obs flying off of ground, off of Beckanon Road
EWPW	May 29 2013 6:04am	obs flying off of ground	522282 5078689	pair (2) flew off ground together, off of Beckanon Rd
Red- bellied Snake killed	May 14 2013 1:56pm	obs, photo- graphed	528846 5078150	roadkilled on Beckanon Rd
Eastern Spotted Newt Red eft stage	May 22 2013 7:41am	photographed	529513 5078235	on Beckanon Rd -obs w Pete Read
Eastern Spotted Newt Red eft stage	May 22 2013 7:57am	photographed	529473 5078422	on Beckanon Rd -obs w Pete Read
Eastern Spotted Newt Red eft stage	May 22 2013 8:00am	photographed	529500 5078447	on Beckanon Rd -obs w Pete Read
Eastern Spotted Newt Red eft stage	May 22 2013 8:03am	photographed	529505 5078267	on Beckanon Rd -obs w Pete Read

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: D. Richer  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)



Species	Time	Evidence	UTM	Description and comments
Eastern Spotted Newt Red eff stage	May 22 2013 7:15am	photographed	529474 5078017	on Beckanon Road - obs w Pete Reed
Eastern Spotted Newt Red eff stage	May 22 2013 7:50am	photographed	529502 5078290	Roadkilled on Beckanon Road - obs w Pete Reed

Page 6 of 6

Quality Control: This form is complete ( ) & legible ( ).

Signature: J. R. C.  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

REV: May, 08 FORM 33

**Stantec**

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## Significant Observation Form

Project Number 160960424Project Name: Nigig/HenveyDate: Sept 6 2013Field Personnel: Richard M. Traut

Weather Conditions:

Temp:

9.20

Wind:

4

Cloud:

100

PPT:

—

PPT in last 24 hrs:

—

Description of area searched (map attached):

Features found:

Species	Time	Evidence	UTM	Description and comments
MASN	9:03am	Photo	523879 5081036	
MASN	11:28am	Photo	527117 5081654	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

REV: May, 08

FORM 33



**Stantec**

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N1G 4P5  
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Fax: (519) 836-2493

**Significant Observation Form**

Project Number <u>160960824</u>		Project Name: <u>Nigig/Henvey Inlet</u>			
Date: <u>Oct 2 2013 → Oct 4 2013</u>		Field Personnel: <u>SRichert &amp; J Ball</u>			
Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:

Description of area searched (map attached):

Features found:

Species	Time	Evidence	UTM	Description and comments
Bald Eagle	12:30 pm Oct 2 2013	observed by Sarah Richert & Janice Ball	528322 5078012	Adult, both below and at blade height, flying west/sw
Red-bellied Snake roadkilled	Oct 2 2013 8:55am	roadkilled on Beckman, obs by SRichert & J Ball	529512 5078230	not a fresh kill, perhaps less than a week old
Bald Eagle (two)	12:40 pm Oct 3 2013	obs by Sarah Richert & Janice Ball	526670 5077218	Two adults, both perched in top third of a White Pine tree on south edge of inlet, one male & one female
Trail camera ?	Oct 4 2013 Friday	obs by Sarah Richert & Janice Ball	525605 5073300	also observed Sept. 25 2013 (last week) by SRichert & Carolyn Peterson. In Sandy Bay...

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

REV: May, 08

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**Significant Observation Form**Project Number 160960824Project Name: Nigig/Henvey InletDate: Sept 11-14 2013Field Personnel: SRicher

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:

Description of area searched (map attached):

Features found:

NAD 83

Species	Time	Evidence	UTM 17T	Description and comments
Bald Eagle (adult)	Wed Sept. 11 2013	observed by SRicher & CPaterson	520317 5076136	Adult; soaring
Bald Eagle (immature)	Wed Sept. 11 2013	observed by SRicher & CPaterson	524365 5076080	2nd year bird, soaring around Milton's Bay
Bald Eagle (immature)	Wed Sept. 11 2013	observed by SRicher & CPaterson	526214 5077542	2nd year bird, perched on north shore of inlet; different bird than previous imm. BACA
Blanding's Turtle (remains)	Thurs Sept. 12 2013	photo of remains	526090 5077019	carapace empty; plastron broken into 2 pieces approx 10m away
Bald Eagle (adult)	Fri Sept. 13 2013	observed by SRicher & CPaterson	528352 5078180	soaring East along Inlet above Beckman landing
Bald Eagle (adult)	Sat. Sept 14 2013	observed by SRicher & CPaterson	521032 5081722	soaring overhead, steadily east/southeast at Key River ~ 11:30
Bald Eagle (adult)	Sat. Sept 14th 2013	observed by SRicher & CPaterson	525978 5077077	soaring overhead by Hawk watch 2 station, ~ 12:00 pm

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: A. Rich  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

REV: May, 08

FORM 33





**Stantec**

Stantec Consulting Ltd.  
70-1 Southgate Drive  
Guelph, Ontario, Canada  
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Tel: (519) 836-6050  
Fax: (519) 836-2493

## Significant Observation Form

Project Number 160960824

Project Name: Nigig/Henvey Inlet

Date: Sept 17-19 2013

Field Personnel: S Richer & Miller

Weather Conditions:

Temp:

Wind:

Cloud:

PPT:

PPT In last 24 hrs:

Description of area searched (map attached):

Features found:

Species	Time	Evidence	UTM	Description and comments
Bald Eagle	4:00pm Sept 17 2013	observed by S Richer & Miller, photo	527290 5077954	4th year bird, perched on north side of inlet

Quality Control: This form is complete ( ) & legible ( )

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

REV: May, 08

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Fax: (519) 836-2493

**Significant Observation Form**Project Number 160960824Project Name: Nigig/Henvey InletDate: Sept 23-26 2013Field Personnel: S. Richer**Weather Conditions:**

Temp: \_\_\_\_\_

Wind: \_\_\_\_\_

Cloud: \_\_\_\_\_

PPT: \_\_\_\_\_

PPT in last 24 hrs: \_\_\_\_\_

Description of area searched (map attached):

Features found:

Species	Time	Evidence	UTM	Description and comments
Massasauga snake	10:59 am	ashed snake skin	523667 5081298	photo taken: length, shape, scale beads, pattern
Garter snake	1:55 pm.	photo taken, living specimen	531926 5078963	crossing road, going E/NE (in area where garter snakes have been frequently observed in the fall in past years)

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

REV: May, 08 FORM 33



# Significant Observation Form

Stantec Consulting Ltd  
70-1 Southgate Drive  
Guelph, Ontario, Canada N1G 4P5  
Tel: (519) 836-8050  
Fax: (519) 836-2493

Project Number: 160990824  
Date: See below

Project Name: Nigig/Henvey Inlet  
Field Personnel: Sarah Richer

Great Blue Heron *GrHE* 2013-07-01 6:36 AM photograph 542574 5060848 Snests with young

Species	Species code	Date obs (year-mm-dd)	Time	Evidence	NAD83 Easting	NAD83 Northing	Description & Comments
Painted Turtle roadkill	PATU	2013-06-21	2:43 PM	photograph	534051	5077695	roadkill
Northern Watersnake roadkill	NWAT	2013-05-22	3:52 PM	photograph	533605	5079472	roadkill
Snapping Turtle juvenile roadkill	SNTU	2013-05-23	6:21 AM	photograph	547561	5052455	juvenile roadkill
Snapping Turtle roadkill	SNTU	2013-05-23	6:34 AM	photograph	547166	5053320	roadkill
Predated turtle nests		2013-05-23	7:01 AM	photograph	546938	5054154	Snapping Turtle eggs & other species
Unknown turtle species roadkill	Unknown	2013-05-23	7:43 AM	photograph	544003	5058089	roadkill
Unknown turtle species roadkill	Unknown	2013-05-23	7:49 AM	photograph	543719	5058371	roadkill
Painted Turtle bones	PATU	2013-05-23	7:54 AM	photograph	543667	5058448	bones
Common Loon Nest	COLO	2013-05-23	8:25 AM	photograph	566435	5033965	Pair, adult at nest
Unknown turtle species roadkill	Unknown	2013-05-23	8:27 AM	photograph	542628	5059846	roadkill
Unknown turtle species roadkill	Unknown	2013-05-23	8:31 AM	photograph	542787	5059897	roadkill
Painted Turtle roadkill	PATU	2013-05-23	8:38 AM	photograph	542634	5060296	roadkill
Unknown turtle species roadkill	Unknown	2013-05-23	8:42 AM	photograph	542689	5060225	roadkill
Predated turtle nests		2013-05-23	8:58 AM	photograph	541947	5061927	Snapping Turtle eggs & other species
Blending's Turtle roadkill	BLTU	2013-05-23	9:09 AM	photograph	541470	5063041	roadkill
Blanding's Turtle baby roadkill	BLTU	2013-05-23	9:10 AM	photograph	541458	5063070	baby roadkill
Painted Turtle roadkill	PATU	2013-05-23	9:12 AM	photograph	541453	5063082	roadkill
Blanding's Turtle roadkill	BLTU	2013-05-23	9:14 AM	photograph	541439	5063066	roadkill

Page 1 of 4

David Hill



Species	Species code	Date obs (year-mm-dd)	Time	Evidence	NAD83 Easting	NAD83 Northing	Description & Comments
Blanding's Turtle roadkill	BLTU	2013-05-23	9:16 AM	photograph	541460	5063023	roadkill
Painted Turtle roadkill	PATU	2013-05-23	12:34 PM	photograph	566009	5034412	roadkill
Painted Turtle roadkill	PATU	2013-05-23	12:41 PM	photograph	565513	5034936	roadkill
Snapping Turtle roadkill	SNTU	2013-05-23	12:44 PM	photograph	565257	5035204	roadkill
Blanding's Turtle female roadkill	BLTU	2013-05-23	12:48 PM	photograph	565257	5035189	female roadkill
Snapping Turtle baby rescued	SNTU	2013-05-23	12:50 PM	photograph	565253	5035193	baby
Snapping Turtle roadkill	SNTU	2013-05-23	12:56 PM	photograph	565249	5035222	roadkill
Snapping Turtle roadkill	SNTU	2013-05-23	12:58 PM	photograph	565278	5035203	roadkill
Snapping Turtle roadkill	SNTU	2013-05-23	1:15 PM	photograph	564321	5036198	roadkill
Unknown turtle species roadkill	Unknown	2013-05-23	2:40 PM	photograph	558515	5041829	roadkill
Snapping Turtle juvenile roadkill	SNTU	2013-05-23	4:11 PM	photograph	555962	5044211	juvenile roadkill
Snapping Turtle roadkill	SNTU	2013-05-23	4:55 PM	photograph	554428	5045162	roadkill
Bullfrogs - two roadkill	BULL	2013-05-23	1:41 PM	photograph	562322	5038039	roadkill
Snapping Turtle roadkill	SNTU	2013-05-24	8:33 AM	photograph	566913	5033341	roadkill
Painted Turtle roadkill	PATU	2013-05-24	8:47 AM	photograph	565069	5035385	by roadkill frog
Painted Turtle - two	PATU	2013-05-24	5:08 PM	photograph	558085	5042287	basking on log by highway
Painted Turtle - two	PATU	2013-05-24	5:37 PM	photograph	551335	5046805	basking on log by highway
Painted Turtle roadkill	PATU	2013-05-25	7:51 AM	photograph	571552	5031183	roadkill
Painted Turtle roadkill	PATU	2013-05-30	5:21 PM	photograph	532949	5085122	Severely injured, barely alive; euthanized
Painted Turtle roadkill	PATU	2013-06-04	7:40 AM	photograph	533603	5082508	Severely injured, barely alive; euthanized
Snapping Turtle juvenile roadkill	SNTU	2013-06-09	8:37 AM	photograph	563350	5037120	juvenile roadkill
Snapping Turtle roadkill	SNTU	2013-06-09	8:49 AM	photograph	554605	5045088	roadkill
Snapping Turtle juvenile roadkill	SNTU	2013-06-09	8:57 AM	photograph	552204	5046325	juvenile roadkill



Species	Species code	Date obs (year-mm-dd)	Time	Evidence	NAD83 Easting	NAD83 Northing	Description & Comments
Snapping Turtle roadkill	SNTU	2013-06-09	9:03 AM	photograph	548781	5049515	roadkill
Snapping Turtle juvenile roadkill	SNTU	2013-06-09	9:17 AM	photograph	541713	5062471	juvenile roadkill
Painted Turtle roadkill	PATU	2013-06-09	9:24 AM	photograph	540267	5065700	roadkill
Blanding's Turtle juvenile roadkill	BLTU	2013-06-09	9:29 AM	photograph	539962	5066371	juvenile roadkill
Painted Turtle - two roadkill	PATU	2013-06-09	9:32 AM	photograph	539736	5066879	roadkill
Painted Turtle roadkill	PATU	2013-06-09	9:43 AM	photograph	534430	5076247	roadkill
Snapping Turtle nesting	SNTU	2013-06-10	10:40 AM	photograph	538815	5069576	on road shoulder
Blanding's Turtle bones	BLTU	2013-06-10	1:01 PM	photograph	540875	5064366	bones
Unknown turtle species roadkill	Unknown	2013-06-10	1:01 PM	photograph	540875	5064366	roadkill
Snapping Turtle juvenile roadkill	SNTU	2013-06-10	1:17 PM	photograph	541415	5063130	juvenile roadkill
Snapping Turtle juvenile roadkill	SNTU	2013-06-10	3:15 PM	photograph	538407	5069771	juvenile roadkill
Painted Turtle practice nest	PATU	2013-06-12	6:53 AM	photograph	547521	5052520	Spooked when I parked
Painted Turtle roadkill	PATU	2013-06-12	11:59 AM	photograph	550464	5047283	roadkill
Painted Turtle roadkill	PATU	2013-06-12	2:04 PM	photograph	559644	5040671	roadkill
Painted Turtle roadkill	PATU	2013-06-12	2:42 PM	photograph	557922	5042434	roadkill
Blanding's Turtle juvenile roadkill	BLTU	2013-06-12	3:39 PM	photograph	539969	5066327	juvenile roadkill
		2013-06-12	3:42 PM	photograph			Unknown sex, too damaged
Snapping Turtle roadkill	SNTU	2013-06-13	2:39 PM	photograph	556296	5043978	roadkill
Painted Turtle roadkill	PATU	2013-06-13	3:40 PM	photograph	533580	5079509	roadkill
Blanding's Turtle adult female roadkill	BLTU	2013-06-13	3:51 PM	photograph	533589	5081140	adult female roadkill
Snapping Turtle roadkill	SNTU	2013-06-13	4:06 PM	photograph	532804	5090178	roadkill
Snapping Turtle juvenile roadkill	SNTU	2013-06-14	8:59 AM	photograph	550426	5047310	juvenile roadkill
		2013-06-14	10:27 AM	photograph			adult male roadkill
Snapping Turtle baby roadkill	SNTU	2013-06-14	4:53 PM	photograph	551654	5046565	baby roadkill

Page 3 of 4

*David R. I.*



Species	Species code	Date obs (year-mm-dd)	Time	Evidence	NAD83 Easting	NAD83 Northing	Description & Comments
Blanding's Turtle	BLTU	2013-06-16	4:22 PM	photograph	533687	5081580	1 egg in remains; likely purposely hit
Predated turtle nests		2013-06-30	11:04 AM	photograph	534765	5075263	Snapping Turtle eggs & other species
Blanding's Turtle roadkill	BLTU	2013-06-30	1:08 PM	photograph	540281	5065697	roadkill
Snapping Turtle juvenile roadkill	SNTU	2013-06-30	2:19 PM	photograph	533603	5082505	juvenile roadkill
Snapping Turtle roadkill	SNTU	2013-06-30	2:32 PM	photograph	533420	5093083	likely purposely killed
Blanding's Turtle roadkill	BLTU	2013-07-01	2:38 PM	photograph	541453	5063087	roadkill
Massasauga snake	MASN	2013-07-02	1:46 PM	photograph	559561	5040794	Adult, healthy
Painted Turtle roadkill	PATU	2013-07-03	1:12 PM	photograph	571641	5031181	roadkill
Blanding's Turtle female roadkill	BLTU	2013-07-03	1:15 PM	photograph	571691	5031142	adult female roadkill
Snapping Turtle juvenile roadkill	SNTU	2013-07-03	4:08 PM	photograph	533088	5091677	juvenile roadkill
Five-lined Skink	FLSK	2013-07-04	5:20 PM	photograph	540599	5065047	adult
Blanding's Turtle juvenile roadkill	BLTU	2013-07-23	9:34 AM	photograph	532600	5090302	juvenile roadkill
Snapping Turtle roadkill	SNTU	2013-07-23	9:38 AM	photograph	532600	5090293	roadkill
Painted Turtle roadkill	PATU	2013-07-23	9:40 AM	photograph	532585	5090214	roadkill
Snapping Turtle roadkill	SNTU	2013-07-23	9:46 AM	photograph	532605	5090219	roadkill
Painted Turtle juvenile roadkill	PATU	2013-07-24	9:29 AM	photograph	559341	5040976	juvenile roadkill
Painted Turtle roadkill	PATU	2013-07-24	9:36 AM	photograph	559992	5040293	roadkill
Snapping Turtle juvenile roadkill	SNTU	2013-07-24	10:23 AM	photograph	563139	5037291	juvenile roadkill
Blanding's Turtle juvenile roadkill	BLTU	2013-07-24	3:41 PM	photograph	541474	5082984	juvenile roadkill
Painted Turtle roadkill	PATU	2013-07-24	3:47 PM	photograph	541448	5063100	roadkill
Painted Turtle roadkill	PATU	2013-07-24	4:24 PM	photograph	542113	5061489	roadkill

Page 4 of 4

*[Handwritten signature]*



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**Significant Observation Form**Project Number 160960824Project Name: Nigig/Henvey InletDate: October 8-11 2013Field Personnel: S Richer & C Paterson

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:

Description of area searched (map attached):

Features found:

The ~~3~~ Bald Eagles recorded below do not include those observed during the hawk watch

Species	Time	Evidence	UTM	Description and comments
Bald Eagle	7:50am Oct 8 2013	observed by Sarah Richer & Carolyn Paterson	521312 5076396	flying at & below blade height, south east, adult
Bald Eagle	10:00 Oct 8 2013	observed by Sarah Richer & Carolyn Paterson	525157 5078735	perched in White Pine on north shore briefly, then flew west, 4th year bird
Bald Eagle	7:40am Oct 10 2013	"	524574 5076114	3rd year bird, perched in Milton's Bay after being observed flying at below blade height
Bald Eagle	11:15 Oct 10 2013	"	526628 5081767	2nd year bird, flying west along inlet below blade height
Monarch (one individual)	10:53am Oct 11 2013	obs by Sarah Richer	522612 5077011	flying south; winds today ~5-10km/hr from NE

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

REV: May, 08 FORM 33

During  
Breeding Bird Surveys



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## Significant Observation Form

Project Number 160960824

Project Name: Heavey

Date: June 25, 2013

Field Personnel: A. Taylor & M. Cameron

Weather Conditions:	Temp: <u>17-23°C</u>	Wind: <u>0</u>	Cloud: <u>60%</u>	PPT: <u>/</u>	PPT in last 24 hrs: <u>/</u>
---------------------	----------------------	----------------	-------------------	---------------	------------------------------

Species	Time	Evidence	UTM/location	Description and comments
WOTH	8:15	S	525846 5074763	
MASS	9:30		526179 5074681	~ 2' long
Northern watersnake	9:45		526287 5074687	~ 6" long
N. watersnake	11:50		526367 5074730	~ 1.5' long
SNTWx2	15:10		525666 5075046	

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

REV: May, 08

FORM 33





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## Significant Observation Form

Project Number	160960824	Project Name:	Henvey
Date:	June 24, 2013	Field Personnel:	A. Taylor / M. Cameron
Weather Conditions:	Temp: 20°C	Wind: 3	Cloud: 10%
		PPT: /	PPT in last 24 hrs: showers

Species	Time	Evidence	UTM/location	Description and comments
WOTH	6:05	S	528268 5077534	
Spotted Salamander	7:26	-egg mass ↳ empty	528025 5077065	
WOTH	8:10	S	528675 5076647	
WOTH	9:30	S	529243 5076250	
BLTUx2	7:40		528662 5077029	Mating Pair

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

REV: May, 08

FORM 33

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# Reptile Survey Observation Form

545am - 630pm

Project Number

16096024

Project Name:

Nizy

Date / Time:

Jun 4/13

Field Personnel:

B. Holden

Weather Conditions:

Temp:

49-16°C

Wind:

1-2-3-4

Cloud:

5-10%

PPT:

/

PPT in last 24 hrs:

/

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
0524938 5080971	1050am	Blandings Turtle	Fairly open Beaver pond	VERY large for species...
0524723 5079179	210pm	Painted Turtles	Bag? Ponds... - Several individuals in the 2 ponds in this area...	
	215	Snapping Turtle	- Some (2nd) larger pond @ above WTM's	
0524692 5078574	245	Milk snake	- Rock Barrens beside small bag pond	~5m. ~15cm
0524723 5079174	213 pm	Blandings Turtle	- Bag 1 for Ponds.	Confirmed later via photo.

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page

/ of \_\_\_\_\_

REV: May 07 FORM 005



W:\active\60960770\060960770\060960770\_Fishtrap\_Tiled\_PhotoMosaic\_20130401.mxd  
Revised: 2013-04-01 By: ewhite



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

April 2013  
Project No.

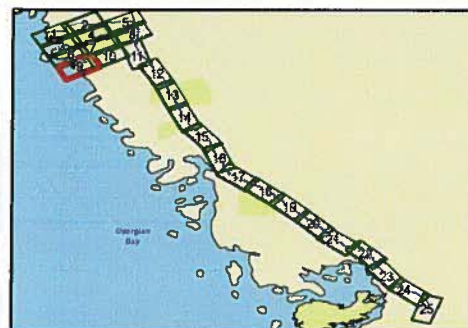


Stantec

## Legend

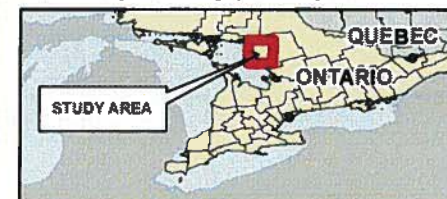
- |                                    |                       |
|------------------------------------|-----------------------|
| <b>Potential Transmission Line</b> | Railway               |
| Proposed Route                     | Trail                 |
| North Substation                   | Contours(5m)          |
| Route Marker                       | Watercourse           |
| <b>Existing Features</b>           | First Nations Reserve |
| City or Town                       |                       |
| Hydro Station                      |                       |
| Existing Transmission Line         |                       |
| Highway                            |                       |
| Major Road                         |                       |
| Local Road                         |                       |

\*Location of transmission line within the highway corridor is unknown at this time.



## Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.

9

**DRAFT**

Title

**Proposed Route -  
Photo Mosaic**



Long

Data  
Entered  
Reptiles.

Nigig

160960824

B. Holden

Jun 4, 2013



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## Reptile Survey Observation Form

Project Number 1609 60 824Project Name: AlvigeDate / Time: June 4, 2013Field Personnel: A. Taylor / M. Cameron

Weather Conditions:

Temp:

17

Wind:

3

Cloud:

50

PPT:

/

PPT in last 24 hrs:

/

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
<u>17T 528432</u> <u>5078333</u>	<u>12:30</u>	<u>SNTU</u>	<u>- Inlet</u>	<u>- basking near surface</u>

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: May 07 FORM 005

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Fax: (519) 836-2493

## Reptile Survey Observation Form

Project Number 160960824Project Name: NogingDate / Time: June 5, 2013Field Personnel: A. Taylor / M. Cameron

Weather Conditions:

Temp:

10-17°C

Wind:

3

Cloud:

50%

PPT:

/

PPT in last 24 hrs:

/

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
177 527554 5074934	9:40	BLTU	-marsh	-basking on stump
527079 5074581	13:20	BLTU	-marsh	-basking on log -very large adult
527045 5074586	13:25	BLTU	"	-basking on log -large adult
526939 5074627	13:31	BLTU	"	-basking on log -medium size adult
526416 5075293	16:35	BLTU	"	-basking on log in 2 PATU-below
"	16:35	PATU	"	"
525450 5075515	17:10	SNTU	"	-basking in water -large ~16cm long

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: May 07 FORM 005



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## Reptile Survey Observation Form

Project Number 1609 60 824Project Name: NogogDate / Time: June 6, 2013Field Personnel: A. Taylor / M. Cameron

Weather Conditions:	Temp: <u>10-15°C</u>	Wind: <u>3</u>	Cloud: <u>80</u>	PPT: <u>—</u>	PPT in last 24 hrs: <u>—</u>
---------------------	-------------------------	-------------------	---------------------	------------------	---------------------------------

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
<u>526319</u> <u>5076654</u>	<u>8:00</u>	<u>BLTU X2</u>	<u>-marsh</u>	<u>-basking on log</u>
<u>527527</u> <u>5075897</u>	<u>11:35</u>	<u>BLTU x 6</u> <u>PATU x 8</u>	<u>-marsh</u>	<u>-basking on logs ab</u> <u>in marsh</u>
<u>526591</u> <u>5076142</u>	<u>13:30</u>	<u>BLTU x 4</u> <u>PATU x 11</u>	<u>-marsh</u>	<u>-basking</u>

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: May 07 FORM 005



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# Reptile Survey Observation Form

6am - 6pm

Project Number

160960824

Project Name:

Nizig

Date / Time:

Jun 6, 13

Field Personnel:

SA

Weather Conditions:

Temp:

8-18°C

Wind:

3 E

Cloud:

100-10%

PPT:

/

PPT in last 24 hrs:

/

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
0533576 5081870	0630	Five-lined Skink	Rock outcrop	Sw.
0533564 5081958	0636	Five-lined Skink	Rock outcrop	Adult - missing tail
0529888 5078613	0825	N. Red Belly Snake	Rock outcrop	~20cm
Lake Shore / inlet	0930	N. Water snake	Across from Ploverport Bay	in water only
Lake Shore / inlet	1740	N. Water snake	- Joe's Cabin	Large (leopard)

Quality Control: This form is complete ( ) & legible ( ).

Signature:

(Field Personnel)

Signature:

(Project Manager)

Page

of

REV: May 07 FORM 005



W:\chive\6060770\Drawings\MXD\TerraNova\Final\Map\16060770\_FieldMap\_Tiled\_PhotoMosaic\_20130401.mxd  
Revised: 2013-04-01 By: ewhite



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community



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## Legend

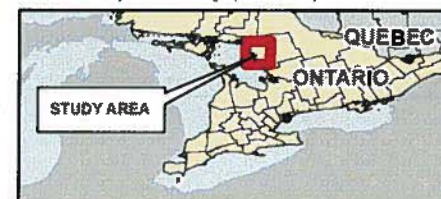
<b>Potential Transmission Line</b>	Railway
Proposed Route	Trail
North Substation	Contours(5m)
Route Marker	Watercourse
<b>Existing Features</b>	First Nations Reserve
City or Town	
Hydro Station	
Existing Transmission Line	
Highway	
Major Road	
Local Road	

\*Location of transmission line within the highway corridor is unknown at this time.



## Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.

8

**DRAFT**

Title

**Proposed Route -  
Photo Mosaic**

April 2013  
Project No.



Short

Nigig

160960824

B. Holden

Jun 6, 2013



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Stantec Consulting Ltd.  
70-1 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Reptile Survey Observation Form

Project Number 160960824Project Name: NyctDate / Time: June 7, 2013Field Personnel: A. Taylor / M. Cannon

Weather Conditions:	Temp: <u>10-17°C</u>	Wind: <u>2</u>	Cloud: <u>50%</u>	PPT: <u>—</u>	PPT in last 24 hrs: <u>—</u>
---------------------	----------------------	----------------	-------------------	---------------	------------------------------

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
<u>528569</u> <u>5076631</u>	<u>7:11</u>	<u>Skink</u>	<u>- Rock baron</u>	
<u>528897</u> <u>5076644</u>	<u>9:10</u>	<u>Skink</u>	<u>- 1c li</u>	
	<u>10:00</u>		<u>- barking in water in bog</u>	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: May 07 FORM 005

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## Reptile Survey Observation Form

Project Number 160960824 Project Name: Nigig  
Date / Time: Jun 7, 13 Field Personnel: B. Holden

Weather Conditions:	Temp: <u>9-19°C</u>	Wind: <u>3 E</u>	Cloud: <u>100-6080</u>	PPT: <u>/</u>	PPT in last 24 hrs: <u>/</u>
---------------------	---------------------	------------------	------------------------	---------------	------------------------------

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
<u>0521182</u> <u>5080275</u>	<u>1020</u>	<u>Massasauga</u> <u>Rattlesnake</u>	<u>Rocky</u> <u>Rocky shore near</u> <u>wetland. ~30-40cm?</u>	<u>In box of</u> <u>Scupper</u>
<u>Large wetland</u> <u>mid-site</u>		<u>Painted</u> <u>Turtle</u>	<u>4 - Wetland</u>	
<u>0521175</u> <u>5078847</u>	<u>1310</u>	<u>Milksnake</u>	<u>Rock Outcrop</u>	<u>~15cm</u>

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

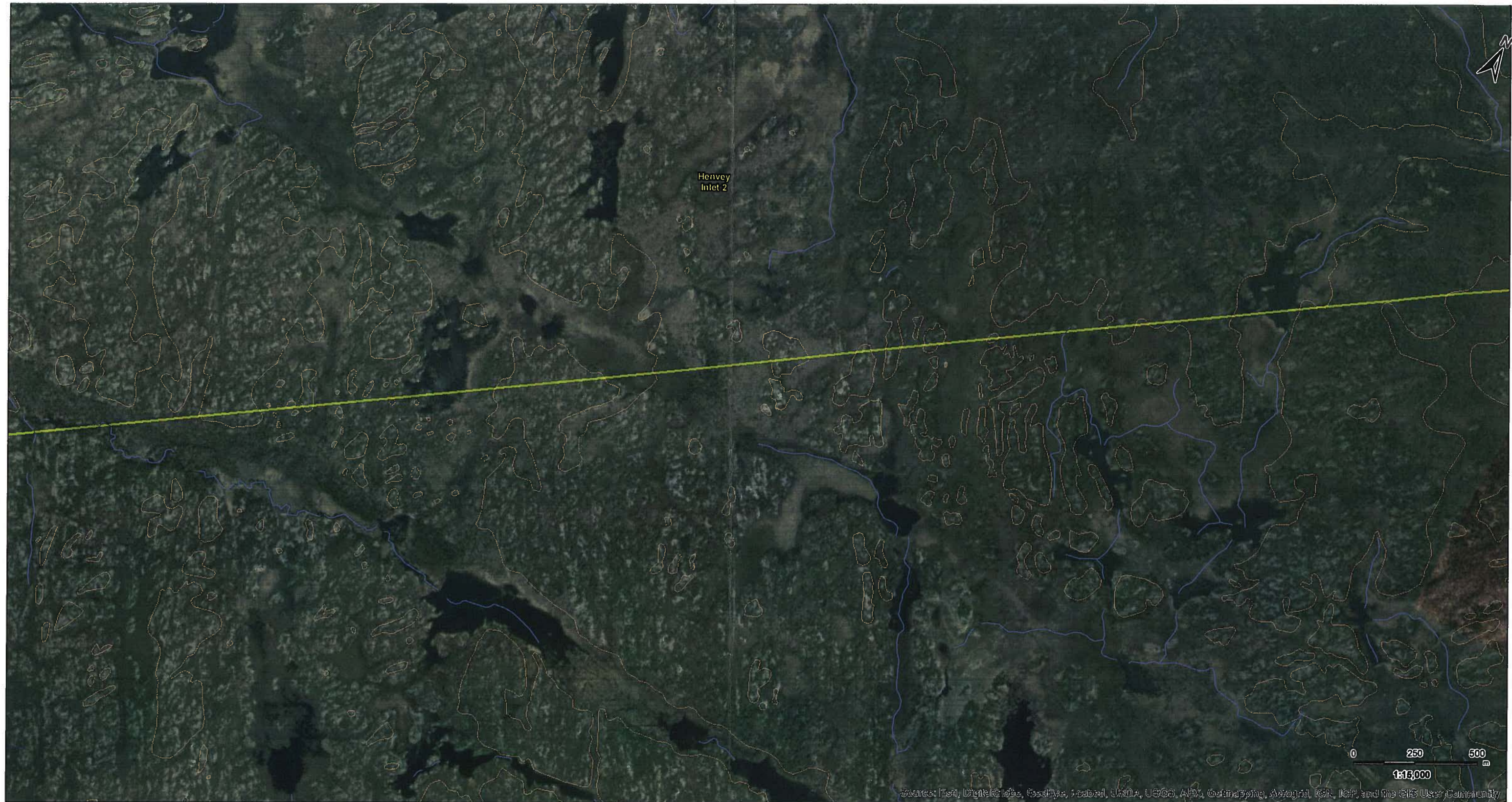
Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

REV: May 07 FORM 005



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Revised: 2013-04-01 By: ewh/b



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

April 2013  
Project No.



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## Legend

- |                                    |                       |
|------------------------------------|-----------------------|
| <b>Potential Transmission Line</b> | Railway               |
| Proposed Route                     | Trail                 |
| North Substation                   | Contours(5m)          |
| Route Marker                       | Watercourse           |
| <b>Existing Features</b>           | First Nations Reserve |
| City or Town                       |                       |
| Hydro Station                      |                       |
| Existing Transmission Line         |                       |
| Highway                            |                       |
| Major Road                         |                       |
| Local Road                         |                       |

\*Location of transmission line within the highway corridor is unknown at this time.



## Notes

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3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
10

**DRAFT**

Title

**Proposed Route -  
Photo Mosaic**



20

Nigig

160960824

B. Holden

Jun 7, 2013





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Fax: (519) 836-2493

## Reptile Survey Observation Form

530am - 2pm

Project Number

160960824

Project Name:

Nigig

Date / Time:

Jan 8, 13

Field Personnel:

B. Holder

Weather Conditions:

Temp:

8-18°C

Wind:

1-2 E

Cloud:

100-90-100

PPT:

PPT in last 24 hrs:

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
0528565 5079450		Massasauga Rattlesnake	Jack Pine Barrens in Rock outcrop	~45-60 cm large rattle
0530524 5078771	150 pm	Blonding Turtle	Man-made wet area (pond) along Bevan Rd.	Large but not fully grown

Quality Control: This form is complete ( ) & legible ( ).

Signature:

(Field Personnel)

Signature:

(Project Manager)

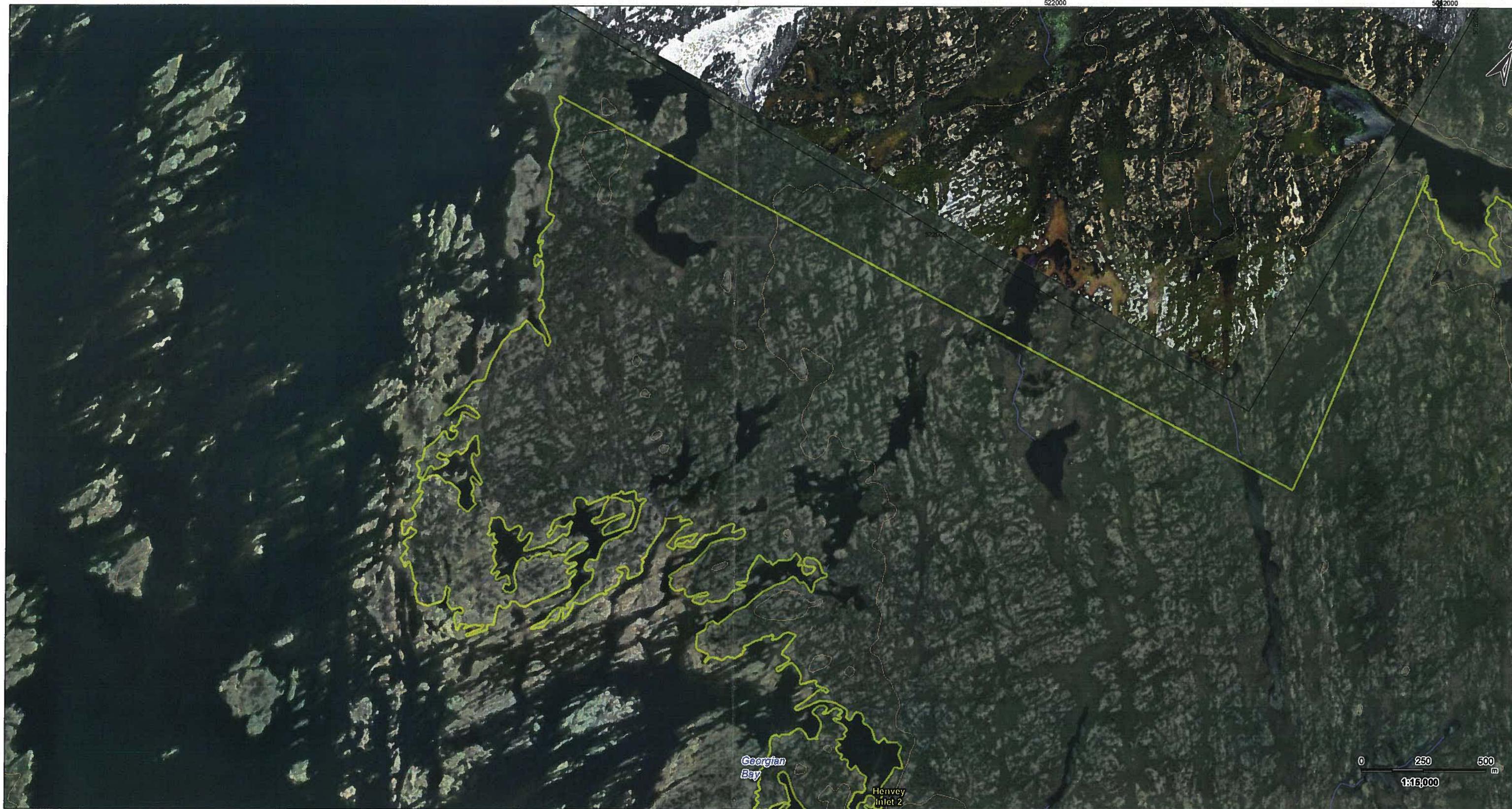
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of

REV: May 07 FORM 005



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Released: 2013-04-01 By: white



April 2013  
Project No.

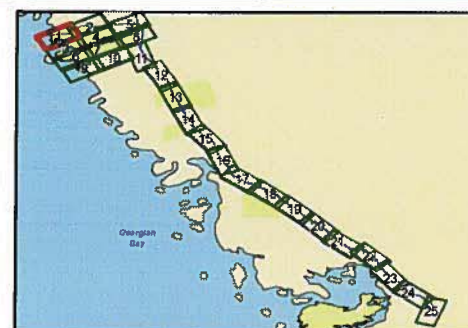


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## Legend

- |                                    |                       |
|------------------------------------|-----------------------|
| <b>Potential Transmission Line</b> | Railway               |
| Proposed Route                     | Trail                 |
| North Substation                   | Contours(5m)          |
| Route Marker                       | Watercourse           |
| <b>Existing Features</b>           | First Nations Reserve |
| City or Town                       |                       |
| Hydro Station                      |                       |
| Existing Transmission Line         |                       |
| Highway                            |                       |
| Major Road                         |                       |
| Local Road                         |                       |

\*Location of transmission line within the highway corridor is unknown at this time.



## Notes

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Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.

1

**DRAFT**

Title

**Proposed Route -  
Photo Mosaic**



Nigro

160960824

B. Holden

Jun 8, 2013



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## Reptile Survey Observation Form

Project Number 100960824

Project Name: Nigig

Date / Time: Jun 18 13

Field Personnel: B. Holden

Weather Conditions:

Temp:

13-18

Wind:

2-3

Cloud:

50

PPT:

/

PPT in last 24 hrs:

/

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
<u>177</u> <u>0529488</u> <u>5078005</u>	<u>1015</u>	<u>Smooth Green Snake</u>	<u>Near Road edge</u>	<u>small (20cm)</u>

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

REV: May 07 FORM 005







Jun 18, 13

Jun 18, 2013

B. Holden

Nigig

Breeding Bird

Remd 2





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## Reptile Survey Observation Form

Project Number 160960824 Project Name: Nigig  
Date / Time: Jun 20, 2013 Field Personnel: B. Holden

Weather Conditions:	Temp: <u>8-18°C</u>	Wind: <u>1-3 W</u>	Cloud: <u>10-30</u>	PPT: <u>/</u>	PPT in last 24 hrs: <u>/</u>
---------------------	---------------------	--------------------	---------------------	---------------	------------------------------

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
<u>~ 11km N of Joel's cottage</u>	<u>1050</u>	<u>Massasauga Rattlesnake</u>	<u>Base of Juniper along rock cutting.</u>	<u>Did not rattle. photos.</u>
				<u>Large. ~ 9 for 8 rattle</u>

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

REV: May 07 FORM 005



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Revised: 2013-06-11 By: carlson

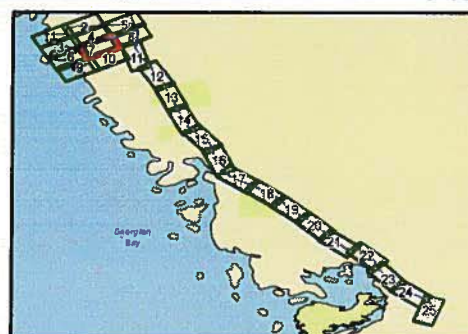


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## Legend

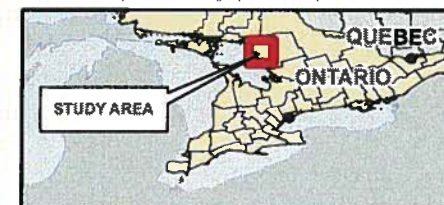
Proposed Transmission Line	Railway	Aggregate Site	Conservation Reserve
North Substation	Trail	Significant Ecological Area	Forest Reserve
Route Marker	Contours(5m)	Wintering Area	Provincial Park
City or Town	Watercourse	Deer Wintering Area (Stratum 2)	
Hydro Station	Municipal Boundary - Upper	Deer Yard (Stratum 1)	
Existing Transmission Line	Municipal Boundary - Lower	Moose Late Wintering Area	
Highway	ANSI	Wetland, Provincially Significant	
Major Road	ANSI, Earth Science	Wetland, Locally Significant	
Local Road	ANSI, Life Science	Wetland, Unevaluated	
	Candidate ANSI, Earth Science	Waterbody	
	Candidate ANSI, Life Science	First Nations Reserve	

\*Location of transmission line within the highway corridor is unknown at this time.



## Notes

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Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.

7

**DRAFT**

Title

**Proposed Route -  
Field Map**

June 2013  
Project No.



20

Jun 20, 13

BH

Nigig

BBS - Rnd 2



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Guelph, Ontario, Canada  
N1G 4P5  
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**Reptile Survey  
Observation Form**

0600  
1600

Project Number 160960824

Project Name: Nizny

Date / Time: Jun 24, 13

Field Personnel: D. Holden

Weather Conditions:	Temp: <u>18-25</u>	Wind: <u>3 SW</u>	Cloud: <u>C-20</u>	PPT: <u>/</u>	PPT in last 24 hrs: <u>RAIN</u>
---------------------	-----------------------	----------------------	-----------------------	------------------	------------------------------------

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
			<u>NO</u>	<u>SAR</u>
			<u>recorded</u>	

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

REV: May 07 FORM 005



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Revised: 2013-06-11 By: carolann

bing

© 2010 DigitalGlobe Imagery courtesy of USGS © 2013 Microsoft Corporation Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, Swisstopo, and the GIS User Community  
1:15,000  
0 250 500 m



Stantec

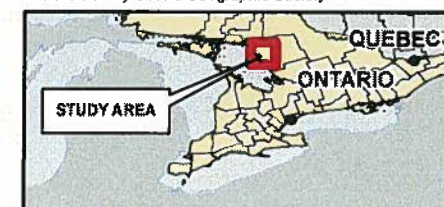
## Legend

Proposed Transmission Line	Railway	Aggregate Site	Conservation Reserve
North Substation	Trail	Significant Ecological Area	Forest Reserve
Route Marker	Contours(5m)	<b>Wintering Area</b>	Provincial Park
<b>Existing Features</b>	Watercourse	Deer Wintering Area (Stratum 2)	*Location of transmission line within the highway corridor is unknown at this time.
City or Town	Municipal Boundary - Upper	Deer Yard (Stratum 1)	
Hydro Station	Municipal Boundary - Lower	Moose Late Wintering Area	
Existing Transmission Line	<b>ANSI</b>	Wetland, Provincially Significant	
Highway	ANSI, Earth Science	Wetland, Locally Significant	
Major Road	ANSI, Life Science	Wetland, Unevaluated	
Local Road	Candidate ANSI, Earth Science	Waterbody	
	Candidate ANSI, Life Science	First Nations Reserve	



## Notes

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Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
6

**DRAFT**

Title

**Proposed Route -  
Field Map**

June 2013  
Project No.



24

Jun 24, 13

Nigry

BH

BBS Rnd 2





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Fax: (519) 836-2493

0530-1620

# Reptile Survey Observation Form

Project Number

160960824

Project Name:

Nigig

Date / Time:

Jun 25, 13

Field Personnel:

B Holden

Weather Conditions:

Temp:

19-24

Wind:

0-2 W

Cloud:

50-75

PPT:

/

PPT in last 24 hrs:

X

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
			NO SAR	
			Recorded.	

Quality Control: This form is complete ( ) & legible ( ).

Signature:

(Field Personnel)

Signature:

(Project Manager)

Page

of

REV: May 07 FORM 005

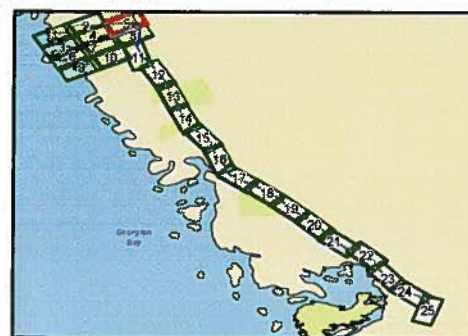




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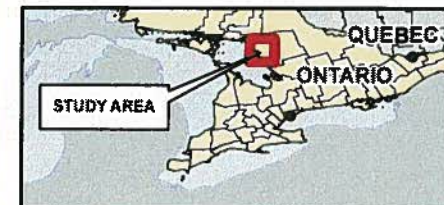
## Legend

Proposed Transmission Line	Railway	Aggregate Site	Conservation Reserve
North Substation	Trail	Significant Ecological Area	Forest Reserve
Route Marker	Contours(5m)	Wintering Area	Provincial Park
City or Town	Watercourse	Deer Wintering Area (Stratum 2)	
Hydro Station	Municipal Boundary - Upper	Deer Yard (Stratum 1)	
Existing Transmission Line	Municipal Boundary - Lower	Moose Late Wintering Area	
Highway	ANSI	Wetland, Provincially Significant	
Major Road	ANSI, Earth Science	Wetland, Locally Significant	
Local Road	ANSI, Life Science	Wetland, Unevaluated	
	Candidate ANSI, Earth Science	Waterbody	
	Candidate ANSI, Life Science	First Nations Reserve	



## Notes

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Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
5

**DRAFT**

Title

**Proposed Route -  
Field Map**

June 2013  
Project No.



25

Migig

BH

Jun 25, 13

BBS Remd 2



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Fax: (519) 836-2493

Reptile Survey  
Observation Form

0540

-1630

+ 1700-2030

Project Number 160960824

Project Name: Nig 7

Date / Time: 5m 26/13

Field Personnel: 3H, MC, AT

Weather Conditions:

Temp:

19-27°C

Wind:

3-5W

Cloud:

100%

PPT:

/

PPT in last 24 hrs:

/

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
0524537 5076645		Milk snake	Near shore half under rock	Doing the fake Rattle
0526734 5073715		Five-lined skink	Rock Barrens	Immature
0522218 5077102	2pm	Fox snake	off shore island (chain of islands) crevice ~ 1m from water	3ft length

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

REV: May 07 FORM 005



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Revised: 2013-06-11 By: carlson



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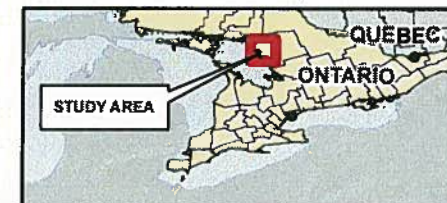
## Legend

Proposed Transmission Line	Railway	Aggregate Site	Conservation Reserve
North Substation	Trail	Significant Ecological Area	Forest Reserve
Route Marker	Contours(5m)	Wintering Area	Provincial Park
City or Town	Watercourse	Deer Wintering Area (Stratum 2)	*Location of transmission line within the highway corridor is unknown at this time.
Hydro Station	Municipal Boundary - Upper	Deer Yard (Stratum 1)	
Existing Transmission Line	Municipal Boundary - Lower	Moose Late Wintering Area	
Highway	ANSI	Wetland, Provincially Significant	
Major Road	ANSI, Earth Science	Wetland, Locally Significant	
Local Road	ANSI, Life Science	Wetland, Unevaluated	
	Candidate ANSI, Earth Science	Waterbody	
	Candidate ANSI, Life Science	First Nations Reserve	



## Notes

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Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.

11

**DRAFT**

Title

**Proposed Route -  
Field Map**

June 2013  
Project No.



5m 26,13  
BH, MC, ART  
Mgig  
Breeding BM  
Round 2

26





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Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

0530-1620

# Reptile Survey Observation Form

Project Number 160960824

Project Name: Nigig

Date / Time: Jun 25, 13

Field Personnel: B Holden

Weather Conditions:	Temp: <u>19-24</u>	Wind: <u>0-2 W</u>	Cloud: <u>50-75</u>	PPT: <u>/</u>	PPT in last 24 hrs: <u>X</u>
---------------------	--------------------	--------------------	---------------------	---------------	------------------------------

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
			<u>NO SAR</u>	
			<u>Recorded.</u>	

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

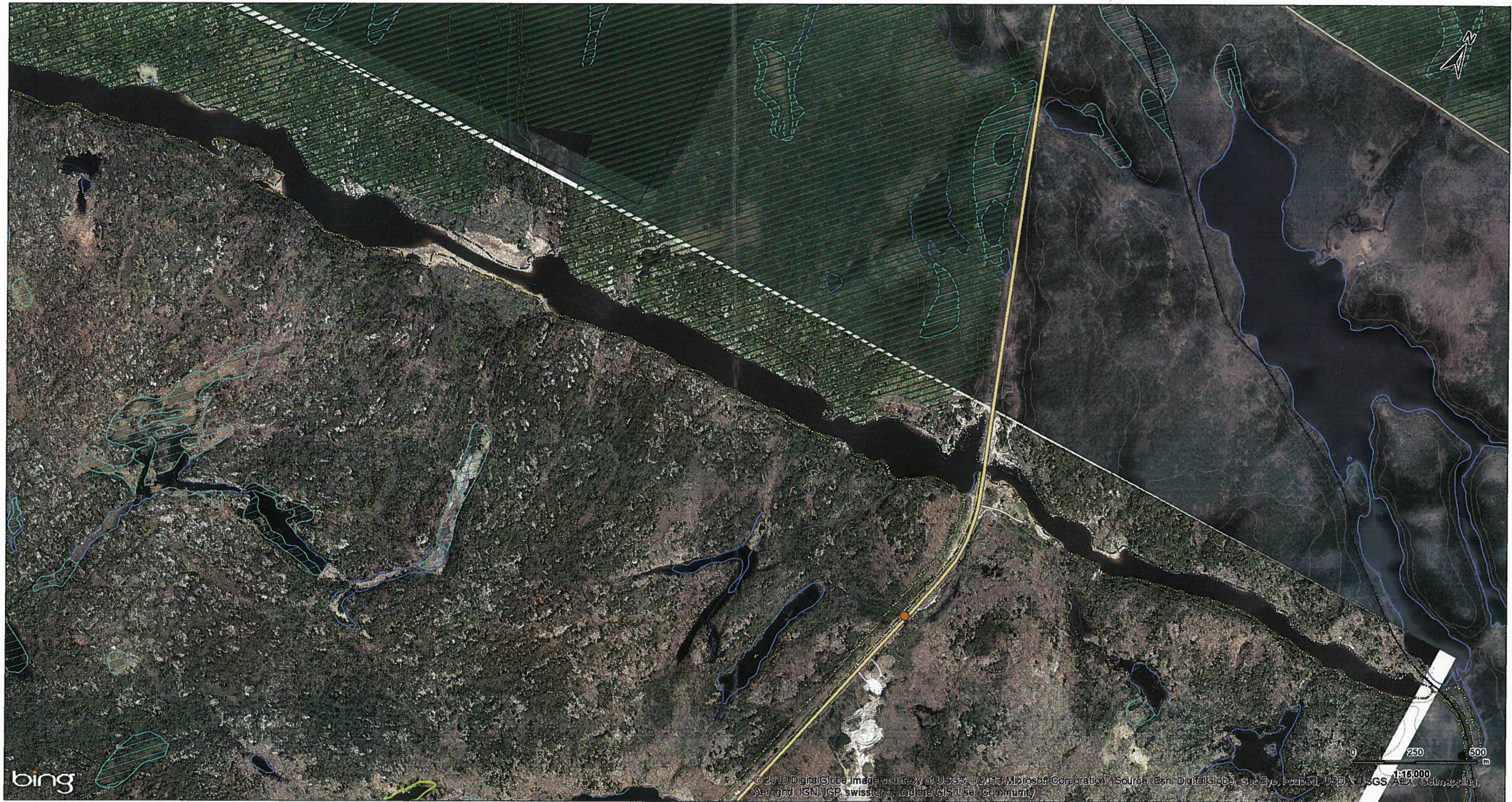
Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

REV: May 07 FORM 005



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Revised: 2013-06-11 By: carolann



Stantec

## Legend

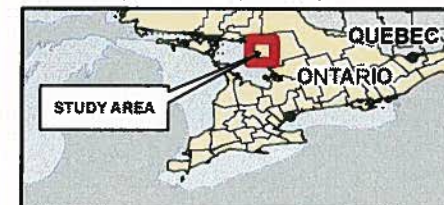
Proposed Transmission Line	Railway	Aggregate Site	Conservation Reserve
North Substation	Trail	Significant Ecological Area	Forest Reserve
Route Marker	Contours(5m)	<b>Wintering Area</b>	Provincial Park
City or Town	Watercourse	Deer Wintering Area (Stratum 2)	
Hydro Station	Municipal Boundary - Upper	Deer Yard (Stratum 1)	
Existing Transmission Line	Municipal Boundary - Lower	Moose Late Wintering Area	
Highway	<b>ANSI</b>	Wetland, Provincially Significant	
Major Road	ANSI, Earth Science	Wetland, Locally Significant	
Local Road	ANSI, Life Science	Wetland, Unevaluated	
	Candidate ANSI, Earth Science	Waterbody	
	Candidate ANSI, Life Science	First Nations Reserve	

\*Location of transmission line within the highway corridor is unknown at this time.



## Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
5

**DRAFT**

Title

**Proposed Route -  
Field Map**

June 2013  
Project No.



25

Migig

BH

Jun 25, 13

BBS Remd 2

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N1G 4P5  
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CS 30  
-1630

# Reptile Survey Observation Form

Project Number 160960824Project Name: N. 355Date / Time: Jun 27, 13Field Personnel: B. H. / K.

Weather Conditions:

Temp:

17-25

Wind:

0-3

Cloud:

90-100

PPT:

—

PPT in last 24 hrs:

—

LOCATION	START/ END TIME	SPECIES	HABITAT DESCRIPTION	OTHER NOTES
10m west of ↓	0830	Ringneck Snake	Rock Berries Near Beaverpond	small ~ 15-20cm
0521497 5075963	1002	Five-lined Snake	Rock Berries near Beaverpond	5m 18
		N. Redbelly Snake		
		Blainville's Turtle	GPS Lost - Large Beaver pond / small lake in core of BBS route	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

REV: May 07 FORM 005



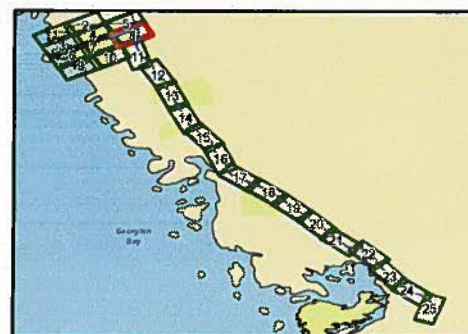
\\hdsrv060000770\drawing\MS\CD\TernsectalFieldWork\160960770\_FldMap\_Tiled\_20130611.mxd  
Revised: 2013-06-11 By: dalibonson



Stantec

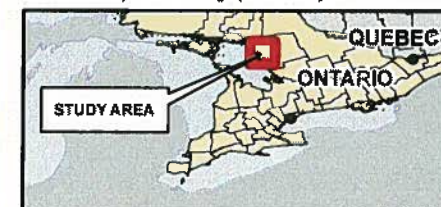
## Legend

Proposed Transmission Line	Railway	Aggregate Site	Conservation Reserve
North Substation	Trail	Significant Ecological Area	Forest Reserve
Route Marker	Contours(5m)	Wintering Area	Provincial Park
City or Town	Watercourse	Deer Wintering Area (Stratum 2)	
Hydro Station	Municipal Boundary - Upper	Deer Yard (Stratum 1)	
Existing Transmission Line	Municipal Boundary - Lower	Moose Late Wintering Area	
Highway	ANSI	Wetland, Provincially Significant	
Major Road	ANSI, Earth Science	Wetland, Locally Significant	
Local Road	ANSI, Life Science	Wetland, Unevaluated	
	Candidate ANSI, Earth Science	Waterbody	
	Candidate ANSI, Life Science	First Nations Reserve	



## Notes

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2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
8

**DRAFT**

Title

**Proposed Route -  
Field Map**

June 2013  
Project No.



27

Nigig

BH

BBS Rd 2

Jun 27, 13





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Fax: (519) 836-2493

## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960770

Project Name: Nigig/Henvey Inlet T-Line Hydro Conn

Date / Time: July 30 - Aug 13 2013

Field Personnel: SRicher & C Korpilähtö

Weather Conditions:

Temp:

Wind:

Cloud:

PPT:

PPT in last 24 hrs:

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area #1	549057 5083113	Rock barren	0~50%	Rock piles, stumps, brush piles, rock crevices	forest & wetland	None	
to	549110 5083012	↓	↓	↓	↓	↓	
to	549168 5083025	↓	↓	↓	↓	↓	
to	549134 5083077	↓	↓	↓	↓	↓	
Area #2	549160 5083111	↓	↓	↓	↓	↓	
to	549116 5083053	↓	↓	↓	↓	↓	

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 20

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area #3	549189 5082866	Rock barren	0-50	Rock piles, rock crevices, brush piles, stumps	Forest, wetland	None	
to	549238 5082901						
to	549268 5082721						
to	549311 5082723						
Area #4	549283 5082917						UTM is centroid
Area #5	549387 5082799						
to	549360 5082744						
to	549398 5082683						
to	549444 5082705						

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 2 of 20

REV: Jul 13 FORM 00#





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## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960770

Project Name: Nigig/Henvey Inlet T-Line Hydro Conn

Date / Time: July 30 - Aug 13 2013

Field Personnel: J. Disher

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM CODRDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area #6	549448 5082388	Rock Barren	0-50	brush piles, rock piles, rock crevices, stumps	forest & wetland	None	
to	549503 5082408						
to	549747 5081839						
to	549777 5081878						
Area #7	549519 5082431						
to	549590 5082439						

(Flip over)

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 3 of 20

REV: Jul 13 FORM 00#

HABITAT 10 and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 7 (continued)	549747 5082017	Rock barren	0-50	brush piles, stumps, rock piles, rock crevices	forest & wetland	None	
to	549799 5082044						
Area #8	549962 5081734						
to	549893 5081762						
to	550146 5081273						
to	550211 5081283						
Area #9	549981 5081397						
to	550019 5081441						
to	550125 5081239						
to	550102 5081168						

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: A. Paul  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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REV: Jul 13 FORM 00#





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## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960770

Project Name: Henvey/Nigig T-Line Hydro

Date / Time: July 30 - Aug 13 2013

Field Personnel: SRicher

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area #10	550133 5081112	Rock barrens	0-50	brush, rock piles, rock crevices, stumps	forest wetland	None	
to	550181 5081140	↓	↓	↓	↓	↓	
to	550332 5080729	↓	↓	↓	↓	↓	
to	550369 5080798	↓	↓	↓	↓	↓	
Area #11	550202 5081160	↓	↓	↓	↓	↓	
to	550277 5081152	↓	↓	↓	↓	↓	

(Flip over)

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 11 continued	550291 5080995	Rock barren	0-50	brush & rock piles, stumps, rock crevices	brush & wetland	None	
to	550372 5081002						
Area #12	550395 5080788						
to	<del>550320</del> 550320 5080940						
to	550383 5080968						
Area #13	550461 5080821						
to	550445 5080726						
to	550499 5080626						
to	550549 5080648						
Area #14	550690 5080297	✓	✓	✓	✓	✓	UTM is centroid

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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REV: Jul 13 FORM 00#





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## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number: 160960770

Date / Time: July 30-Aug 13 2013

Project Name: Nigig/Harvey Inlet T-Line Hydro Corr

Field Personnel: SRicher & CKorpijakko

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area #15	550498 5080438	Rock barrens	0-50	brush, rock piles, rock crevices, stumps	forest & wetland	None	
to	550574 5080432	↓	↓	↓	↓	↓	
to	550825 5079797	↓	↓	↓	↓	↓	
to	550881 5079842	↓	↓	↓	↓	↓	
Area #16	550860 5080076	↓	↓	↓	↓	↓	
to	550926 5079933	↓	↓	↓	↓	↓	

Quality Control: This form is complete ( ) & legible ( ).

Signature: Paul Rice  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 7 of 20

REV: Jul 13 FORM 00#

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area #17	550927 5079815	Rock barrens	0-50	brush piles, rock piles, rock crevices, stumps	forest, wetland	None	
to	550969 5079874						
to	551049 5079711						
to	551053 5079583						
Area #18	550945 5079725						
to	550978 5079547						
to	551062 5079374						
to	551155 5079318						
Area #19	551143 5079599						
to	551118 5079466						

continued on pg 9

- 1 - forest opening; rock barren; meadow; edge habitat  
2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)  
3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)  
4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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REV: Jul 13 FORM 00#





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# Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number: 160960770  
Date / Time: July 30 Aug 13 2013

Project Name: Nigig / Henvey Inlet T-Line Hydro Conn  
Field Personnel: J Richer

Weather Conditions:	Temp: _____	Wind: _____	Cloud: _____	PPT: _____	PPT in last 24 hrs: _____
---------------------	-------------	-------------	--------------	------------	---------------------------

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 19 continued	551233 5079257	Rock barrens	0-50	brush piles, rock piles, rock crevices, stumps	forest, wetland	Non R	
to	551322 5079221						
Area #20	551120 5079295						
to	551198 5079252						
to	551306 5079041						
to	551230 5079058						

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 9 of 20

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area #21	551247 5079225	Rock Barren	0-50	brush pile, rock pile, rock crevice, stump	forest wetland	None	
to	551342 5079172						
to	551427 5079021						
to	551356 5079024						
Area #22	551245 5079027						
to	551332 5079002						
to	551605 5078503						
to	551506 5078558						
Area #23	551362 5079001						to 551633 5078576
to	551434 5078999						551692 5078531

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 10 of 20

REV: Jul 13 FORM 00#





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## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960770

Project Name: Nig's/Henvey Inlet

Date / Time: July 30 - Aug 13 2013

Field Personnel: SRichter - C Korpjakko

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Gestation Area 24	551572 5078449	Rock barrens	0-50	brush piles, rock piles, rock crevices, stumps	Forest, wetland	None	to 551764 ↑ 5078076
to	551628 5078425						to 551813 ↑ 5078097
Gestation Area 25	551674 5078432						to 551850 ↑ 5078116
to	551748 5078429						to 551888 ↑ 5078154
Gestation Area 26	551781 5078036						to 551931 ↑ 5077759
	551836 5078064						to 552010 ↑ 5077748

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 11 of 20

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area #27	551861 5078083	Rock barren	0-50	brush piles, rock piles, rock crevices, stumps	forest + wetland	None	552015 5077805
to	551915 5078111	Rock barren	0-50				to 552088 5077780
Area #28	552085 5077676						to 552185 5077496
to	552148 5077684						to 552289 5072518
Area #29	552133 5077384						552412 5076868
to	552218 5077370						552464 5076904
Area #30	552260 5077347						552502 5076900
to	552270 5077440						552552 5076924
Area #31	552562 5076599						552599 5076522
to	552598 5076646						552654 5076545

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 12 of 20

REV: Jul 13 FORM 00#





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## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960770

Project Name: Nigig / Henvey Inlet Hydro Corridor

Date / Time: July 30 - Aug 13 2013

Field Personnel: Richie & Janice Ball

Weather Conditions:

Temp:

Wind:

Cloud:

PPT:

PPT in last 24 hrs:

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 32	552626 5076664	Rock barrens	0-50	brush piles rock piles rock crevices, stumps	Forest wetland	None	552681 → 5076574
to	552663 5076718						→ 552759 → 5076533
Area 33	552640 5076442						→ 552795 → 5076429
to	552755 5076480						→ 552722 → 5076293
Area 34	552772 5076196						→ 552907 → 5076058
to	552832 5076198						→ 552864 → 5076024

Quality Control: This form is complete (✓) & legible (✓).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 13 of 20



HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 35	552801 5076332	Rock Barrens	0-50	brush piles, rock piles, rock crevices, stumps	forest wetland	None	552959 5076172
to	552849 5076362						552919 5076117
Area 36	552878 5075990						553107 5075698
to	552940 5076008						553073 5075645
Area 37	553003 5076081						553127 5075728
to	552966 5076031						553154 5075803
Area 38	553229 5075470						553265 5075288
to	553208 5075397						553300 5075342
Area 39	553298 5075230						553368 5075094
to	553334 5075225						553414 5075121

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

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REV: Jul 13 FORM 00#





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Fax: (519) 836-2493

# Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number: 160960770  
Date / Time: July 30 - Aug 13 2013

Project Name: Henvey Inlet / Nigig  
Field Personnel: SRibber & Janice Fall

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 40	553396 5075268	Rock barren	On 50	brush piles, rock piles, rock crevices, stumps	Forest & wetlands	None	553586 5075035
to	553479 5075192						553494 5075044
Area 41	553538 5074841						UTM is centroid for area (rock barren peninsula in lake)
Area 42	553719 5074555						also has cliff at south edge
to	553726 5074429						
to	553725 5074436						

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 42	553743 5074597	Rock barren	0-50	brush pile, rock pile, rock crevices, stumps	Forest & wetlands	None	553886 5074430
to	553799 5074606						553826 5074428
Area 44	553784 5074329						553927 5074057
to	553830 5074345						553957 5074108
Area 45	553870 5074355						554000 5074187
to	553919 5074371						553940 5074224
Area 46	553989 5074134				Forest & wetlands		554160 5073924
to	554087 5074071						554095 5073936
Area 47	554172 5073806						554291 5073697
to	554234 5073807						554232 5073679

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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REV: Jul 13 FORM 00#





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Tel: (519) 836-6050  
Fax: (519) 836-2493

## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960770

Project Name: Vigil/Henvey Inlet

Date / Time: July 30 - Aug 13 2013

Field Personnel: Richard & Tanice Ball

Weather Conditions:

Temp:

Wind:

Cloud:

PPT:

PPT in last 24 hrs:

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 48	554039 5073257	Rock Barrens	0-50	brush piles, rock piles, rock crevices, stumps	forest wetland	None	554197 5072672
to	554088 5073864						554139 5072652
Area 49	554554 5072895						554729 5072578
to	554598 5072922						554780 5072591
Area 50	554691 5072819						554868 5072622
to	554785 5072772						554823 5072592

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 51	554874 5072298	Rock barrens	0-50	brush piles, rock piles, rock crevices, stumps	Forest wetland	None	555061 5071952
to	554940 5072293						555099 5071983
Area 52	555003 5072245						555224 5071968
to	555075 5072232						555204 5071889
Area 53	555129 5071825						555324 5071462
to	555198 5071808						555355 5071513
Area 54	555328 5071424						555511 5071220
to	555383 5071456						555452 5071215
Area 55	555433 5071499	✓	✓	✓	✓	✓	UTM is centroid

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: D. R. E.  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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REV: Jul 13 FORM 00#





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## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960770

Project Name: Nigig/Henvey Inlet Hydro Corridor

Date / Time: July 30 Aug 13 2013

Field Personnel: SRicker & Janice Bell

Weather Conditions:

Temp:

Wind:

Cloud:

PPT:

PPT in last 24 hrs:

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 56	555505 5071119	Rock barren	0-50	brush+rock pile of rock crevices, stumps	Forest wetland	None	555636 5070864
to	555560 5071136						555690 5070893
Area 57	555571 5071192						555735 5070892
to	555650 5071174						555785 5070916
Area 58	555671 5070810						555836 5070632
to	555797 5070824						555787 5070600

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
Area 59	555845 5070481	Rock barren	0-50	brush pile, rock pile, stump, rock crevice	forest & wetland	None	556086 5070041
to	555896 5070512						556128 5070095
Area 60	556014 5070370						556145 5070123
to	556100 5070328						556194 5070156

- 1 – forest opening; rock barren; meadow; edge habitat  
2 – table rock; rock pile; stump; rock crevice; brush pile; other (describe)  
3 – forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)  
4 – type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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# Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960824

Project Name: Nigig

Date / Time: Jul 24, 13

Field Personnel: B Holden B. Miller

Weather Conditions:	Temp:	Wind:	Cloud:	PPT: <u>/</u>	PPT in last 24 hrs: <u>Rain</u>
---------------------	-------	-------	--------	---------------	---------------------------------

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

166-0

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
516 515	0550731 5079999	Rock Barren	100% < 10	Limited Logs / table rock	Forest + wetland		Survey time 11:30am - 1:50pm
519	0550805 5079844	11	~100%	Logs / Limited table rock	11		<del>2:00pm - 2:15pm</del> 1.5 min
521 522	0551001 5079708	11	< 10%	Limited Logs / Rocks	11		<del>2:15pm</del> 2 min
526 527	0550916 0579551	11	< 10%	11	11		2 min
530	0551178 5079224	11	< 10%	11	11		2 min
533	0551246 5079037	11	35%	Trees	11		6 min

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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REV: Jul 13 FORM 00#

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
535	551288 5078954	Rock Barren	~10%	Limited Rocks/ logs.	Marsh Woods		
540	0551444 5078699	II	<10% Increasing as we move south	II	II		
545	551598 5078568	II	25% decreasing as we move N.	II	Woods	Lead to S	
546 547	551322	II	<10%	II	II	Beaver pond?	
548 549	0551634 5078336	II	<5%	II	Woods / Beaver pond	Pond?	
554	551861 5078132	Rock Barren II Meadow	<5%	II	II		
555	0550698 5078103	II	<10%	II	Woods	Lead?	

- 1 - forest opening; rock barren; meadow; edge habitat  
2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)  
3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)  
4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

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## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960824

Project Name: Nigig - Corridor Massasauga Survey

Date / Time: 30 July 2013

Field Personnel: Brian Miller, Hamish Aubrey

Weather Conditions:	Temp: 13°C	Wind: 1	Cloud: 20%	PPT: none	PPT in last 24 hrs: none yes
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Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
581 H.G. 590	0563898 5055513	Rock Barren	20	brush piles <del>table rock</del>	forest	ATV corridor	
591 592 H.G.2	0563644 5056007	Brush Rock Barren	10%	brush pile hummocks	forest	ATV corridor	
605 606 H.G.3	0562626 5057864	Barren Rock / Edge Habitat	15%	brush, rock, crevices	forest	no	
612 H.G.4 613 614	0562319 5058530	Barren Rock	5%	table rock brush	forest	no	
615 H.G.5 619	0562201 5058730	Barren Rock	10% Junipers	Brush Rock crevices	forest / lake	no	
644 H.G.6 645	0562011 5059696	Barren Rock / Broken	15%	Brush Rock crevices	forest	no	

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
649 H, G7 650	0562370 5058588	Shrub/ Rock Barren	30%	Shrubs Rock crevices	Forest/Wetland	no	
651 H, G8 652	0562587 5058188	Rock Barren/ Meadow	20%	Shrubs Table top	Forest/Wetland	no	
654 H, G9 655	0562341 5059695	Rock Barren/ Meadow	10%	Shrubs Rock crevices	Forest	no	
656 H, G10 657	0563076 5057250	Rock Barren/ Meadow	<10%	Table top Rock crevices shrubs	Forest/Wetland	no	
660 H, G11 -662	0561806 5059463	Rock Barren/ Meadow	10%	Shrubs Rock crevices	Forest/Wetland	no	
663 H, G12 665	0561679 5059648	Rock Barren Meadow	5%	shrubs Table rock Rock crevices	Forest/Wetland	no	
668 H, G13 669	0561640 5059749	Rock barren/ Shrubland	50%	Shrub Rock crevices	Forest/Wetland/ Lake	Lake	
670 H, G14 671	0561705 5059797	Rock barren/ Meadow	25%	Shrub Rock crevices	Forest/wetland	no	
674 H, G15 675	0561868 5059527	Rock barren/ Shrub land/ Meadow	20%	Shrub Rock crevices	Forest/Wetland	no	disturbed by vehicles accessing transmission tower
677 H, G16 678	0561527 5060133	Shrub land/ Rock barren	50%	Shrub Rock crevices	Forest/Lake	Lake	

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 1609 ~~60~~ 60324

Project Name: Nigg - Corridor Massasauga Snake Survey

Date / Time: 31 July 2013

Field Personnel: Hamish Aubrey, Brian Miller

Weather Conditions:	Temp: <u>20°C</u>	Wind: <u>2</u>	Cloud: <u>70%</u>	PPT: <u>no</u>	PPT in last 24 hrs: <u>no</u>
---------------------	-------------------	----------------	-------------------	----------------	-------------------------------

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
679 H <sub>1</sub> G <sub>17</sub> 680	0561453 5060076	Rock barren/ Shrubland	40%	Shrubs Rock crevices Table rock	Forest, Lake, Wetland	Lake	
683 H <sub>1</sub> G <sub>18</sub> 674	0561310 5060348	Rock barren/ Shrubland	30%	Shrubs Rock crevices	Forest / Lake	Lake	Some disturbance from vehicle access to transmission tower
685 H <sub>1</sub> G <sub>19</sub> 686	0561183 5060795	Shrubland / Rock Barren	30%	Shrubs Rock crevices	Forest, Lake	Lake	
687 H <sub>1</sub> G <sub>20</sub> 690 691	0560842 5061412	Shrubland Rock Barren	40%	Shrubs Rock crevices	Forest	no	
692 H <sub>1</sub> G <sub>21</sub> 673	0560751 5061406	Shrubland Rock Barren	30%	Shrubs Rock crevices	Forest	no	
694 H <sub>1</sub> G <sub>22</sub> 645	0560669 5061593	Shrubland Rock Barren	20%	Shrubs Rock crevices	Forest / Lake	Lake	

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
696 H. 623 697	0560572 5061783	Shrubland/ Barren Rock	40%	Shrubs Rock crevices	Forest, Lake	Lake	
698 H. 624 699	0560578 5061902	Barren Rock Shrubland	20%	Rock crevices Shrubs	Forest, Lake	Lake	
703 H. 625 704	0564883 5053934	Barren Rock Meadow	10%	Rock crevices Shrubs	Forest, Lake	Lake	Area fairly disturbed by vehicles
709 H. 626 710	0564795 5053899	Barren Rock Meadow	< 10%	Rock crevices Shrubs	Forest, Lake	Lake	Area disturbed by vehicles (ATVs)
717 H. 627 718	0564990 5053516	Barren Rock Meadow	5%	Rock crevices Shrubs	Forest, Wetland	no	
752 H. 628 753	0565310 5053151	Barren Rock Meadow	< 5%	Rock crevices	Forest, Wetland	no	
768 H. 629 769	0565683 5052297	Barren Rock Meadow	< 5%	Rock crevices	Forest, Wetland	no	
772 H. 630 773	0565863 5052113	Barren Rock Meadow	5%	Rock crevices	Forest	no	
774 H. 631 775	0566103 5051638	Rock Barren Meadow	< 5%	Rock crevices	Forest	no	Adjacent to steep river valley
785 H. 632 786	0566407 5051094	Rock Barren Shrubland	40%	Rock crevices	Forest, Lake	no	Adjacent to lake

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

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## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960824

Project Name: Nigig - Corridor Massasauga Snake Survey

Date / Time: 1 Aug 2013

Field Personnel: Hannah Aubrey, Brian Miller

Weather Conditions:

Temp:

21°C

Wind:

3

Cloud:

40%

PPT:

no

PPT in last 24 hrs:

yes

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
H, 633 294 295	0566704 5050588	barren Rock Meadow	10%	Rock crevices Shrubs	Forest / Wetland	No	
H, 634 300 301	0566936 5049894	Meadow barren Rock	5%	Rock crevices Shrubs	Forest	No	

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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Fax: (519) 836-2493

## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 60960824

Project Name: Nigig - H2N1 corridor

Date / Time: 8 Aug 2013

Field Personnel: B. Holden, M. Cameron

Weather Conditions:	Temp: <u>28°C</u>	Wind: <u>3</u>	Cloud: <u>60%</u>	PPT: <u>Ø</u>	PPT in last 24 hrs: <u>yes, thunderstorms</u>
---------------------	----------------------	-------------------	----------------------	------------------	--

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

### SECTION H

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
G35 9804 9811 G36	See map for Feature	rock barren	<5%	some loose rock & crevices, but mostly smooth pavement	jack pine & some sedge marsh (H22)	<del>atv/snowmobile</del> trail	hackberry & grasses throughout
9816 G37		rock barren & meadow	<5%	lots of boulders & ledges, juniper shrubs	l.w. pine forest, marsh; rock barren	none	rolling terrain; grassy; more veg cover & dense forest H2A
9822 G38		rock barren & meadow	5-10%	mostly flat pavement	oak/pine forest	none	grasses & hackberry
9820 G39		rock barren & meadow	~10%	fairly flat pavement, some loose rock	mixed forest	none	meadows west
9813, 9819		rock barren & meadow	0%	some loose rock, low ledges, mostly smooth	white pine/poplar; marsh	none	South-facing slope

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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Fax: (519) 836-2493

## Massasauga Hibernation Habitat Assessment Form (Georgian Bay Populations)

Project Number 60960824

Project Name: Nigig-HONI corridor

Date / Time: 8 Aug 2013

Field Personnel: B. Holden, M. Cameron

Weather Conditions:	Temp: <u>23°C</u>	Wind: <u>3</u>	Cloud: <u>60%</u>	PPT: <u>Ø</u>	PPT in last 24 hrs: <u>yes, heavy thunderstorms</u>
---------------------	----------------------	-------------------	----------------------	------------------	--

Note: All wetlands within the study area are to be assessed for potential Massasauga hibernation habitat. Wetlands which do not qualify as potential hibernation habitat are considered potential foraging/mating habitat.

### SECTION H

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT (general) <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
H22 9805 9812		sedge marsh + open water	< 5%	rock barren; jack pine forest	none	
H23 9814		cattail marsh + open water	0%	rock barren; w. pine forest	none	small feature, down steep slope from rock barren
H24 9817		marsh + open water	0%	rock barren; mixed forest	none	large marsh, lots of open water
H25 9824		marsh (sedge + cattail)	0-50%	rock barren; w. pine forest	atv trail	lots of dead standing trees in one section
H26 9823		sedge + cattail marsh	0	rock barren; mixed forest	atv trail	
H27						

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: Jul 13 FORM 00#

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
#28 918		cattail/sedge marsh & open water	0%	rock barrens, white pine forest	atv trail	

1 – conifer/shrub swamp; fen/bog; sedge or sphagnum hummocks; other wetland

2 – forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

3 – type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

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Tel: (519) 836-6050  
Fax: (519) 836-2493

## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960824

Project Name: Nigig - HONI corridor

Date / Time: Aug 9, 2013

Field Personnel: B. Holden, M. Cameron

Weather Conditions:	Temp: <u>23°C</u>	Wind:	Cloud: <u>0%</u>	PPT: <u>Ø</u>	PPT in last 24 hrs: <u>Ø</u>
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Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

### SECTION K

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
<del>G1</del> G1 #32		rock barren, field	< 25%	rocky terrain, ledges, crevices, loose rock	mixed forest	atv trail	
G2 34		shrub/ shrub	75%	same	mixed forest, wetland	atv trail	longer terrain, less disturbance off trail some lower wet pockets
G3 33, 41		shrub + rock barren	75%	same	mixed forest, wetland	atv trail	rough terrain, juniper barren in valleys, small wetland pockets
G4 43	0577683 5029704	shrub + meadow rock barren	40%	rock piles, ledges, cracks	mixed upland forest, wetland	atv trail	more open rock and grasses at higher points
G5 46	0578311 5028411	rock barren, meadow shrub	30%	shrubs, loose rock, ledges, juniper	upland forest	atv trail	succae + juniper thickets rolling, south-facing slope
G6 50		barren shrub	30%	loose rock, juniper	upland mixed forest	atv trail	s-facing slope down to Seymour ditches dense succae patches abundant slash

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: Jul 13 FORM 00#



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## Massasauga Hibernation Habitat Assessment Form (Georgian Bay Populations)

Project Number \_\_\_\_\_

Project Name: \_\_\_\_\_

Date / Time: \_\_\_\_\_

Field Personnel: \_\_\_\_\_

Weather Conditions:

Temp:

Wind:

Cloud:

PPT:

PPT in last 24 hrs:

Note: All wetlands within the study area are to be assessed for potential Massasauga hibernation habitat. Wetlands which do not qualify as potential hibernation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT (general) <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
H1 36		meadow marsh	0%	mixed forest, open water	adv trail/ MNR road	riparian wetland
H2 38		marsh	40%	cliff, mixed forest, open water	"	marsh at lake edge, base of cliff
H3 60, 61		shrub & sedge wetland, open water	70%	rock barrens/juniper scrub, upland deciduous forest	minor adv trail	riparian wetland; few trees but lots of shrubs; cattail marsh on east side of trail
H4 53		marshy edge of open water	10%	cliff and mixed forest	adv trail	26 painted turtles

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

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# Massasauga Hibernation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960824 or 770?

Project Name: Heavy / Nigig TLine along Hwy

Date / Time: July 23 2013 Tues

Field Personnel: J Richer

Weather Conditions:	Temp: <u>21</u>	Wind: <u>Beaufort 3</u>	Cloud: <u>100</u>	PPT: <u>0</u>	PPT in last 24 hrs: <u>Heavy Rain &amp; Storms</u>
---------------------	-----------------	-------------------------	-------------------	---------------	--

Note: All wetlands within the study area are to be assessed for potential Massasauga hibernation habitat. Wetlands which do not qualify as potential hibernation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT COMMUNITIES <sup>2</sup> HABITAT	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
EMR H02 <del>EMR H01</del>	<del>540888</del> 5065945	<del>cattail /</del> sedge marsh	15-25	shrub barren, thick shrub	Hwy 69 & power lines	South end of Magnetawan Reserve
EMR H03	540893 5064361	beaver pond, sedge marsh	25-40	tree/shrub rock barrens, thick shrub	"	
EMR H04	540825 5064487	sedge hummocky shrub swamp	25-40	tree/shrub rock barrens, thick shrub	" & watercourse	continuation / connected to EMR H03
EMR H05	540715 5064732	sedge marsh + hummocks	5-15	tree/shrub rock barrens, conifer woodland	Hwy 69 & power lines	
EMR H06	540486 5065260	sedge marsh + hummocky shrub swamp	25-40	tree/shrub rock barrens	"	<del>APU observed</del>
EMR H07	540390 5065483	sedge marsh + shrub swamp	15-25	tree/shrub rock barrens	"	2 PATU observed

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 11

REV: Jul 13 FORM 00#

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
EMR H08	540212 5065868	beaver pond, sedge herb, moss, swamp	10-20% <del>10-20</del>	forest, rock barren (tree/shrub) + swamp	Hwy, <del>power lines</del> beaver dam	water levels down edge w/ P. canth. in past weeks, <del>beaver</del> activity
EMR H09	<del>540044</del> 5066228	beaver pond, sedge, water lilies	5-15% (within wetland)	forest, rock cliff, tree/shrub, rock barren	Hwy, power lines	
EMR H10	539966 5066413	sedge marsh, shrub edge, swamp	10-15% win wetland	tree/shrub, rock barren	"	
EMR H11 & H12	539930 5066525	sedge cattail marsh, shrub, swamp	20-50	tree/shrub, rock barren	"	
<del>EMR H13</del>	<del>539911</del> <del>5066413</del>	<del>sedge marsh, shrub, swamp</del>	<del>10-20</del>	<del>forest, rock barren</del>	<del>Hwy</del>	
EMR H13	539718 5066929	beaver pond, sedge, water lily, rock barren	10-20	tree/shrub, rock barren, mixed forest	"	
EMR H14	539557 5067295	sedge marsh, shrub hummocks, swamp, beaver pond	25-40	tree/shrub, rock barren, mixed forest	"	
EMR H15	539530 5067392	sedge marsh, shrubs around edge, beaver pond	5-15% <del>10-20</del>	tree/shrub, rock barren	"	
EMR H16	539438 5067585	several beaver dams, sedge, shrubs, moss, swamp, cattail, stands	15-30	tree/shrub, rock barren	"	broken beaver dam, water levels down
EMR H17	539193 5068432	<del>beaver pond</del> w some shrubs	10-20	forest	"	

1 - conifer/shrub swamp; fen/bog; sedge or sphagnum hummocks; other wetland

2 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

3 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 2 of 11

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## Massasauga Hibernation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960824 or 770?

Project Name: Nigig/Henvey Inlet

Date / Time: July 23 2013

Field Personnel: J. Richer

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:

*Continuation of prior sheets*

Note: All wetlands within the study area are to be assessed for potential Massasauga hibernation habitat. Wetlands which do not qualify as potential hibernation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT COMMUNITIES <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
EMR H18	538822 5069617	Sedges along water course, shrubs along edge	15-20	treed/shrub rock barrens	Hwy & power lines	SVTU present
EMR H19	537660 5069934	shrub swamp with cattails	50-75	treed/shrub rock barrens, conifer forest, rock cliffs (short)	"	
EMR H20	537129 5070343	shrub swamp sedge hummocks	30-50	treed/rock barrens	"	
EMR H21	536700 5070844	thicket swamp sedge ground pond	30-50	treed/rock barrens woodland	"	
EMR H22	536446 5071158	shrub sedge swamp	40-60	treed rock barrens, woodland	"	communications tower also present
EMR H23	536165 5071753	cattail stand surrounded by shrubs	5-10	treed/shrub rock barrens	"	

Quality Control: This form is complete ( ) & legible ( ).

Signature: A. Richer

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

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# Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number

160960824

Project Name:

Nigig

Date / Time:

5/12/13

Field Personnel:

B Holden

B. Miller

Weather Conditions:

Temp:

Wind:

Cloud:

PPT:

PPT in last 24 hrs:

Rain

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foregong/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
516 515	0550731 5079999	Rock Barren	100% <10	Limited logs / table rock	Forest + wetland		Survey time 11:30am - 156pm
519	0550805 5079841	11	~100%	Logs / Limited table rock	11		<del>2:00pm - 1:50pm</del> 1.5 min
521 522	0551001 5079708	11	<10%	Limited logs? Rocks	11		2/min
526 527	0550976 0579551	11	<60%	11	11		20 min
530	0551178 5079224	11	<60%	11	11		10 min
533	0551246 5079037	11	35%	Trees	11		6 min

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature:

(Field Personnel)

Signature:

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

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HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
535	551288 5078954	Rock Barren	~10%	Limited Rocks/ logs.	Marsh Woods		
540	0551444 5078699		<10% Increasing as we move south				
545	551598 5078568		25% decreasing as we move N.		Woods	Lead to S.	
546 547	551322		<10%			Beaver pond?	
548 549	0551634 5078336		<5%		Woods / Beaver pond	Pond?	
554	551861 5078132	Rock Barren    Meadow	<5%				
555	0550616 5078103		<10%		Woods	Lead?	

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 2 of \_\_\_\_\_

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## Massasauga Hibernation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960824  
Date / Time: Jul 24, 13

Project Name: Nigig  
Field Personnel: B. Holden B. Miller

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs:
		<u>3</u>		<u>/</u>	<u>Rain</u>

Note: All wetlands within the study area are to be assessed for potential Massasauga hibernation habitat. Wetlands which do not qualify as potential hibernation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT COMMUNITIES <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
0517 0520 <small>0518</small>	0550795 5080011	Marsh / Fen	<10%	Rocky Barren		Leatherleaf
0528 0529	0551162 5079309	Wetland Sphagnum	/	Rock Barren Forest	Pond?	Pond (Beaver)
0532	0551238 5079091	Fen	<10%	11		
0534	0551261 5078996	Fen edge	/	11	Pond	Beaver Pond
0539	0551431 5078742	Marsh	1%	11	/	
534	Continues to		West	Line		

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

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HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
556	550593 5080307	Sedge Marsh	~20%	Rock Barren Woods	?	Small IDg
558 559 560	Continues	into	west	side	OK hydro	cut 3 then back
	further	south	along	west side	- see map.	

1 - conifer/shrub swamp; fen/bog; sedge or sphagnum hummocks; other wetland

2 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

3 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

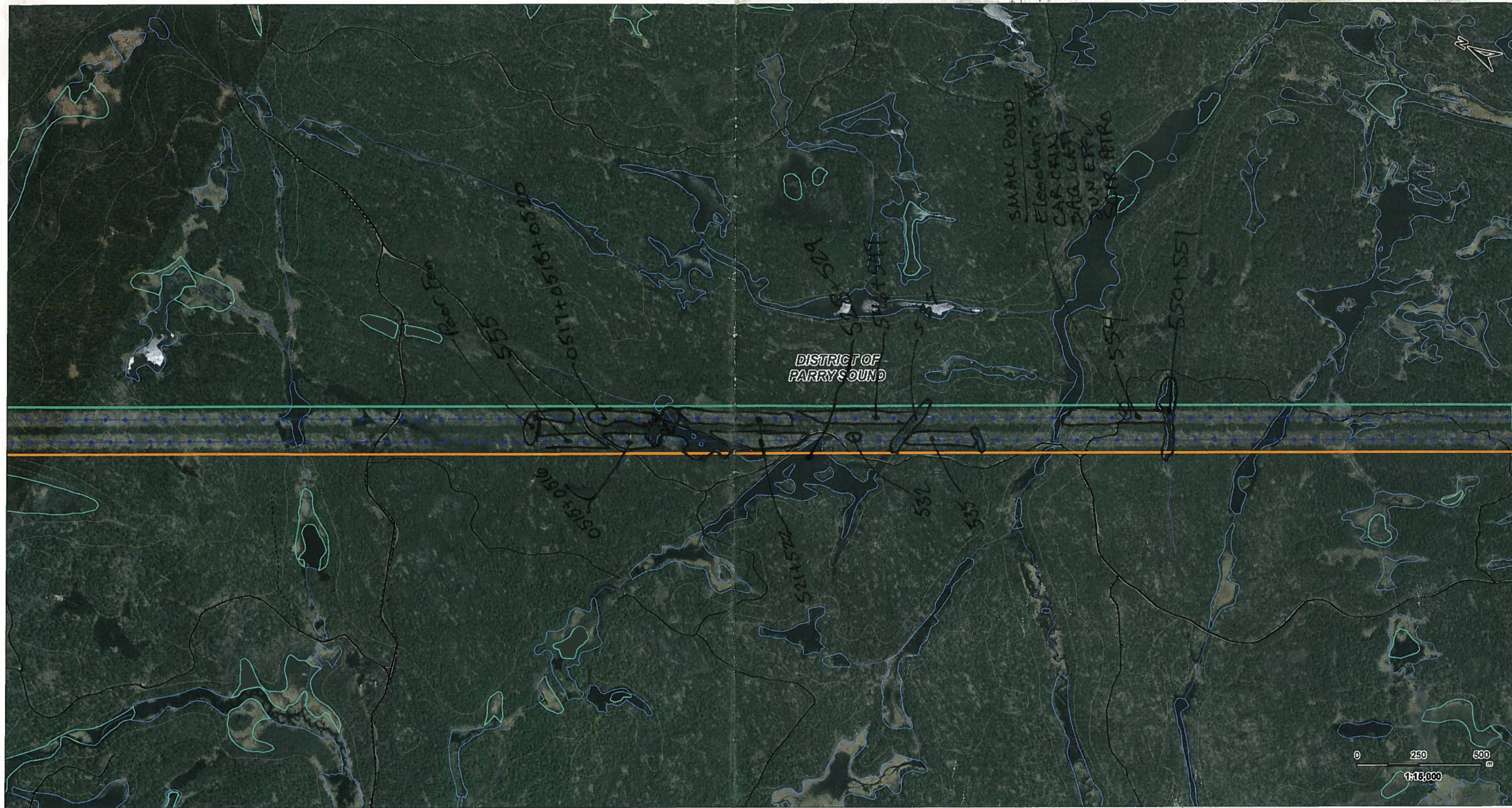
(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: Jul 13 FORM 00#



\\hdc\hdc\060770\Drawings\NAD\1\Terrestrial\Field\Work\16060770\_FieldMap\_Tiled\_20130704.mxd  
Revised: 2013-07-04 By: swille



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#### Potential Transmission Line

- Option A
- Option C
- Option CE
- Options A, C
- North Substation
- Route Marker

#### Existing Features

- City or Town
- Hydro Station
- Existing Transmission Line
- Highway
- Major Road
- Local Road
- Railway
- Trail
- Contours(5m)
- Watercourse

- Municipal Boundary - Upper
- Municipal Boundary - Lower

#### ANSI

- ANSI, Earth Science
- ANSI, Life Science
- Candidate ANSI, Earth Science
- Candidate ANSI, Life
- Aggregate Site
- Significant Ecological
- Massasauga Rattlesnake Distribution

#### Wintering Area

- Deer Wintering Area (Stratum 2)
- Deer Yard (Stratum 1)
- Moose Late Wintering
- Wetland, Provincially Significant
- Wetland, Locally Significant
- Wetland, Unevaluated
- Waterbody
- First Nations Reserve

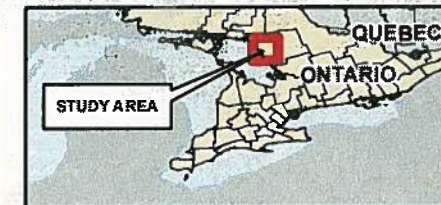
- Conservation Reserve
- Forest Reserve
- Provincial Park
- Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
29

**DRAFT**

Title

**Proposed Route -  
Field Map**

July 2013  
150980824





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# Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960 ~~770~~

Project Name: Nigig/Henvey TransLine

Date / Time: 22 Jul 2013

Field Personnel: Kapishnikov & Richer

Weather Conditions:

Temp:

18°C

Wind:

B 2

Cloud:

80

PPT:

na

PPT in last 24 hrs:

2cm + T-storms

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
2 PCS rock pile & barrens	549065 5083083	R. edge rock barrens meadow	15	rock pile crevice brush pile	forest wetland waterbody	Corridor barrier = Hwy 520	
	to ↓						
	549147 5083004	to	549181 5083043				
Feat 4	550252 5080909	rock barrens	5-10	rock piles, stumps rock crevices brush piles	wetlands, forest		extends to Feature 6 (a wetland)
Feat 7	550090 5081238	rock barrens	5-10	rock piles, stumps rock crevices, brush piles	wetland, forest	-	Five-lined Skink
18 Feat 8	550314 5081238	rock barrens	100				Rattle headed.

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
10	549545 5082423	R.B	5	TR / RP / RC	wetland north Dec/nix forest		
11 2	550591 5080456	FO, RB, meadow, edge	5-10	RP, Stumps, BP,	Con forest		
11 3	↳ to 550515 5080418						
12	550325 5080738	RB	15-20	RP, stump, RC, BP.	Con forest		
12 3	↳ 550317 to 5080840						

- 1 - forest opening; rock barren; meadow; edge habitat  
2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)  
3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)  
4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

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REV: Jul 13 FORM 00#



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# Massasauga Hibernation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960770

Project Name: Nigig/Henvey TransLine

Date / Time: 22 Jul 2013

Field Personnel: Kortjeka & Richer

Weather Conditions:	Temp: <u>20°C</u>	Wind: <u>2</u>	Cloud: <u>90</u>	PPT: <u>nil</u>	PPT in last 24 hrs: <u>Heavy Rain + T-storms</u>
---------------------	-------------------	----------------	------------------	-----------------	--

Note: All wetlands within the study area are to be assessed for potential Massasauga hibernation habitat. Wetlands which do not qualify as potential hibernation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT (general) <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
Feat 2 <u>371X wetland</u>	<u>549151</u> <u>5083005</u>	<u>Cattail marsh</u>	<u>0%</u>	<u>Tree Swamp</u> <u>Con/mix forest</u>		
Feat 3 <u>TPIC</u>	<u>549165</u> <u>50835083144</u>	<u>fore marsh</u> <u>open watercourse</u>				
Feat 5	<u>550307</u> <u>5080942</u>	<u>rock/edge</u> <u>conifer</u> <u>marsh</u>	<u>10-15</u> <u>mostly edge</u>	<u>rock barren</u> <u>Chydrocut</u>	<u>access road</u> <u>unpaved</u>	
Feat 6	<u>550121</u> <u>5081094</u>	<u>fore marsh</u> <u>to converted</u> <u>swamp</u>	<u>15-20</u>	<u>open water</u> <u>Wetland</u> <u>rock barren</u>		
Feat 8	<u>549909</u> <u>5081506</u>	<u>Swamp</u> <u>271CS</u>	<u>5-10</u>	<u>Rock barren</u> <u>dec. forest</u>		<u>OSFL → pins present</u> <u>u-shape</u>
Feat 9	<u>549314</u> <u>5082400</u>	<u>conifer</u> <u>Swamp</u> <u>next to</u> <u>Cattail</u> <u>marsh</u>	<u>~20</u>	<u>rock barren</u> <u>rock cliffs</u> <u>bluffs</u>	<u>-</u>	

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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REV: Jul 13 FORM 00#





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Tel: (519) 836-6050  
Fax: (519) 836-2493

## Massasauga Observation Form

Project Number 160960770

Project Name: Nigig/Henvey Inlet Transline

Date / Time: 22 July 2013

Field Personnel: Katijack & Richer.

Weather Conditions:

Temp:

18

Wind:

B2

Cloud:

80

PPT:

n/a

PPT in last 24 hrs:

2 cm of snow

LOCATION*	TIME	PHOTO #	TYPE OF OBSERVATION (e.g. visual confirmation, rattle heard, shed skin)	NOTES (e.g. size, behaviour, microhabitat)
<u>530039</u> <u>508138</u>	<u>13:25</u>	<u>1 PIC</u>	<u>Rattle</u>	<u>Picture is of habitat</u>

\* Geographic coordinates and habitat ID or habitat type

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

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Tel: (519) 836-6050  
Fax: (519) 836-2493

## Massasauga Hibernation Habitat Assessment Form (Georgian Bay Population)

Project Number 160960770

Project Name: Niagara/Henvey Inlet TransLine

Date / Time: 30 July 2013

Field Personnel: K. J. J. & Richer

Weather Conditions:	Temp: <u>26°C</u>	Wind: <u>1-2</u>	Cloud: <u>15</u>	PPT: <u>n/a</u>	PPT in last 24 hrs: <u>n/a</u>
---------------------	-------------------	------------------	------------------	-----------------	--------------------------------

Note: All wetlands within the study area are to be assessed for potential Massasauga hibernation habitat. Wetlands which do not qualify as potential hibernation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT (general) <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
<u>Feet 21</u>	<u>552948</u> <u>5076107</u>	<u>sedge 1st hummocks</u>	<u>5-10</u>	<u>con forest (edge)</u>	<u>n/a</u>	<u>sandhill crane 2</u>
<u>22</u>	<u>553159</u> <u>5075711</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>n/a catbird</u>
<u>24</u>	<u>553349</u> <u>5075335</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>n/a</u>	<u>n/a</u>
<u>25</u>	<u>552921</u> <u>5075848</u>	<u>"</u>	<u>20-30</u>	<u>rock barren forest edge</u>	<u>n/a</u>	<u>n/a</u>
<u>14</u>	<u>552182</u> <u>5077411</u>	<u>grass marsh conif forest edge</u>	<u>5-10</u>	<u>forest, rock barren</u>	<u>"</u>	<u>"</u>
<u>15</u>	<u>552007</u> <u>5077673</u>	<u>OAO open bog/alkali</u>	<u>10</u>	<u>forest, rock barren</u>		

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 3

REV: Jul 13 FORM 00#



HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
16	551811 5078044	<del>0-5</del> Reed Marsh	<del>10-15</del>	rock barren, forest		
17	552572 5076768	Reed Marsh	0-5	" "		
18	552712 5076453	Reed Marsh	10	rock barren, forest	Road (dirt)	
<del>19</del>	<del>552712 5076453</del>		<del>10-15</del>			

1 – conifer/shrub swamp; fen/bog; sedge or sphagnum hummocks; other wetland

2 – forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

3 – type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 2 of 3

REV: Jul 13 FORM 00#



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Guelph, Ontario, Canada  
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Tel: (519) 836-6050  
Fax: (519) 836-2493

## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number: 160960770

Project Name: Nigig / Henvey Inlet Transline

Date / Time: 30 Jul 2013

Field Personnel: Kerry Jacko + Bider

Weather Conditions:

Temp:

26°C

Wind:

1-2

Cloud:

15

PPT:

n/a

PPT in last 24 hrs:

n/a

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
<u>23</u>	<u>553252</u> <u>5075499</u>	<u>RB</u> <u>BB</u>	<u>20</u>	<u>RP BP</u> <u>BB</u>	<u>con forest edge</u> <u>wetland</u>	<u>n/a</u>	<u>Sketchy</u>
	<u>6 to 8</u> <u>553375</u> <u>5075140</u>						<u>including habitat recorded July 29 2013</u>
<u>13</u>	<u>552389</u> <u>5076977</u>	<u>Rock barren</u>	<u>10-15</u>	<u>Rock crevice</u> <u>Rock piles</u>	<u>con. f forest</u> <u>+ reed marsh</u> <u>wetland</u>	<u>n/a</u>	<u>all gestation features</u> <u>habitat recorded</u>
<u>15</u>	<u>551939</u> <u>5077797</u>	<u>Rock Barren</u>	<u>20</u>	<u>"</u>	<u>"</u>	<u>n/a</u>	<u>extends to the</u> <u>nearest hibernation</u> <u>feature (wetland)</u>
<u>20</u>	<u>552640</u> <u>5076686</u>	<u>Rock Barrens</u>	<u>5</u>	<u>" "</u>	<u>forest edge</u> <u>wetland edge</u>	<u>n/a</u>	<u>and throughout</u> <u>study area within</u> <u>corridor</u>

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 3 of 3

REV: Jul 13 FORM 00#





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Fax: (519) 836-2493

## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960B24

Project Name: Nigig - HONI corridor

Date / Time: Aug 9, 2013

Field Personnel: B. Holden, M. Cameron

Weather Conditions:

Temp:

23°C

Wind:

Cloud:

0%

PPT:

Ø

PPT in last 24 hrs:

Ø

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

### SECTION I

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
<u>I1A1</u>	<u>see map</u>						
<u>8</u>							
<u>G2</u>							
<u>G3</u>							
<u>G4</u>							

NO ACCESS  
TO  
SECTIONS  
I & J

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

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Fax: (519) 836-2493

## Massasauga Hibernation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960824

Project Name: Nigig - HONI corridor

Date / Time: Aug 9, 2013

Field Personnel: B. Holden, M. Cameron

Weather Conditions:	Temp: <u>23°C</u>	Wind:	Cloud: <u>0%</u>	PPT: <u>Ø</u>	PPT in last 24 hrs: <u>Ø</u>
---------------------	----------------------	-------	---------------------	------------------	---------------------------------

Note: All wetlands within the study area are to be assessed for potential Massasauga hibernation habitat. Wetlands which do not qualify as potential hibernation habitat are considered potential foraging/mating habitat.

### SECTION I

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT (general) <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
H1						
H2						
H3						
H4						
H5						
H6						

*NO ACCESS TO SECTIONS I + J*

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

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Tel: (519) 836-6050  
Fax: (519) 836-2493

## Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960824

Project Name: Nigig - HONI corridor

Date / Time: Aug 10, 2013

Field Personnel: B. Holden, M. Cameron

Weather Conditions:	Temp: <u>20°C</u>	Wind: <u>1</u>	Cloud: <u>10%</u>	PPT: <u>Ø</u>	PPT in last 24 hrs: <u>Ø trace</u>
---------------------	-------------------	----------------	-------------------	---------------	------------------------------------

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

### SECTION K

Parked at 0577082, 5030969  
to access Section K

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT (general) <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
G7 Photo 7B		rock barren & meadow	10% - 50%	loose rock, juniper	upland mixed forest, changing to conifer toward H5	road + trails/driving	mostly smooth, rolling rock barren, lots of lichen rolling terrain with pockets of woods in each hollow depression. More heavily shaded to N.
G8		scrub & rock barren w/ wetland pockets	50%	shrubs, loose rock, crevices, garbage	conifer forest	main road, trail	signed private land
G9 90		field w/ rock outcrops	10%	slash, some loose rock & ledges	mixed forest, upland	Hwy 124 at northern end	no trail, rolling terrain
G10							

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

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## Massasauga Hibernation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960824

Project Name: Nigig - HONI corridor

Date / Time: Aug 10, 2013

Field Personnel: B. Holden, M. Cameron

Weather Conditions:	Temp: <u>20°C</u>	Wind: <u>1</u>	Cloud: <u>10%</u>	PPT: <u>Ø</u>	PPT in last 24 hrs: <u>trace</u>
---------------------	-------------------	----------------	-------------------	---------------	----------------------------------

Note: All wetlands within the study area are to be assessed for potential Massasauga hibernation habitat. Wetlands which do not qualify as potential hibernation habitat are considered potential foraging/mating habitat.

### SECTION K

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT (general) <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
H5		marsh edge of open water	< 10%	conifer forest	trail, driveway, road	mostly open water

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: Jul 13 FORM 00#



# Massasanga surveys - Central

BH + MC

Aug 5 - general notes

- narrow creek crossing corridor ( $90^\circ$ )
- abundant rock cover - boulders, cracks, crevices
- adjacent decid forest
- 0564052, 5055523
- 12:41 pm

---

Tunnel road 3pm, ~ 0563262, 5056761



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Tel: (519) 836-6050  
Fax: (519) 836-2493

# Massasauga Gestation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960770 (?)

Project Name: Nigig/Hevey Inlet Line (along Hwy 69)

Date / Time: July 23 2012 Tue

Field Personnel: SRicher

Weather Conditions:	Temp: <u>21</u>	Wind: <u>E 2-3</u>	Cloud: <u>100</u>	PPT: <u>None</u>	PPT in last 24 hrs: <u>Heavy Rain + Thunder</u>
---------------------	-----------------	--------------------	-------------------	------------------	---

Note: All forest openings, rock barrens, meadows and edge habitats within the study area are to be assessed for potential Massasauga gestation habitat. Clearings which do not qualify as potential gestation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
EMR 601	540925 5064285	Tree/shrub rock barren	30-40	Table Rock Rock Shrub Other (etc.)	wetland waterbody	Hwy 69, power lines	
EMR 602	540585 5065036	Tree/shrub rock barrens	25-50	fallen dead trees	pocket wetland	"	
EMR 603	540171 5065956	Shrub rock barrens	30-50		wetland (EMR 608)	"	
EMR 604	538939 5069491	Tree/shrub rock barrens	25-50		Magnetawan river, pocket wetland	"	
EMR 605	536114 5071856	Tree/shrub rock barrens	25-40		Ryng Inlet/grassy Still River, meadows	" ATV trail	
EMR 606	535641 5073057	Mown hay field, forest thicket barrens	10-20	railway, hay bales, barn	railway, barns bldgs,	power lines, railway, Hwy	

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 2

REV: Jul 13 FORM 00#



July 24 2013

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	COVER OBJECTS <sup>2</sup>	ADJACENT HABITAT <sup>3</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>4</sup>	OTHER NOTES
EMR 607	548694 5049715	streamside meadow, rock meadow	10-15	<del>brush piles, rock crevices</del>	mixed forest, rocky clearing, rock cliffs, residential lawn	Hwy 69 & powerlines	Sucker Creek @ Pointe au Baril
EMR 608	550203 5047522	lakeside clearing/ cultural meadow	5-10	brush piles, rock piles	lake w rocky shoreline, conifer forest	" " Topo Trunk C. trail	
<del>EMR 609</del>	<del>561154 5039196</del>	<del>Treed rock barrens</del>	<del>40-60</del>	<del>rock crevices brush piles</del>	<del>wetland Gredgearthub fen, some cattail</del>	<del>Hwy 69 powerlines</del>	
EMR 610	562231 5038138	cultural meadow, some paved area	1-5%	brush piles	mixed forest	" " sewage treatment ponds	by Woods Road
EMR 611	566287 5034158	freed rock barrens	30-40	rock crevices, brush piles, fallen dead trees	Dinner Lake (wetland)	Hwy 69 & powerlines	

1 - forest opening; rock barren; meadow; edge habitat

2 - table rock; rock pile; stump; rock crevice; brush pile; other (describe)

3 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)

4 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 2 of 2

REV: Jul 13 FORM 00#



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Revised: 2013-04-01 By: awilla



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## Legend

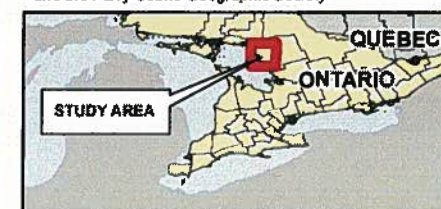
- |                                    |                       |
|------------------------------------|-----------------------|
| <b>Potential Transmission Line</b> | Railway               |
| Proposed Route                     | Trail                 |
| North Substation                   | Contours(5m)          |
| Route Marker                       | Watercourse           |
| <b>Existing Features</b>           | First Nations Reserve |
| City or Town                       |                       |
| Hydro Station                      |                       |
| Existing Transmission Line         |                       |
| Highway                            |                       |
| Major Road                         |                       |
| Local Road                         |                       |

\*Location of transmission line within the highway corridor is unknown at this time.



## Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
8

**DRAFT**

Title

**Proposed Route -  
Photo Mosaic**

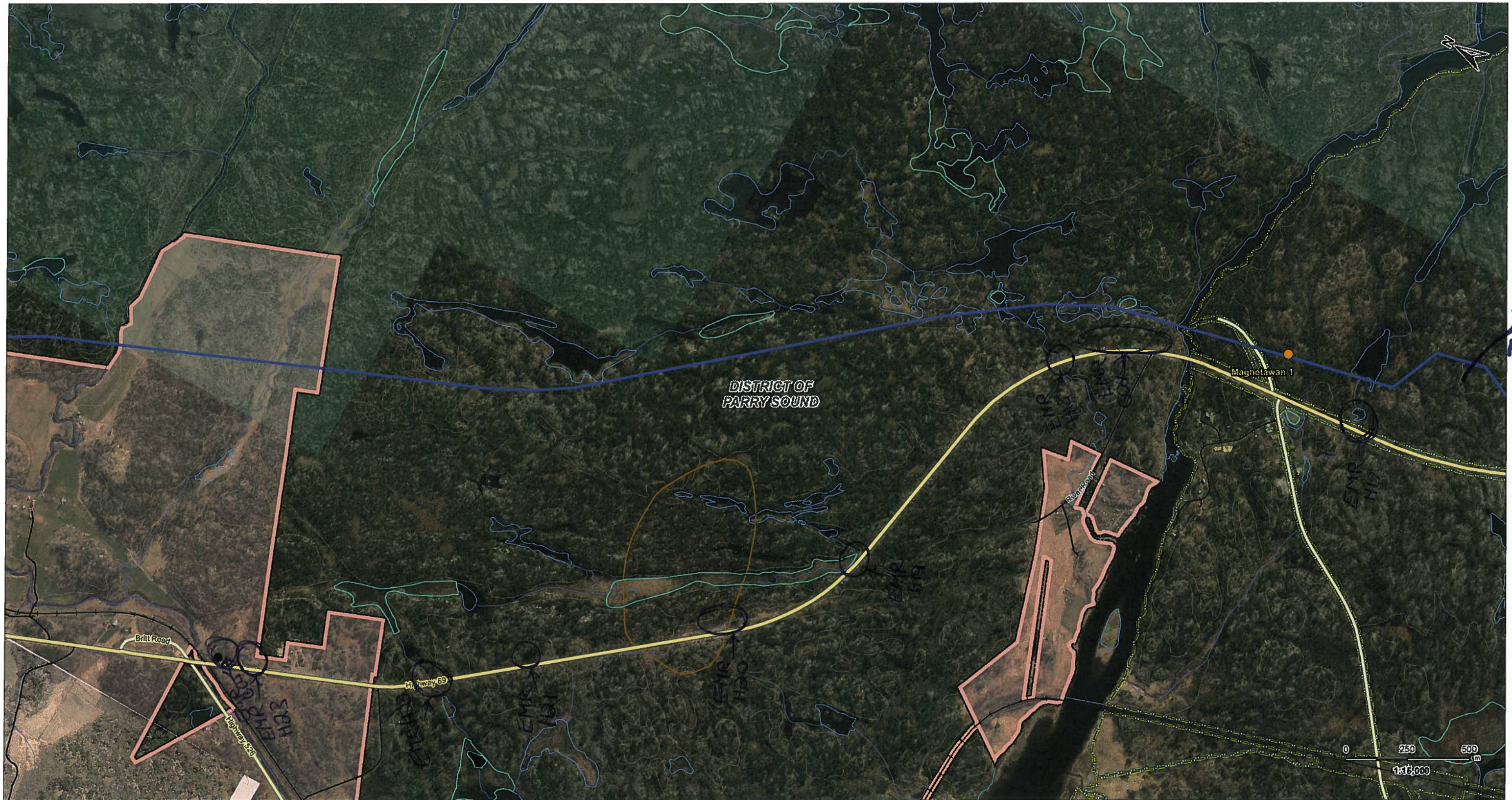
April 2013  
Project No.







W:\active\6096077\Drawings\MXD\Transmission\as06061150960770\_FieldsMap\_Tiled\_20130704.mxd  
Revised: 2013-07-04 By: ewhite



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#### Potential Transmission Line

- Option A
- Option C
- Option CE
- Option CW
- Options A, C
- North Substation
- Route Marker

#### Existing Features

- City or Town
- Hydro Station
- Existing Transmission Line
- Highway
- Major Road
- Local Road
- Railway
- Trail
- Contours (5m)
- Watercourse

#### Municipal Boundary - Upper

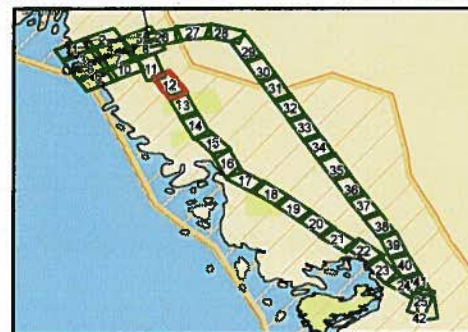
- Municipal Boundary - Lower
- ANSI
- ANSI, Earth Science
- ANSI, Life Science
- Candidate ANSI, Earth Science
- Candidate ANSI, Life
- Aggregate Site
- Significant Ecological
- Massasauga Rattlesnake Distribution

#### Wintering Area

- Deer Wintering Area (Stratum 2)
- Deer Yard (Stratum 1)
- Moose Late Wintering
- Wetland, Provincially Significant
- Wetland, Locally Significant
- Wetland, Unevaluated
- Waterbody
- First Nations Reserve

- Conservation Reserve
- Forest Reserve
- Provincial Park
- Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

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- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
- Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
12

**DRAFT**

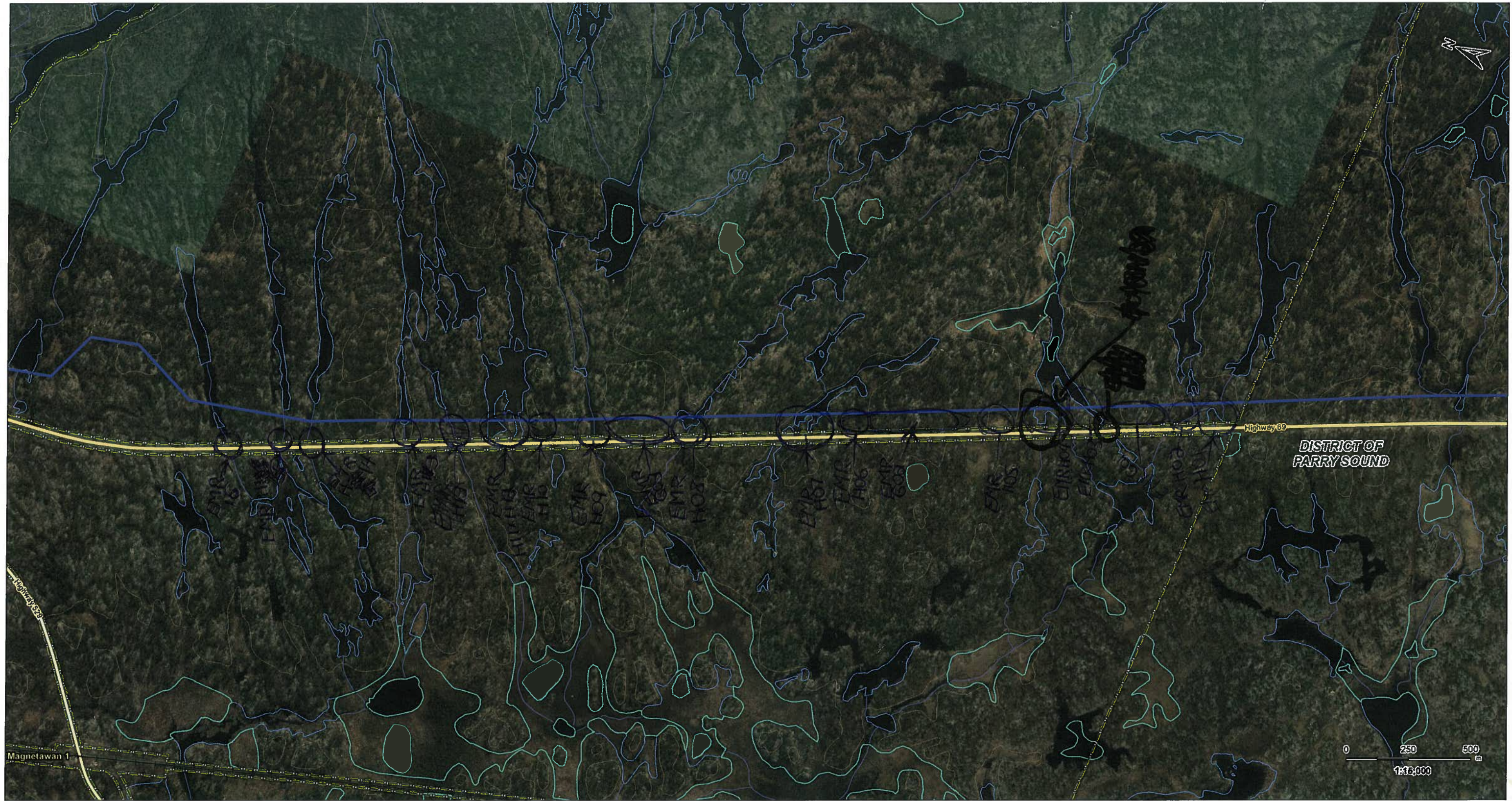
Title

**Proposed Route -  
Field Map**

July 2013  
160950824



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Revised: 2013-07-04 By: ewh



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#### Potential Transmission Line

- Option A
- Option C
- Option CE
- Option CW
- Options A, C
- North Substation
- Route Marker

#### Existing Features

- City or Town
- Hydro Station
- Existing Transmission Line
- Highway
- Major Road
- Local Road
- Railway
- Trail
- Contours(5m)
- Watercourse

#### Municipal Boundary - Upper

#### Municipal Boundary - Lower

- ANSI
- ANSI, Earth Science
- ANSI, Life Science
- Candidate ANSI, Earth Science
- Candidate ANSI, Life
- Aggregate Site
- Significant Ecological
- Massasauga Rattlesnake Distribution

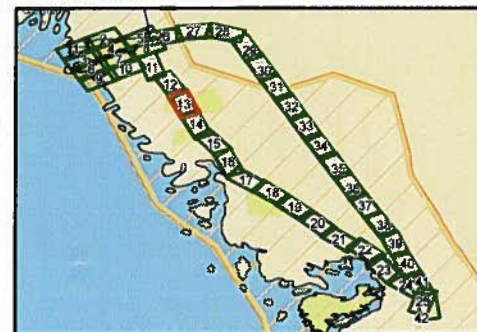
#### Wintering Area

- Deer Wintering Area (Stratum 2)
- Deer Yard (Stratum 1)
- Moose Late Wintering
- Wetland, Provincially Significant
- Wetland, Locally Significant
- Wetland, Unevaluated
- Waterbody
- First Nations Reserve

#### Conservation Reserve

- Forest Reserve
- Provincial Park
- Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

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#### Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
13

**DRAFT**

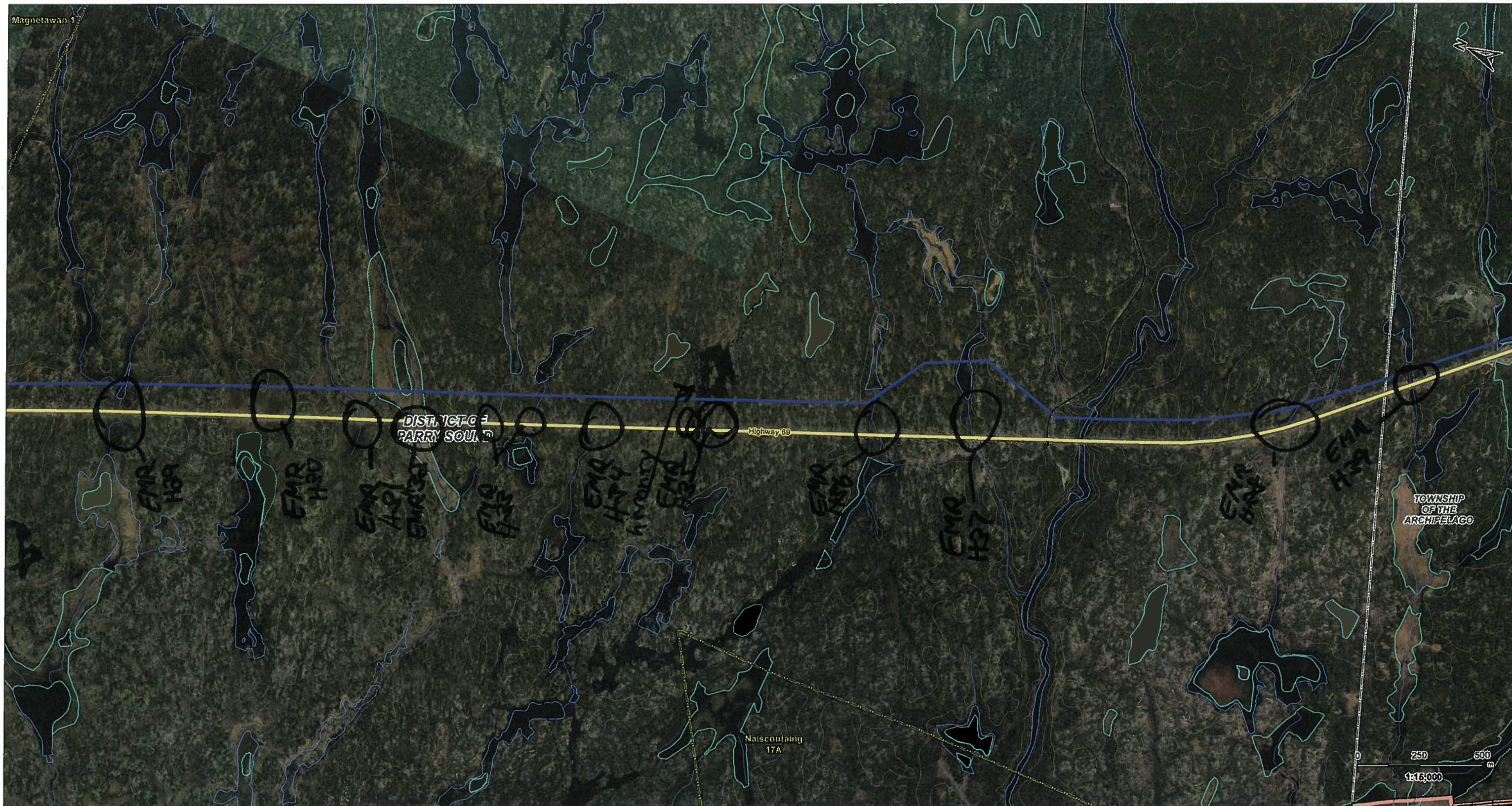
#### Title

**Proposed Route -  
Field Map**

July 2013  
150060624



\\stc\drive\00000770\drawing\MKD\TerrestrialFieldWork\16060770\_FieldMap\_Tiled\_20130704.mxd  
Revised: 2013-07-04 By: awt/b



July 2013  
16090824



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**Potential Transmission Line**  
Option A  
Option C  
Option CE  
Option CW  
Options A, C  
North Substation  
Route Marker

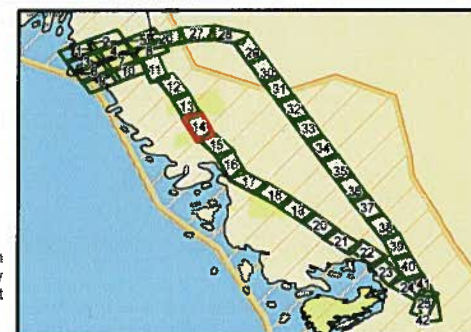
**Existing Features**  
City or Town  
Hydro Station  
Existing Transmission Line  
Highway  
Major Road  
Local Road  
Railway  
Trail  
Contours (5m)  
Watercourse

**Municipal Boundary - Upper**  
**Municipal Boundary - Lower**  
**ANSI**  
ANSI, Earth Science  
ANSI, Life Science  
Candidate ANSI, Earth Science  
Candidate ANSI, Life  
Aggregate Site  
Significant Ecological  
Massasauga Rattlesnake Distribution

**Wintering Area**  
Deer Wintering Area (Stratum 2)  
Deer Yard (Stratum 1)  
Moose Late Wintering  
Wetland, Provincially Significant  
Wetland, Locally Significant  
Wetland, Unevaluated  
Waterbody  
First Nations Reserve

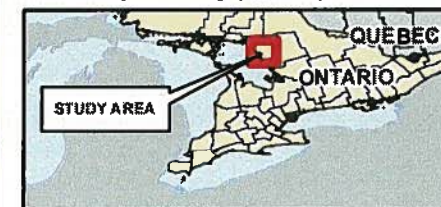
**Conservation Reserve**  
Forest Reserve  
Provincial Park  
Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

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3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
14

**DRAFT**

Title

**Proposed Route -  
Field Map**



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Revised: 2013-07-04 By: awilho



Stantec

#### Potential Transmission Line

- Option A
- Option C
- Option CE
- Option CW
- Options A, C
- North Substation
- Route Marker

#### Existing Features

- City or Town
- Hydro Station
- Existing Transmission Line
- Highway
- Major Road
- Local Road
- Railway
- Trail
- Contours(5m)
- Watercourse

#### Municipal Boundary - Upper

- Municipal Boundary - Lower
- ANSI
- ANSI, Earth Science
- ANSI, Life Science
- Candidate ANSI, Earth Science
- Candidate ANSI, Life
- Aggregate Site
- Significant Ecological
- Massasauga Rattlesnake Distribution

#### Wintering Area

- Deer Wintering Area (Stratum 2)
- Deer Yard (Stratum 1)
- Moose Late Wintering
- Wetland, Provincially Significant
- Wetland, Locally Significant
- Wetland, Unevaluated
- Waterbody
- First Nations Reserve

- Conservation Reserve
- Forest Reserve
- Provincial Park
- Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
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3. Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geographic Society



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
15

**DRAFT**

Title

**Proposed Route -  
Field Map**

July 2013  
160960824



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Revised: 2013-07-04 By: ewille



Stantec

#### Potential Transmission Line

- Option A
- Option C
- Option CE
- Option CW
- Options A, C
- North Substation
- Route Marker

#### Existing Features

- City or Town
- Hydro Station
- Existing Transmission Line
- Highway
- Major Road
- Local Road
- Railway
- Trail
- Contours(5m)
- Watercourse

#### Municipal Boundary - Upper

#### Municipal Boundary - Lower

- ANSI
- ANSI, Earth Science
- ANSI, Life Science
- Candidate ANSI, Earth Science
- Candidate ANSI, Life
- Aggregate Site
- Significant Ecological
- Massasauga Rattlesnake Distribution

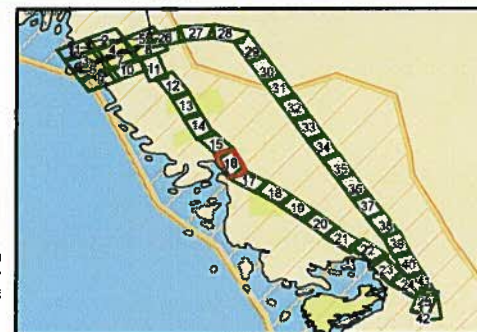
#### Wintering Area

- Deer Wintering Area (Stratum 2)
- Deer Yard (Stratum 1)
- Moosa Late Wintering
- Wetland, Provincially Significant
- Wetland, Locally Significant
- Wetland, Unevaluated
- Waterbody
- First Nations Reserve

#### Conservation Reserve

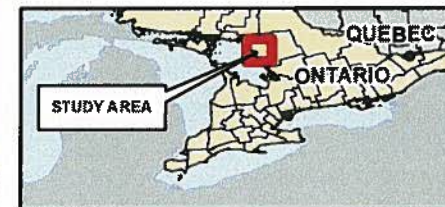
- Forest Reserve
- Provincial Park
- Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

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#### Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
16

**DRAFT**

#### Title

**Proposed Route -  
Field Map**

July 2013  
16090824







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Revised: 2013-07-04 By: anilla



Stantec

#### Potential Transmission Line

- Option A
- Option C
- Option CE
- Options A, C
- North Substation
- Route Marker

#### Existing Features

- City or Town
- Hydro Station
- Existing Transmission Line
- Highway
- Major Road
- Local Road
- Railway
- Trail
- Contours(5m)
- Watercourse

- Municipal Boundary - Upper
- Municipal Boundary - Lower

#### ANSI

- ANSI, Earth Science
- ANSI, Life Science
- Candidate ANSI, Earth Science
- Candidate ANSI, Life
- Aggregate Site
- Significant Ecological
- Massasauga Rattlesnake Distribution

#### Wintering Area

- Deer Wintering Area (Stratum 2)
- Deer Yard (Stratum 1)
- Moose Late Wintering
- Wetland, Provincially Significant
- Wetland, Locally Significant
- Wetland, Unevaluated
- Waterbody
- First Nations Reserve

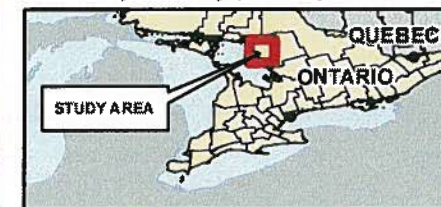
- Conservation Reserve
- Forest Reserve
- Provincial Park
- Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

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Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
18

**DRAFT**

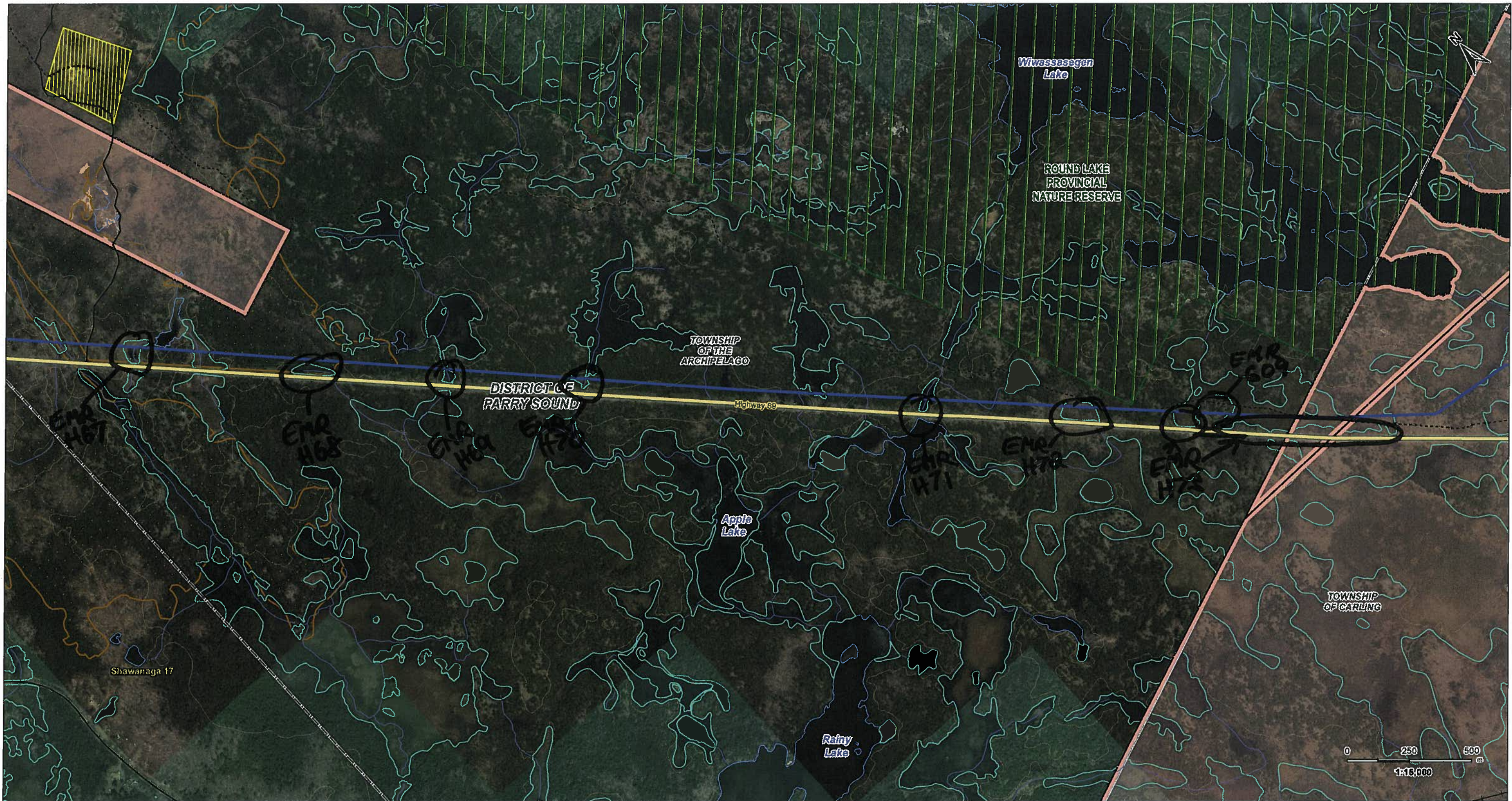
Title

**Proposed Route -  
Field Map**

July 2013  
182980824



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Revised: 2013-07-04 By: amh



Stantec

#### Potential Transmission Line

- Option A
- Option C
- Option CE
- Option CW
- Options A, C
- North Substation
- Route Marker

#### Existing Features

- City or Town
- Hydro Station
- Existing Transmission Line
- Highway
- Major Road
- Local Road
- Railway
- Trail
- Contours(5m)
- Watercourse

#### Municipal Boundary - Upper

#### Municipal Boundary - Lower

#### ANSI

- ANSI, Earth Science
- ANSI, Life Science
- Candidate ANSI, Earth Science
- Candidate ANSI, Life
- Aggregate Site
- Significant Ecological
- Massasauga Rattlesnake Distribution

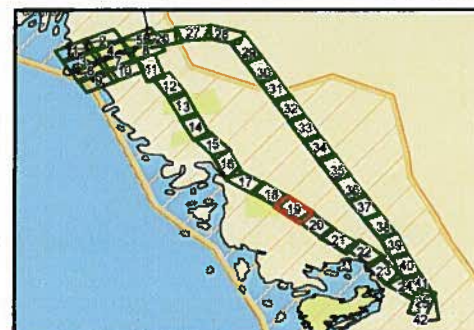
#### Wintering Area

- Deer Wintering Area (Stratum 2)
- Deer Yard (Stratum 1)
- Moose Late Wintering
- Wetland, Provincially Significant
- Wetland, Locally Significant
- Wetland, Unevaluated
- Waterbody
- First Nations Reserve

#### Conservation Reserve

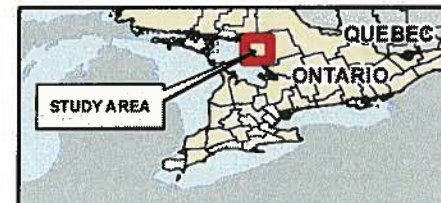
- Forest Reserve
- Provincial Park
- Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

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#### Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
19

**DRAFT**

#### Title

**Proposed Route -  
Field Map**

July 2013  
160960824



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Revised: 2013-07-04 By: arf/are



Stantec

- Potential Transmission Line**
- Option A
  - Option C
  - Option CE
  - Option CW
  - Options A, C
  - North Substation
  - Route Marker

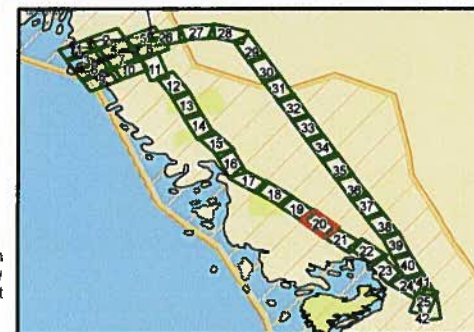
- Existing Features**
- City or Town
  - Hydro Station
  - Existing Transmission Line
  - Highway
  - Major Road
  - Local Road
  - Railway
  - Trail
  - Contours(5m)
  - Watercourse

- Municipal Boundary - Upper**
- Municipal Boundary - Lower**
- ANSI**
- ANSI, Earth Science
  - ANSI, Life Science
  - Candidate ANSI, Earth Science
  - Candidate ANSI, Life
  - Aggregate Site
  - Significant Ecological
  - Massasauga Rattlesnake Distribution

- Wintering Area**
- Deer Wintering Area (Stratum 2)
  - Deer Yard (Stratum 1)
  - Moose Late Wintering
  - Wetland, Provincially Significant
  - Wetland, Locally Significant
  - Wetland, Unevaluated
  - Waterbody
  - First Nations Reserve

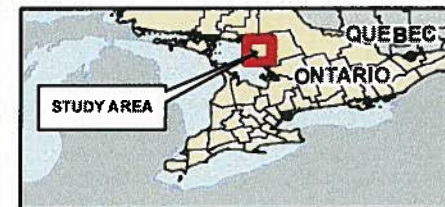
- Conservation Reserve
- Forest Reserve
- Provincial Park
- Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



**Notes**

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Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
20

**DRAFT**

Title

**Proposed Route -  
Field Map**

July 2013  
16090824



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Revised: 2013-07-04 By: amw



July 2013  
160960824



Stantec

#### Potential Transmission Line

- Option A
- Option C
- Option CE
- Option CW
- Options A, C
- North Substation
- Route Marker

#### Existing Features

- City or Town
- Hydro Station
- Existing Transmission Line
- Highway
- Major Road
- Local Road
- Railway
- Trail
- Contours(5m)
- Watercourse

#### Municipal Boundary - Upper

- Municipal Boundary - Lower
- ANSI
- ANSI, Earth Science
- ANSI, Life Science
- Candidate ANSI, Earth Science
- Candidate ANSI, Life
- Aggregate Site
- Significant Ecological
- Massasauga Rattlesnake Distribution

#### Wintering Area

- Deer Wintering Area (Stratum 2)
- Deer Yard (Stratum 1)
- Moose Late Wintering
- Wetland, Provincially Significant
- Wetland, Locally Significant
- Wetland, Unevaluated
- Waterbody
- First Nations Reserve

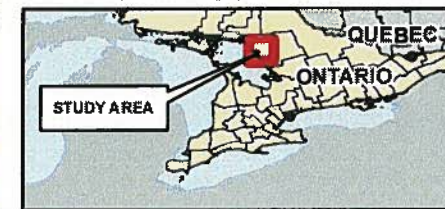
- Conservation Reserve
- Forest Reserve
- Provincial Park
- Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

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#### Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
21

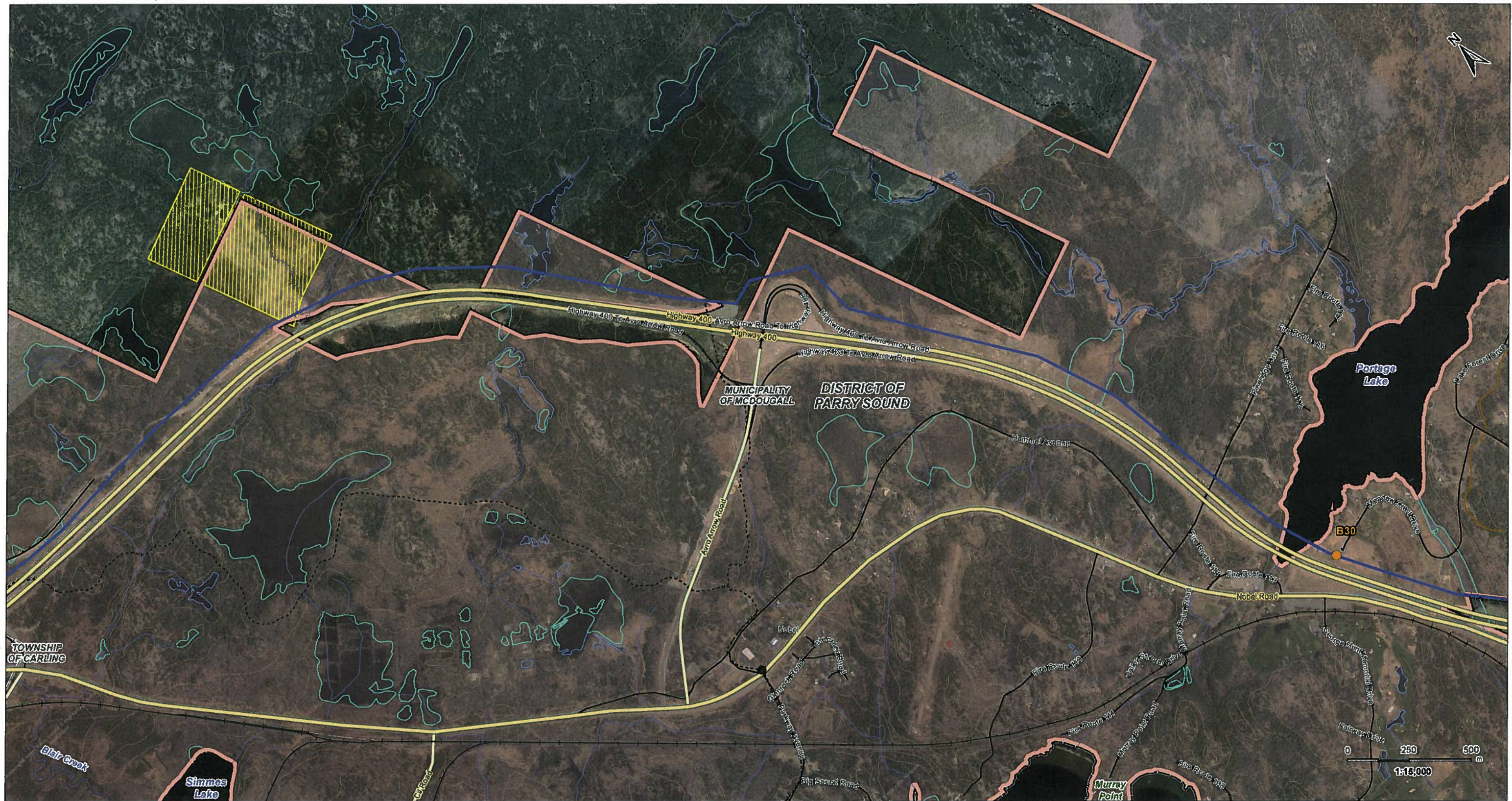
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#### Title

**Proposed Route -  
Field Map**



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Revised: 2013-07-04 By: white



Stantec

**Potential Transmission Line**  
Option A  
Option C  
Option CE  
Option CW  
Options A, C  
North Substation  
Route Marker

**Existing Features**  
City or Town  
Hydro Station  
Existing Transmission Line  
Highway  
Major Road  
Local Road  
Railway  
Trail  
Contours(5m)  
Watercourse

**Municipal Boundary - Upper**  
**Municipal Boundary - Lower**  
**ANSI**  
ANSI, Earth Science  
ANSI, Life Science  
Candidate ANSI, Earth Science  
Candidate ANSI, Life  
Aggregate Site  
Significant Ecological  
Massasauga Rattlesnake Distribution

**Wintering Area**  
Deer Wintering Area (Stratum 2)  
Deer Yard (Stratum 1)  
Moose Late Wintering  
Wetland, Provincially Significant  
Wetland, Locally Significant  
Wetland, Unevaluated  
Waterbody  
First Nations Reserve

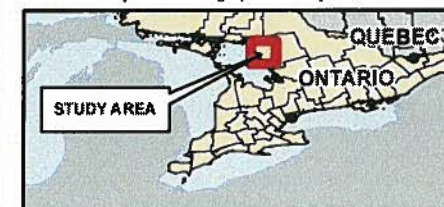
Conservation Reserve  
Forest Reserve  
Provincial Park  
Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

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Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
22

Title

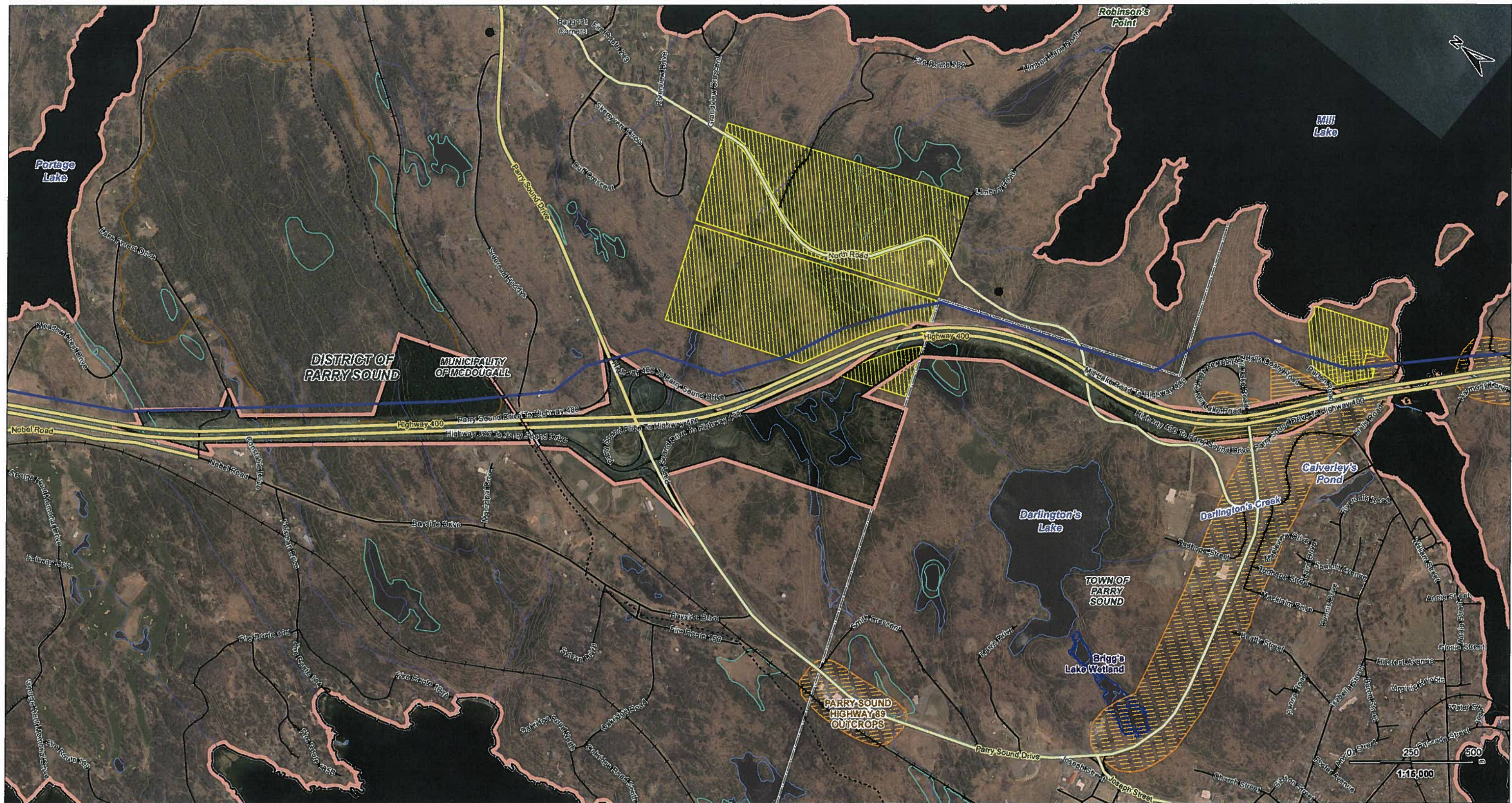
**Proposed Route -  
Field Map**

**DRAFT**

July 2013  
160908024



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Revised: 2013-07-04 By: awt/bc



Stantec

**Potential Transmission Line**  
Option A  
Option C  
Option CE  
Option CW  
Options A, C  
North Substation  
Route Marker

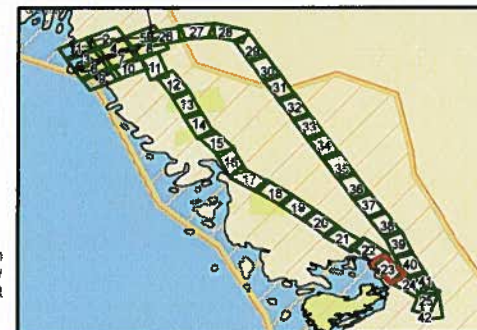
**Existing Features**  
City or Town  
Hydro Station  
Existing Transmission Line  
Highway  
Major Road  
Local Road  
Railway  
Trail  
Contours(5m)  
Watercourse

**Municipal Boundary - Upper**  
**Municipal Boundary - Lower**  
**ANSI**  
ANSI, Earth Science  
ANSI, Life Science  
Candidate ANSI, Earth Science  
Candidate ANSI, Life  
Aggregate Site  
Significant Ecological  
Massasauga Rattlesnake Distribution

**Wintering Area**  
Daar Wintering Area (Stratum 2)  
Deer Yard (Stratum 1)  
Moose Late Wintering  
Wetland, Provincially Significant  
Wetland, Locally Significant  
Wetland, Unevaluated  
Waterbody  
First Nations Reserve

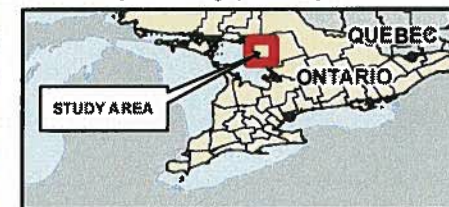
**Conservation Reserve**  
Forest Reserve  
Provincial Park  
Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



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Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
23

Title

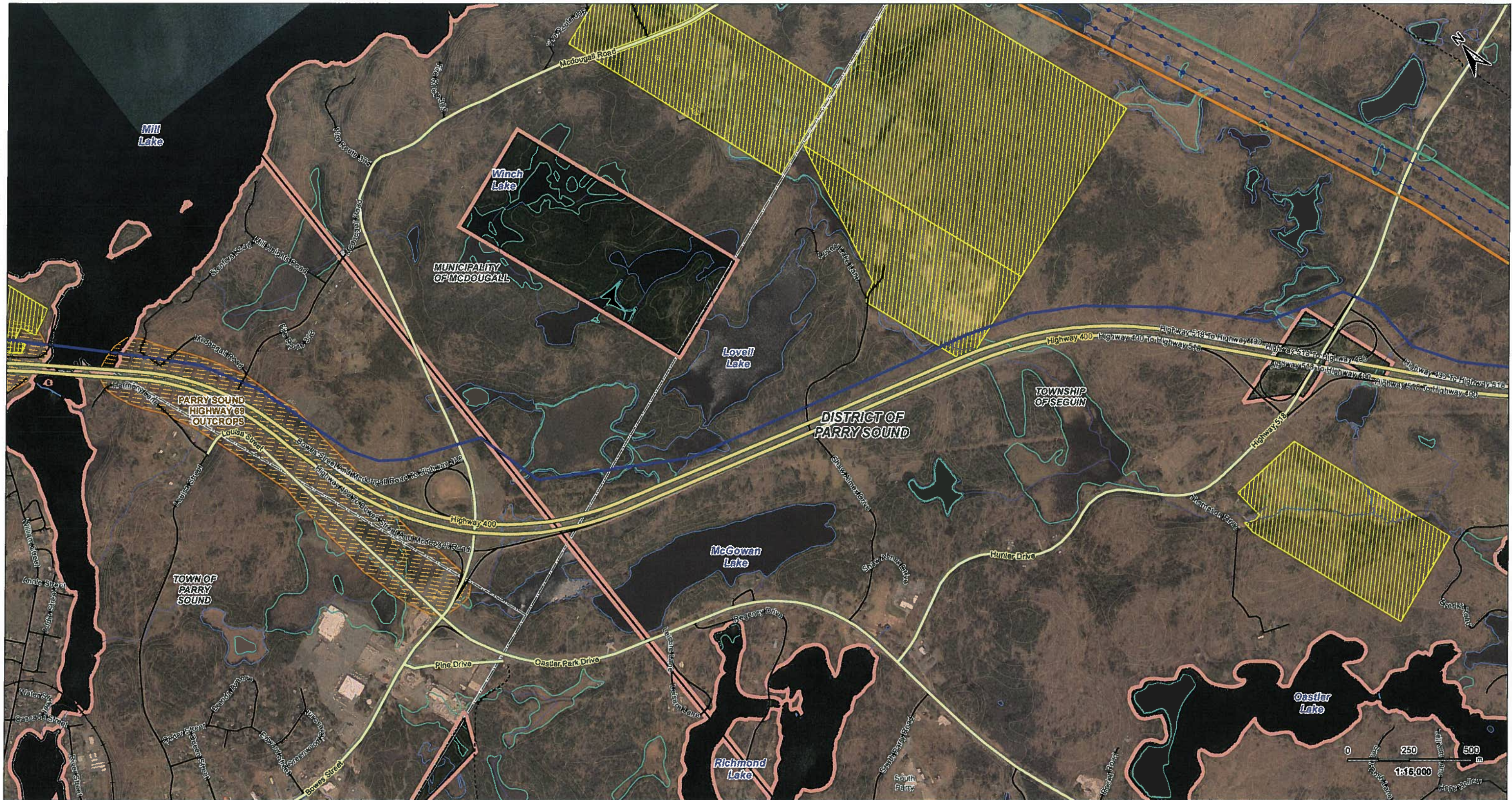
**Proposed Route -  
Field Map**

**DRAFT**

July 2013  
160960824



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Printed: 2013-07-04 By: awillie



July 2013  
1609060824



Stantec

**Potential Transmission Line**  
Option A  
Option C  
Option CE  
Option CW  
Options A, C  
North Substation  
Route Marker

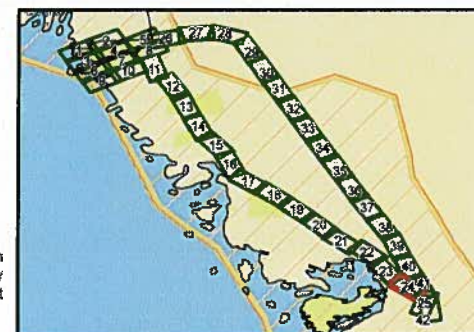
**Existing Features**  
City or Town  
Hydro Station  
Existing Transmission Line  
Highway  
Major Road  
Local Road  
Railway  
Trail  
Contours(5m)  
Watercourse

Municipal Boundary - Upper  
Municipal Boundary - Lower  
**ANSI**  
ANSI, Earth Science  
ANSI, Life Science  
Candidate ANSI, Earth Science  
Candidate ANSI, Life  
Aggregate Site  
Significant Ecological  
Massasauga Rattlesnake Distribution

**Wintering Area**  
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Wetland, Locally Significant  
Wetland, Unevaluated  
Waterbody  
First Nations Reserve

Conservation Reserve  
Forest Reserve  
Provincial Park  
Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



#### Notes

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Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

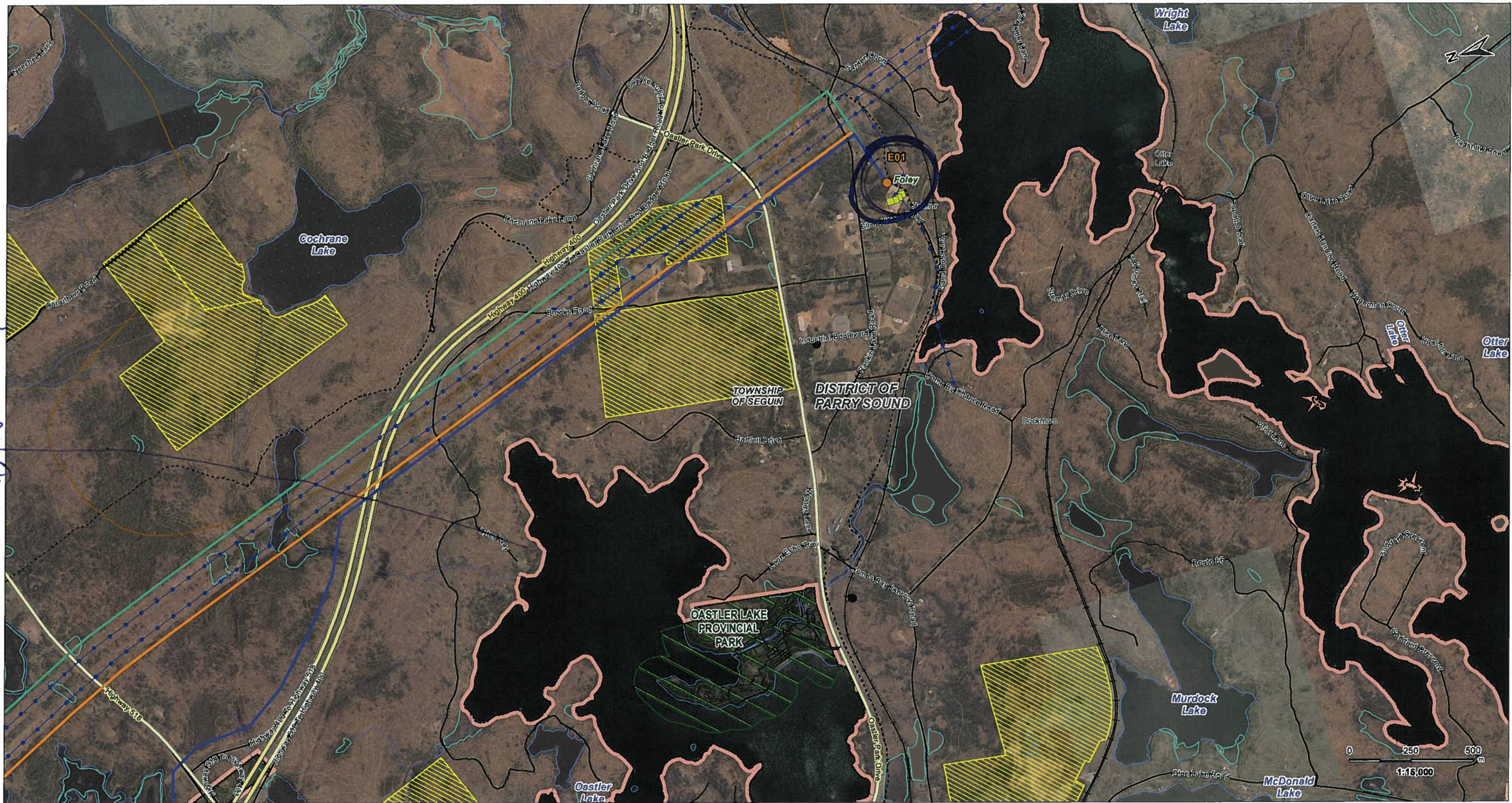
Figure No.  
24

**DRAFT**








Title

**Proposed Route -  
Field Map**















- ### Potential Transmission Line

-  Option A  
 Option C  
 Option CE  
 Option CW  
 Options A, C  
 North Substation  
 Route Marker

- ### Existing Features

-  City or Town  
 Hydro Station  
 Existing Transmission Line  
 Highway  
 Major Road  
 Local Road  
 Railway  
 Trail  
 Contours(5m)  
 Watercourse

-  Municipal Boundary - Upper

- ANSI**
- ANSI, Earth Science
  - ANSI, Life Science
  - Candidate ANSI, Earth Science
  - Candidate ANSI, Life
  - Aggregate Site
  - Significant Ecological
  - Massasauga Rattlesnake Distribution

- ### Wintering Area

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-  Deer Yard (Stratum 1)
-  Moose Late Wintering
-  Wetland, Provincially Significant
-  Wetland, Locally Significant
-  Wetland, Unevaluated
-  Waterbody
-  First Nations Reserve

-  Conservation Reserve  
 Forest Reserve  
 Provincial Park  
 Private Land

\*Location of transmission line within the highway corridor is unknown at this time.



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ClientVProject

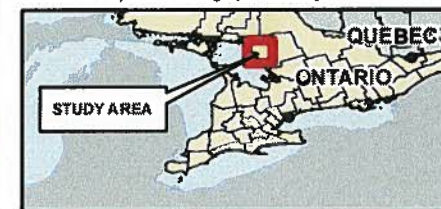
NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
25

**DRAFT**

**Title**

## Proposed Route - Field Map







Stantec

Stantec Consulting Ltd.  
70-1 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

# Massasauga Hibernation Habitat Assessment Form (Georgian Bay Populations)

Project Number 160960770<sup>3</sup>

Project Name: Nigig/Henvey TLine east of Hwy 69

Date / Time: August 1 ~~Thurs~~ 2013

Field Personnel: S. Richer & Janice Ball

Weather Conditions:	Temp: <u>21</u>	Wind: <u>B2</u>	Cloud: <u>20</u>	PPT: <u>none</u>	PPT in last 24 hrs: <u>Heavy Rain</u>
---------------------	-----------------	-----------------	------------------	------------------	---------------------------------------

Note: All wetlands within the study area are to be assessed for potential Massasauga hibernation habitat. Wetlands which do not qualify as potential hibernation habitat are considered potential foraging/mating habitat.

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT (general) <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
Feat 54 2 pics	554913 5078833	more open water sedge marsh hummocky, white pine border	15	rock barrens, forest, muddy swamp	—	Wetland pocket on either side of road
Feat 56	554953 5072257	forest edge sphagnum shrub wetland some tamarack	15-20	rock barrens, open water, broken wetland, fern/white pine road?	foresty barrens	more vegetated arm to wetland in other cleared strip to the west
another arm of it	554908 5072421					
59	554831 5072357	open water, marsh meadow, some conifer, sedge	5-10	conifer forest, swamp, rock barrens	—	
62	554993 5072071	sedge over shrub, peat, white pine border	5-10	rock barrens, forest	—	
64	555114 5071812	standing dead snag swamp sedge thicket	~50	rock barrens & conifer forest	—	2 PATU whoops found

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 2

REV: Jul 13 FORM 00#



Aug 1 2013 160960720 Nigig/Henvey Inlet TLine east of Hwy 69

HABITAT ID and PHOTO #	UTM COORDINATES	HABITAT TYPE <sup>1</sup>	% TREE/SHRUB COVER	ADJACENT HABITAT <sup>2</sup>	CORRIDOR OR BARRIERS TO MOVEMENT <sup>3</sup>	OTHER NOTES
66	555146 5071979	sedge on peat, some shrub	80-25%	rock barren + forest	—	NO FG, ROSE, COVE, SAGE WTRP, SAGE, RUGBY 4 F
69	555667 5070904	tamarack sedge on tamarack swamp	<del>25-80</del> 25-80	rock barren, conifer forest	<del>—</del>	tamarack swamp is part of hedgerow
71	555569 5071082	sedge, shrub moss, sphagnum marsh	~5%	rock barren, forest	—	
75	555322 5071422	beaver pond, grass-forest dam swales into another beaver pond	1-5%	rock barren, conifer forest	—	PATU obs, a WOOD
78	555397 5071672	alder sedge/forest marsh meadow	75-85	rock barren, forest	—	some white pine in alder swamp along edge of bog, hedge/marsh meadow within corridor (2 swales)
82	555609 5071118	sedge on peat, some alder, willow + white pine	5-10	rock barren + forest	—	
86	555847 5070600	sedge marsh rock barren island, leads into beaver pond open water	~5%	rock barren meadow/marsh (forest), conifer forest	<del>—</del>	EARL, EAKI, warty snake
91	555957 5070286	sedge, forb, shrub on sphagnum	50-60	rock barren + forest	<del>—</del>	2 patches of white pine (2 pine; 2 separate areas)
92	556020 5070146 556094 5070038	sedge, cotton grass + sphagnum wetland + sedge-filled channel	5	rock barren, coniferous forest	—	OSFL "pip pip pip"; AMTO; sundew, marsh St John's, some wort
94	556108 5070269 556056 5070325	sedge, shrub tamarack on sphagnum	<del>35-40</del> 35-40	rock barren, coniferous forest	—	2 pine, 2 separate areas shrubs include leatherleaf, lobelia

- 1 - conifer/shrub swamp; fen/bog; sedge or sphagnum hummocks; other wetland  
2 - forest; wetland; thicket; rock barren; meadow; waterbody; other (describe)  
3 - type and description

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 2 of 2

REV: Jul 13 FORM 00#

Area A						First Visit	Second Visit
Point Counts							
	Code	Site	Zone	Easting	Northing		
1	A1	PC201	17T	526702	5078127	4-Jun-13	24-Jun-13
2	A2	PC203	17T	526173	5078766	4-Jun-13	24-Jun-13
3	A3	PC204	17T	526055	5079242	4-Jun-13	24-Jun-13
4	A4	PC206	17T	525618	5079954	4-Jun-13	24-Jun-13
5	A5	PC207	17T	525194	5080508	4-Jun-13	24-Jun-13
6	A6	Marsh 1	17T	525860	5079203	4-Jun-13	24-Jun-13
7	A7	V1	17T	524660	5076679	16-Jun-13	26-Jun-13
8	A8	V2	17T	524778	5077164	16-Jun-13	26-Jun-13
9	A9	V3	17T	524635	5077455	16-Jun-13	26-Jun-13
10	A10	W01	17T	523585	5077154	7-Jun-13	21-Jun-13
11	A11	W02	17T	523365	5077772	7-Jun-13	21-Jun-13
12	A12	W03	17T	523059	5078254	7-Jun-13	21-Jun-13
13	A13	W04	17T	523133	5078765	7-Jun-13	21-Jun-13
14	A14	W05	17T	523320	5079223	7-Jun-13	21-Jun-13
15	A15	W06	17T	523693	5079796	7-Jun-13	21-Jun-13

Area B							
Point Counts							
		Site	Zone	Easting	Northing		
16	B1	PC216	17T	528618	5079111	7-Jun-13	20-Jun-13
17	B2	PC217	17T	528666	5079514	7-Jun-13	20-Jun-13
18	B3	PC218	17T	528361	5079267	7-Jun-13	20-Jun-13
19	B4	PC222	17T	528063	5079633	7-Jun-13	20-Jun-13
20	B5	PC233	17T	527935	5080068	7-Jun-13	20-Jun-13
21	B6	PC224	17T	527602	5080573	7-Jun-13	20-Jun-13
22	B7	PC225	17T	527283	5081020	7-Jun-13	20-Jun-13
23	B8	PC226	17T	527388	5080346	7-Jun-13	20-Jun-13
24	B9	PC232	17T	529216	5079462	8-Jun-13	25-Jun-13
25	B10	PC233	17T	528979	5079939	8-Jun-13	25-Jun-13
26	B11	PC234	17T	528937	5080074	8-Jun-13	25-Jun-13
27	B12	PC235	17T	528809	5080360	8-Jun-13	25-Jun-13
28	B13	PC236	17T	528682	5080494	8-Jun-13	25-Jun-13
29	B14	PC237	17T	528532	5080879	8-Jun-13	25-Jun-13
30	B15	PC238	17T	528438	5081043	8-Jun-13	25-Jun-13
31	B16	PC239	17T	528256	5081418	8-Jun-13	25-Jun-13

Area C							
Point Counts							
		Site	Zone	Easting	Northing		
32	C1	PC209 (forest)	17T	533565	5081897	6-Jun-13	18-Jun-13
33	C2	X1	17T	530013	5078948	6-Jun-13	20-Jun-13
34	C3	X2	17T	530558	5079625	6-Jun-13	20-Jun-13
35	C4	X3	17T	530764	5080346	6-Jun-13	20-Jun-13
36	C5	X4	17T	531110	5080754	6-Jun-13	20-Jun-13

Area D							
Point Counts							
		Site	Zone	Easting	Northing		
37	D1	PC210	17T	533332	5079992	6-Jun-13	18-Jun-13
38	D2	PC211	17T	532871	5078133	6-Jun-13	18-Jun-13
39	D3	PC212	17T	532092	5078861	6-Jun-13	18-Jun-13
40	D4	PC214	17T	529757	5078310	6-Jun-13	18-Jun-13
41	D5	D1 (?) T01	17T	529201	5077915	17-Jun-13	28-Jun-13



42	D6	D2 (?) T02	17T	529411	5077454	17-Jun-13	28-Jun-13
43	D7	D3 (?) T03	17T	529783	5077131	17-Jun-13	28-Jun-13
44	D8	D4 (?) T04	17T	529758	5076540	17-Jun-13	28-Jun-13
45	D9	D5 (?) T05	17T	530275	5076494	17-Jun-13	28-Jun-13
46	D10	D6 (?) T06	17T	530830	5076637	17-Jun-13	28-Jun-13
47	D11	D7 (?) T07	17T	530650	5077108	17-Jun-13	28-Jun-13
48	D12	Z1	17T	532946	5080021	4-Jun-13	18-Jun-13
49	D13	Z2	17T	532736	5079563	4-Jun-13	18-Jun-13
50	D14	Z3	17T	532482	5079124	4-Jun-13	18-Jun-13
51	D15	Z4	17T	532289	5078660	4-Jun-13	18-Jun-13
52	D16	Z5	17T	531989	5078254	4-Jun-13	18-Jun-13
53	D17	Z6	17T	531846	5077768	4-Jun-13	18-Jun-13
54	D18	Z7	17T	531934	5077271	4-Jun-13	18-Jun-13
55	D19	Z8	17T	532418	5077061	4-Jun-13	18-Jun-13
56	D20	Z9	17T	532493	5076815	4-Jun-13	18-Jun-13
57	D21	Z10	17T	532678	5076615	4-Jun-13	18-Jun-13

#### Area E

			Point Counts				
		Site	Zone	Easting	Northing		
58	E1	PC10 (swd-ash)	17T	524945	5075396	5-Jun-13	25-Jun-13
59	E2	PC11 (marsh/fom)	17T	525437	5075483	5-Jun-13	25-Jun-13
60	E3	PC12 (swt/fom)	17T	526475	5075295	5-Jun-13	25-Jun-13
61	E4	PC8 (jack pine/red maple)	17T	526691	5075204	5-Jun-13	
62	E5	PC9 (pine)	17T	527088	5075214	5-Jun-13	
63	E6	PC7 (mas/oa/swc)	17T	527537	5074800	5-Jun-13	
64	E7	PC15(fom/poplar,spruce)	17T	525853	5076584	6-Jun-13	27-Jun-13
65	E8	PC13 (jack pine)	17T	526185	5076403	6-Jun-13	27-Jun-13
66	E9	PC14 (swt)	17T	526451	5076545	6-Jun-13	27-Jun-13
67	E10	PC16 (lowland spruce forest)	17T	527005	5076650	6-Jun-13	27-Jun-13
68	E11	PC17 (pine barren)	17T	527537	5076352	6-Jun-13	27-Jun-13
69	E12	PC18 (pine barren)	17T	527765	5075981	6-Jun-13	27-Jun-13
70	E13	PC1 (fom-pin/maple/oak)	17T	528208	5077811	7-Jun-13	24-Jun-13
71	E14	PC2 (bog)	17T	529355	5075881	7-Jun-13	24-Jun-13
72	E15	PC5 (pine barren)	17T	528224	5077357	7-Jun-13	24-Jun-13
73	E16	PC6 (pine barren)	17T	528325	5076931	7-Jun-13	24-Jun-13
74	E17	PC3 (pine barren)	17T	528789	5076454	7-Jun-13	24-Jun-13
75	E18	PC4 (bog)	17T	529180	5076307	7-Jun-13	24-Jun-13
76	E19	U1	17T	526702	5073100	15-Jun-13	26-Jun-13
77	E20	U2	17T	526797	5073664	15-Jun-13	26-Jun-13
78	E21	U3	17T	526621	5074132	15-Jun-13	26-Jun-13
79	E22	U4	17T	526118	5074163	15-Jun-13	26-Jun-13
80	E23	U5	17T	525769	5073789	15-Jun-13	26-Jun-13

#### Area F

			Point Counts				
		Site	Zone	Easting	Northing		
81	F1	Y1	17T	523131	5076211	5-Jun-13	19-Jun-13
82	F2	Y2	17T	522657	5076058	5-Jun-13	19-Jun-13
83	F3	Y3	17T	522275	5075719	5-Jun-13	19-Jun-13
84	F4	Y4	17T	522185	5075226	5-Jun-13	19-Jun-13
85	F5	Y5	17T	522697	5075239	5-Jun-13	19-Jun-13
86	F6	Y6	17T	523055	5074843	5-Jun-13	19-Jun-13
87	F7	Y7	17T	523375	5074421	5-Jun-13	19-Jun-13

88	F8	Y8	17T	523625	5074854	5-Jun-13	19-Jun-13
89	F9	Y9	17T	523294	5075229	5-Jun-13	19-Jun-13

# **Area MTO**

## **Point Counts**

	<b>Site</b>	<b>Zone</b>	<b>Easting</b>	<b>Northing</b>		
TL01	TL01	17T	533352	5083133	10-Jun-13	30-Jun-13
TL02	TL02	17T	533608	5080784	10-Jun-13	30-Jun-13
TL03	TL03	17T	533598	5079442	10-Jun-13	30-Jun-13
TL04	TL04	17T	534022	5078237	10-Jun-13	30-Jun-13
TL05	TL05	17T	534484	5076512	10-Jun-13	30-Jun-13
TL06	TL06	17T	534777	5075251	10-Jun-13	30-Jun-13
TL07	TL07	17T	535302	5074024	10-Jun-13	30-Jun-13
TL08	TL08	17T	535857	5072690	10-Jun-13	30-Jun-13
TL09	TL09	17T	536392	5071361	10-Jun-13	30-Jun-13
TL10	TL10	17T	537424	5070118	10-Jun-13	30-Jun-13
TL11	TL11	17T	538725	5069753	10-Jun-13	30-Jun-13
TL12	TL12	17T	539262	5068545	10-Jun-13	30-Jun-13
TL13	TL13	17T	539804	5066946	10-Jun-13	30-Jun-13
TL14	TL14	17T	540363	5065728	10-Jun-13	30-Jun-13
TL15	TL15	17T	540917	5064486	10-Jun-13	30-Jun-13
TL16	TL16	17T	541501	5063176	10-Jun-13	1-Jul-13
TL17	TL17	17T	541923	5061938	10-Jun-13	1-Jul-13
TL18	TL18	17T	542520	5060781	10-Jun-13	1-Jul-13
TL19	TL19	17T	543198	5059275	12-Jun-13	1-Jul-13
TL20	TL20	17T	544066	5058149	12-Jun-13	1-Jul-13
TL21	TL21	17T	544941	5057268	12-Jun-13	1-Jul-13
TL22	TL22	17T	545943	5056213	12-Jun-13	1-Jul-13
TL23	TL23	17T	546861	5054959	12-Jun-13	1-Jul-13
TL24	TL24	17T	547179	5053667	12-Jun-13	1-Jul-13
TL25	TL25	17T	547588	5052527	12-Jun-13	1-Jul-13
TL26	TL26	17T	548249	5051310	12-Jun-13	1-Jul-13
TL27	TL27	17T	548537	5050090	12-Jun-13	1-Jul-13
TL28	TL28	17T	549682	5048337	12-Jun-13	2-Jul-13
TL29	TL29	17T	550511	5047371	12-Jun-13	2-Jul-13
TL30	TL30	17T	551720	5046617	12-Jun-13	2-Jul-13
TL31	TL31	17T	552831	5046119	12-Jun-13	2-Jul-13
TL32	TL32	17T	554042	5045491	12-Jun-13	2-Jul-13
TL33	TL33	17T	555293	5044758	12-Jun-13	2-Jul-13
TL34	TL34	17T	556389	5043937	12-Jun-13	2-Jul-13
TL35	TL35	17T	557486	5043000	12-Jun-13	2-Jul-13
TL36	TL36	17T	558569	5041932	12-Jun-13	2-Jul-13
TL37	TL37	17T	559620	5040841	12-Jun-13	2-Jul-13
TL38	TL38	17T	560672	5039756	13-Jun-13	2-Jul-13
TL39	TL39	17T	561721	5038694	13-Jun-13	3-Jul-13
TL40	TL40	17T	562680	5037847	13-Jun-13	3-Jul-13
TL41	TL41	17T	563686	5036949	13-Jun-13	3-Jul-13
TL42	TL42	17T	564664	5035972	13-Jun-13	3-Jul-13
TL43	TL43	17T	565706	5034882	13-Jun-13	3-Jul-13
TL44	TL44	17T	566384	5034183	13-Jun-13	3-Jul-13
TL45	TL45	17T	573208	5029393	13-Jun-13	3-Jul-13
TL46	TL46	17T	572989	5029419	13-Jun-13	3-Jul-13
TL47	TL47	17T	568664	5031923	13-Jun-13	3-Jul-13
TL48	TL48	17T	564173	5036499	13-Jun-13	3-Jul-13
TL49	TL49	17T	561024	5039420	13-Jun-13	3-Jul-13
TL50	TL50	17T	558024	5042490	13-Jun-13	3-Jul-13
TL51	TL51	17T	540651	5065085	13-Jun-13	4-Jul-13
TL52	TL52	17T	572659	5030346	14-Jun-13	4-Jul-13
TL53	TL53	17T	578307	5022423	14-Jun-13	4-Jul-13



TL54	TL54	17T	581614	5020363	14-Jun-13	4-Jul-13
TL55	TL55	17T	581561	5020624	14-Jun-13	4-Jul-13
TL56	TL56	17T	582693	5018280	14-Jun-13	4-Jul-13
TL57	TL57	17T	582226	5019032	14-Jun-13	4-Jul-13
TL58	TL58	17T	582508	5016960	14-Jun-13	4-Jul-13
TL59	TL59	17T	583330	5016881	14-Jun-13	4-Jul-13
TL60	TL60	17T	582287	5018595	14-Jun-13	4-Jul-13

Transect	Season	Zone	Easting	Northing
1-start	Spring/Fall	17T	532337	5078609
1-end	Spring/Fall	17T	532727	5078264
2-start	Spring/Fall	17T	529489	5077989
2-end	Spring/Fall	17T	529536	5078489
3-start	Spring/Fall	17T	527521	5077705
3-end	Spring/Fall	17T	527775	5077228
11-start	Spring/Fall	17T	525825	5077376
11-end	Spring/Fall	17T	525406	5077663
12-start	Spring/Fall	17T	525007	5076746
12-end	Spring/Fall	17T	525147	5077237
13-start	Spring/Fall	17T	523029	5076241
13-end	Spring/Fall	17T	522974	5075756
15-start	Spring/Fall	17T	524705	5081448
15-end	Spring/Fall	17T	524826	5080959
16-start	Spring/Fall	17T	527174	5081640
16-end	Spring/Fall	17T	526669	5081665
17-start	Spring/Fall	17T	525669	5073239
17-end	Spring/Fall	17T	525759	5073731
18-start	Spring/Fall	17T	523666	5081337
18-end	Spring/Fall	17T	523790	5080850
4-start	Spring	17T		
4-end	Spring	17T		
5-start	Spring	17T		
5-end	Spring	17T		
6-start	Spring	17T	533226	5080087
6-end	Spring	17T	533360	5074612
7-start	Spring	17T	533646	5081878
7-end	Spring	17T	533306	5081623
8-start	Spring	17T		
8-end	Spring	17T		
9-start	Spring	17T	525578	5076665
9-end	Spring	17T	525736	5076178
10-start	Spring	17T		
10-end	Spring	17T		
14-start	Spring	17T		
14-end	Spring	17T		



Site	UTM zone	easting	northing	Description
West	17T	522592	5077005	
East	17T	525978	5077077	
Boat Launch	17T	528472	5078338	

Date	UTM zone	easting	northing	Description
19-Jun-13	17T	529555	5078479	abandoned dump truck on Bekanon Rd
20-Jun-13	17T	529555	5078479	abandoned dump truck on Bekanon Rd
21-Jun-13	17T	528472	5078338	boat launch
22-Jun-13	17T	528472	5078338	boat launch
23-Jun-13	17T	525662	5077180	Flash's cabin
24-Jun-13	17T	527972	5078021	Joe's cabin
25-Jun-13	17T	527972	5078021	Joe's cabin
8-Jul	17T	533307	5080078	side of Ground Hog Corner's road
9-Jul-13	17T	527923	5078019	near Joe's cabin; shrubby beach next to aspen forest
10-Jul-13	17T	529178	5077784	along path in moist deciduous forest
11-Jul	17T	532372	5078536	atv trail next to deciduous woods and red pine plantation



Date	Station #	Label	Zone	UTM	Northing
				Easting/	
18-Apr-13	101	101	17T	578838	5021578
18-Apr-13	102	102	17T	576269	5024947
18-Apr-13	103	103	17T	574228	5026829
18-Apr-13	104	104	17T	573257	5029011
18-Apr-13	105	105	17T	571873	5030945
18-Apr-13	106	106	17T	568999	5031634
18-Apr-13	107	107	17T	566364	5034039
18-Apr-13	108	108	17T	564112	5036404
18-Apr-13	109	109	17T	563158	5037287
18-Apr-13	110	110	17T	562085	5038239
18-Apr-13	111	111	17T	558573	5041768
18-Apr-13	112	112	17T	558092	5042256
18-Apr-13	113	113	17T	556795	5043588
18-Apr-13	114	114	17T	553423	5045694
18-Apr-13	115	115	17T	551936	5046452
1-May-13	116	116	17T	550224	5047575
1-May-13	117	117	17T	548114	5051496
1-May-13	118	118	17T	547552	5052462
1-May-13	119	119	17T	546987	5054033
1-May-13	120	120	17T	545661	5056374
1-May-13	121	121	17T	543502	5058624
1-May-13	122	122	17T	541941	5061934
1-May-13	123	123	17T	541068	5063943
1-May-13	124	124	17T	539904	5066503
1-May-13	125	125	17T	538852	5069556
1-May-13	126	126	17T	533531	5079741
1-May-13	127	127	17T	533417	5080468
22-Apr-13	128	128	17T	578486	5077735
22-Apr-13	129	129	17T	528332	5077726
22-Apr-13	130	130	17T	528349	5077510
22-Apr-13	131	131	17T	528262	5077215
22-Apr-13	132	132	17T	528149	5076939
22-Apr-13	133	133	17T	527998	5077357
22-Apr-13	134	134	17T	527931	5076848
22-Apr-13	135	135	17T	527615	5076750
22-Apr-13	136	136	17T	527288	5076723
22-Apr-13	137	137	17T	526999	5076555
30-Apr-13	Amp 1	1	17T	522832	5075579
2-May-13	Amp 10	10	17T	529361	5078032
7-May-13	Amp 11	11	17T	529766	5076925
7-May-13	Amp 12	12	17T	529737	5076603
8-May-13	Amp 13	13	17T	528058	5079022
8-May-13	Amp 14	14	17T	527514	5079489
8-May-13	Amp 15	15	17T	527542	5080113
9-May-13	Amp 16	16	17T	523790	5080839
9-May-13	Amp 17	17	17T	524878	5080998
30-Apr-13	Amp 2	2	17T	523016	5075247
30-Apr-13	Amp 3	3	17T	522773	5075050
30-Apr-13	Amp 4	4	17T	522603	5074832
30-Apr-13	Amp 5	5	17T	522514	5074861
30-Apr-13	Amp 6	6	17T	522353	5075151
2-May-13	Amp 7	7	17T	533628	5077561
2-May-13	Amp 8	8	17T	532329	5078617
2-May-13	Amp 9	9	17T	531234	5078809

<b>Date</b>	<b>Time</b>	<b>Easting</b>	<b>Northing</b>			
16-May-13	21:28	528490	5078335	PL	Boat launch	1
16-May-13	21:49	529506	5078467	PL		2
16-May-13	22:12	532374	5078576	PL		3
5-Jun-13	22:05	524605	5076092	PL		4
5-Jun-13	22:00	527926	5077992	PL	island	5
5-Jun-13		527926	5077992	PL	island	
28-May-13	21:21	547835	5052136	TL		
29-May-13	21:39	528490	5078335	PL	Boat launch	
29-May-13	21:39	528490	5078335	PL	Boat launch	
29-May-13	21:56	529520	5077966	PL		6
29-May-13	22:48	532289	5078663	PL		7
29-May-13	22:09	530146	5078785	PL		8
29-May-13	22:21	531193	5078785	PL		9
29-May-13	22:45	532289	5078663	PL		10
29-May-13	22:48	532289	5078663	PL		
17-Jun-13	21:50	533626	5082442	TL	highway 69 at Key River	
17-Jun-13	22:01	534069	5077650	TL		
17-Jun-13	22:12	535685	5072881	TL		
17-Jun-13	22:20	538955	5069441	TL		
17-Jun-13	22:30	540718	5064706	TL		
17-Jun-13	22:40	542710	5060124	TL		
17-Jun-13	22:50	545810	5056216	TL		
17-Jun-13	23:01	547835	5052136	TL		
17-Jun-13	23:11	550947	5047088	TL		
17-Jun-13	23:22	555384	5044617	TL		
18-Jun-13	22:20	576285	5024876	TL		
18-Jun-13	22:29	562745	5037659	TL		



Date	Time	Easting	Northing	Type of Survey	Observation	4-LTR CODE	SARA Status	# of individuals	Habitat	Other Notes
8-May-13					Bald Eagle	BAEA	NAR	1		
9-May-13					Bald Eagle	BAEA	NAR	1		
14-May-13					Bald Eagle	BAEA	NAR	1		
16-May-13	21:28	528490	5078335	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	3	sandy beach surrounded by inlet, and pine barrens	
16-May-13	21:49	529506	5078467	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	4	poplar, birch, pine woodlands	
16-May-13	22:12	532374	5078576	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	3	sandy pine barrens	
28-May-13	21:21	547835	5052136	Crepuscular Survey	Common Nighthawk	CONI	THR	1	forest	
29-May-13	6:04	532282	5078689		Eastern Wood Pewee	EAWP	SC-NS	1		
29-May-13	21:28	530743	5078733		Common Nighthawk	CONI	THR	1		
29-May-13	21:39	528490	5078335	Crepuscular Survey	Common Nighthawk	CONI	THR	3	forest	
29-May-13	21:39	528490	5078335	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	6	forest	
29-May-13	21:54	528977	5078051		Eastern Whip-poor-will	WHIP	THR	1		
29-May-13	21:56	529520	5077966	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	forest/swamp/marsh/bog/ rock/pine barren	
29-May-13	22:09	530146	5078785	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	forest	
29-May-13	22:21	531193	5078785	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	forest/swamp/beaver pond	
29-May-13	22:45	532289	5078663	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	2	forest	
29-May-13	22:48	532289	5078663	Crepuscular Survey	Common Nighthawk	CONI	THR	1	Forest	
4-Jun-13	5:22	523946	5080021	point count	Wood thrush	WOTH	THR-NS	1		only THR in NS?
4-Jun-13	5:50	532736	5079563	point count	Eastern wood pewee	EAWP	SC-NS	1		
4-Jun-13	5:50	532736	5079563	point count	Wood thrush	WOTH	THR-NS	1		
4-Jun-13	6:16	532482	5079124	point count	Wood thrush	WOTH	THR-NS	1		
4-Jun-13	6:22	526328	5078519		Great Blue Heron Heronry					Nesting colony in the beaver pond to the west of UTM, several nests observed
4-Jun-13	7:03	531989	5078254	point count	eastern wood pewee	EAWP	SC-NS	1		
4-Jun-13	8:07	525934	5079390		Eastern Wood Pewee	EAWP	SC-NS	1		
4-Jun-13	8:57	532418	5077061	point count	Canada Warbler	CAWA	THR	1		
4-Jun-13	9:32	532506	5076804		Red Shouldered Hawk	RSHA	NAR	1		
4-Jun-13	9:43	532493	5076815	point count	Canada Warbler	CAWA	THR	1		
4-Jun-13	10:06	532678	5076615	point count	Canada Warbler	CAWA	THR	3		
4-Jun-13	11:46	524603	5086730		Canada Warbler	CAWA	THR	1		
4-Jun-13	see map				Great Gray Owl	GGOW	NAR	1		Freshly molted feather in crack of rocks
4-Jun-13	16:30	525572	5075439	area Search	Black tern	BLTE	NAR	1		H, flying/foraging over marsh
4-Jun-13	16:35	5255677	5075425		Hooded Merganser	HOME		1		male, H, in marsh
5-Jun-13	16:40	525816	5075460		Prairie Warbler	PRWA	NAR	2	rock barren/wetland	displaying over large area, likely unpaired male
5-Jun-13	6:25	522657	5076058	point count	Canada Warbler	CAWA	THR	2		
5-Jun-13	7:00	522275	5075719	point count	Canada Warbler	CAWA	THR	1		
5-Jun-13	8:10	522697	5075239	point count	Canada Warbler	CAWA	THR	2		
5-Jun-13	9:20	527550	5074187		Wood Thrush	WOTH	THR-NS	1	Forest	
5-Jun-13	10:17	523294	5075229	point count	Canada Warbler	CAWA	THR	3		
5-Jun-13	16:55	525422	5075424		Common Nighthawk	CONI	THR	1		
5-Jun-13	22:00	527926	5077992	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	7	Rock barren / forest	
5-Jun-13	22:05	524605	5076092	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	11	Rock barren / forest	
5-Jun-13		527926	5077992	Crepuscular Survey	Common Nighthawk	CONI	THR	1	Rock barren / forest	
6-Jun-13	6:05	530013	5078948		Canada Warbler	CAWA	THR	2		
6-Jun-13	6:05	525853	5076584		Eastern Wood Pewee	EAWP	SC-NS	1		
6-Jun-13	6:30	526185	5076403	point count	Wood thrush	WOTH	THR-NS	1		
6-Jun-13	6:35	526285	5076403		Wood Thrush	WOTH	THR-NS	1		
6-Jun-13	7:08	526451	5076545	point count	Canada Warbler	CAWA	THR	1		
6-Jun-13	7:10	526250	5076545		Wood Thrush	WOTH	THR-NS	1		
6-Jun-13	7:25	530558	5079625		Canada Warbler	CAWA	THR	1		
6-Jun-13	8:07	532092	5078861	point count	Eastern wood pewee	EAWP	SC-NS	1		
6-Jun-13	8:24	527005	5076650	point count	Canada Warbler	CAWA	THR	1		
6-Jun-13	8:30	529895	5078530		Canada Warbler	CAWA	THR	1		
6-Jun-13	8:39	527005	5076800		Wood Thrush	WOTH	THR-NS	1		
6-Jun-13	8:43	530764	5080346	Point Count	Olive-sided flycatcher	OSFL	THR	1		
6-Jun-13	9:20	527271	5076646		Common Nighthawk	CONI	THR	1		

Date	Time	Easting	Northing	Type of Survey	Observation	4-LTR CODE	SARA Status	# of individuals	Habitat	Other Notes
6-Jun-13	9:30	531110	5080754	point count	Canada Warbler	CAWA	THR	1		
6-Jun-13	9:40	529822	5078608		Canada Warbler	CAWA	THR	1		
6-Jun-13	10:10	529511	5078475		Canada Warbler	CAWA	THR	1		
6-Jun-13	11:35	528616	5078303		Canada Warbler	CAWA	THR	1		
6-Jun-13	12:02	530742	5080510		Olive-sided flycatcher	OSFL	THR	1		
6-Jun-13	21:35	528011	5077974		Common Nighthawk	CONI	THR	1		
7-Jun-13	6:30	528464	5077137		Wood Thrush	WOTH	THR-NS	1		
7-Jun-13	7:15	523365	5077772		canada Warbler	CAWA	THR	1		
7-Jun-13	7:44	528209	5078949		Canada Warbler	CAWA	THR	1		
7-Jun-13	7:54	523059	5078254		Canada Warbler	CAWA	THR	2		
7-Jun-13	8:05	528790	5076553		Wood Thrush	WOTH	THR-NS	1		
7-Jun-13	8:40	527935	5080068		Canada Warbler	CAWA	THR	1		
7-Jun-13	8:52	523241	5079024		Common Nighthawk	CONI	THR	1		
7-Jun-13	9:37	527097	5081001		Canada Warbler	CAWA	THR	1		
7-Jun-13	11:48	523238	5078846		Common Nighthawk	CONI	THR	1		
7-Jun-13	12:00	529050	5075730		Stick Nest	OSPR			open marsh	Osprey using the area, potentially an Osprey nest, though use unknown.
7-Jun-13	12:30	529038	5075895		Osprey	OSPR				
7-Jun-13	13:05	529713	5076698		Wood Thrush	WOTH	THR-NS	1		
7-Jun-13	13:24	527818	5078710		Canada Warbler	CAWA	THR	1		
8-Jun-13	5:50	529192	5079411		Canada Warbler	CAWA	THR	1		
8-Jun-13	11:11	527905	5080490		Canada Warbler	CAWA	THR	1		
8-Jun-13		529216	5079462		Canada Warbler	CAWA	THR	1		
15-Jun-13	7:00	area E		area Search	Caspian Tern	CATE	NAR	11		habitat
15-Jun-13	8:00	526765	5073697	point count	Canada Warbler	CAWA	THR	1	marsh/rock barren	
15-Jun-13	8:00	526797	5073664	point count	Canada Warbler	CAWA	THR	1		
15-Jun-13	8:48	526621	5074132	point count	Canada warbler	CAWA	THR	1	tamarack sedge fen	
15-Jun-13	9:35	526118	5074163	point count	Canada Warbler	CAWA	THR	1	marsh meadow/conifer forest	
15-Jun-13	10:19	525769	5073789	Point count	Canada Warbler	CAWA	THR	2	forest	
16-Jun-13	9:47	524778	5077164	point count	Canada warbler	CAWA	THR	3		
16-Jun-13	10:13	524635	5077455	Point count	Canada Warbler	CAWA	THR	1		
16-Jun-13	13:00	522285	5076496		Eastern Wood Pewee	EAWP	SC-NS	1		
17-Jun-13	5:45	529201	5077915	point count	Canada Warbler	CAWA	THR	3		
17-Jun-13	6:10	532871	5078133	point count	Canada Warbler	CAWA	THR	1		
17-Jun-13	6:36	529783	5077131	point count	Canada Warbler	CAWA	THR	2		
17-Jun-13	8:22	503275	5076494	point count	Canada Warbler	CAWA	THR	1		
17-Jun-13	9:07	530830	5076637	point count	Canada Warbler	CAWA	THR	2		
17-Jun-13	10:15	530650	5077108	point count	Canada Warbler	CAWA	THR	1		
17-Jun-13	21:50	533626	5082442	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	2		
17-Jun-13	22:01	534069	5077650	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1		
17-Jun-13	22:12	535685	5072881	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1		
17-Jun-13	22:20	538955	5069441	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1		
17-Jun-13	22:30	540718	5064706	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1		
17-Jun-13	22:40	542710	5060124	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	2	forest and rock barrens	
17-Jun-13	22:50	545810	5056216	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	Rock barren / forest	
17-Jun-13	23:01	547835	5052136	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1		
17-Jun-13	23:11	550947	5047088	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	Forest	
17-Jun-13	23:22	555384	5044617	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	Forest	
18-Jun-13	5:54	523946	5080021	point count	Canada Warbler	CAWA	THR	1		
18-Jun-13	5:54	523946	5080021	point count	Wood Thrush	WOTH	THR-NS	1		
18-Jun-13	6:15	532736	5079563	point count	Wood Thrush	WOTH	THR-NS	1		
18-Jun-13	7:16	531989	5078254	point count	Wood Thrush	WOTH	THR-NS	1		
18-Jun-13	7:39	531846	5077768	point count	Canada Warbler	CAWA	THR	1		
18-Jun-13	8:48	532418	5077061	point count	Canada Warbler	CAWA	THR	1		
18-Jun-13	9:07	532493	5076815	point count	Canada Warbler	CAWA	THR	1		
18-Jun-13	9:26	532678	5076615	point count	Canada Warbler	CAWA	THR	2		



Date	Time	Easting	Northing	Type of Survey	Observation	4-LTR CODE	SARA Status	# of individuals	Habitat	Other Notes
18-Jun-13	11:53	532753	5079493		Eastern Wood Pewee	EAWP	SC-NS	1		
18-Jun-13	22:20	576285	5024876	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	forest	
18-Jun-13	22:29	562745	5037659	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	2	Forest	
19-Jun-13	6:30	523131	5076211	Point Count	Canada Warbler	CAWA	THR	1		
19-Jun-13	6:30	Area F		area Search	Caspian Tern	CATE		2		habitat
19-Jun-13	6:51	522657	5076058	Point Count	Canada Warbler	CAWA	THR	1		
19-Jun-13	7:22	522275	5075719	Point count	Canada Warbler	CAWA	THR	1		
19-Jun-13	7:56	522185	5075226	point count	Eastern wood pewee	EAWP	SC-NS	1		
19-Jun-13	8:29	522697	5075239	Point count	Canada Warbler	CAWA	THR	1		
19-Jun-13	10:27	523294	5075229	Point count	Canada Warbler	CAWA	THR	1		
20-Jun-13	6:00	Area B		area search	Eastern wood-pewee	EAWP	SC-NS	1		singing male
20-Jun-13	6:15	530010	5078948	point count	yellow rail	_YERA	SC	1	meadow marsh	Unverified
20-Jun-13	7:29	530558	5079625	point count	Canada warbler	CAWA	THR	1		
20-Jun-13	7:29	530558	5079625	Point count	Olive-sided flycatcher	OSFL	THR	1		
20-Jun-13	7:45	530563	5079619		Olive-sided flycatcher	OSFL	THR	1		
20-Jun-13	9:03	531110	5080754	Point count	Canada Warbler	CAWA	THR	3	marsh	
20-Jun-13	9:03	531110	508754	point count	Olive-sided flycatcher	OSFL	THR	1	marsh/forest	
21-Jun-13	6:30	Area A		area search	Canada warbler	CAWA	THR	2		singing male
24-Jun-13	5:45	area E		Area Search	Wood Thrush	WOTH	THR-NS	1		
24-Jun-13	6:05	528268	5077534	Breeding Bird PC	Wood Thrush	WOTH	THR-NS	1		
24-Jun-13	8:10	528675	5076647	Breeding Bird PC	Wood Thrush	WOTH	THR-NS	1		
24-Jun-13	9:30	529143	5076250	Breeding Bird PC	Wood Thrush	WOTH	THR-NS	1		
25-Jun-13	5:40	Area E		Area Search	Wood Thrush	WOTH	THR-NS	1		
25-Jun-13	5:50	Area B		Area Search	Common Nighthawk	CONI	THR	1		observed
25-Jun-13	8:15	525846	5074763	Breeding Bird PC	Wood Thrush	WOTH	THR-NS	1		
25-Jun-13		528430	5081360	Breeding Bird PC	Canada Warbler	CAWA	THR	1		
25-Jun-13		528597	5081266	Breeding Bird PC	Canada Warbler	CAWA	THR	1		
25-Jun-13		528809	5080360	Breeding Bird PC	Canada Warbler	CAWA	THR	1		
25-Jun-13		528979	5079939	Breeding Bird PC	Canada Warbler	CAWA	THR	1		
26-Jun-13	5:30	Area A		Area Search	Caspian Tern	CATE				observed
26-Jun-13	8:30				Canada Warbler	CAWA	THR	1		
27-Jun-13	5:45	Area E		Area Search	Canada Warbler	CAWA	THR	1		singing male
28-Jun-13	5:55	Area A		Area Search	Wood thrush	WOTH	THR-NS	1		singing male
28-Jun-13	9:26	530830	5076637	point count	Eastern wood pewee	EAWP	SC-NS	1		
28-Jun-13	9:50	530650	5077108	point count	Eastern wood pewee	EAWP	SC-NS	1		
7-Jul-13	6:30	542574	5060848		Great Blue Heron Heronry	GTBH				Five nests with young. MTO corridor
6-Aug-13		563092	5057253		Eastern Wood Pewee	EAWP	SC-NS	1		
8-Aug-13		565521	5052335		Olive-sided flycatcher	OSFL	THR	2		
9-Aug-13					Eastern Wood Pewee	EAWP	SC-NS	1		
10-Aug-13					Eastern Whip-poor-will	WHIP	THR	1		
11-Sep-13		520317	5076136		Bald Eagle	BAEA	NAR	1		
11-Sep-13		524365	5076080		Bald Eagle	BAEA	NAR	1		
11-Sep-13		526214	5077542		Bald Eagle	BAEA	NAR	1		
13-Sep-13		528352	5078180		Bald Eagle	BAEA	NAR	1		
14-Sep-13		521032	5081722		Bald Eagle	BAEA	NAR	1		
14-Sep-13		525978	5077077		Bald Eagle	BAEA	NAR	1		
17-Sep-13	16:00	527290	5077954		Bald Eagle	BAEA	NAR	1		
2-Oct-13	12:30	528322	5078012		Bald Eagle	BAEA	NAR	1		
2-Oct-13	12:40	526670	5077218		Bald Eagle	BAEA	NAR	2		Pair, one male and one female perched together both adults
8-Oct-13	7:50	521312	5076396		Bald Eagle	BAEA	NAR	1		
8-Oct-13	10:00	528157	5078735		Bald Eagle	BAEA	NAR	1		
10-Oct-13	7:40	524574	5076114		Bald Eagle	BAEA	NAR	1		
10-Oct-13	11:15	526628	5081767		Bald Eagle	BAEA	NAR	1		
15-May-03					Bald Eagle	BAEA	NAR	1		
10-Aug-03					Eastern Wood Pewee	EAWP	SC-NS	1		

Location/Utm					Type of Survey	Observation	SARA Status	4-LTR CODE	# of Individuals	Habitat	Other Notes	Weather				last 24 hrs?
Date	Time	Zone	Easting	Northing								Temp	Wind	Cloud	precipitation	
22-Apr-13		17T	528097	5077355		Blandings Turtle	THR	BLTU			large adult	10-14	4-Mar	0-20	None	None
30-Apr-13	11:47	17T	522773	5075058		Snapping Turtle	SC	SNTU		inland marsh/pond	adult submerged					
30-Apr-13	12:10	17T	522671	5074966		Blandings Turtle	THR	BLTU		on land about a metre from water	adult					
30-Apr-13	13:11	17T	522446	5074984		Snapping Turtle	SC	SNTU		Large beaver pond	basking on log					
30-Apr-13	13:50	17T	522347	5075863		Blandings Turtle	THR	BLTU		small inland pool						
30-Apr-13	14:00	17T	522468	5075992		Five-lined skink	SC	FLSK			adult female basking					
30-Apr-13		17T	522671	5074966		Blandings Turtle	THR	BLTU				19	3	15	None	Rain
30-Apr-13		17T	522468	5075992		Five-lined skink	SC	FLSK				19	3	15	None	Rain
30-Apr-13		17T	522773	5075058		Snapping Turtle	SC	SNTU				19	3	15	None	Rain
30-Apr-13		17T	522514	5074861		Snapping Turtle	SC	SNTU				19	3	15	None	Rain
1-May-13	8:22	17T	525556	5073401		Blandings Turtle	THR	BLTU		small inland wetland	adult basking					
1-May-13		17T	525556	5073401		Blandings Turtle	THR	BLTU				18	3-4	15-80	None	None
1-May-13		17T	530509	5078763		Blandings Turtle	THR	BLTU				18	3-4	15-80	None	None
2-May-13	15:30	17T	532316	5078607		Blandings Turtle	THR	BLTU			adult basking					
2-May-13	16:40	17T	529450	5078037		Blandings Turtle	THR	BLTU			adult basking					
2-May-13		17T	532316	5078607		Blandings Turtle	THR	BLTU				20	2-3	10	None	None
2-May-13		17T	529532	5078465		Blandings Turtle	THR	BLTU		beckanon road	nest remains	20	2-3	10	None	None
3-May-13	9:36	Exact location will not be made public due to threat of poaching				Restricted species	-	-			-					
3-May-13	11:30	17T	523861	5081045		Snapping Turtle	SC	SNTU		pond/marsh	pair of turtles mating at surface					
3-May-13	11:36	Exact location will not be made public due to threat of poaching				Restricted species	-	-			-					
3-May-13		17T	530509	5078763		Blandings Turtle	THR	BLTU		pond	same pond as observation May 1	20	3-4	5	None	Light rain
3-May-13		17T	523861	5081045		Snapping Turtle	SC	SNTU	2		mating	20	3-4	5	None	Light rain
3-May-13		Exact location will not be made public due to threat of poaching				Restricted species	-	-			-	20	3-4	5	None	Light rain
3-May-13		Exact location will not be made public due to threat of poaching				Restricted species	-	-			-	20	3-4	5	None	Light rain
7-May-13	15:30	17T	529576	5078224		Blandings Turtle	THR	BLTU			adult basking on road					
7-May-13		17T	529516	5078224		Blandings Turtle	THR	BLTU				23	0-1	0	None	None
8-May-13	8:35	17T	523089	5076266		Blandings Turtle	THR	BLTU			adult swimming in shallows near shore					
8-May-13		17T	523089	5076266		Blandings Turtle	THR	BLTU				21	0-1	0	None	None
9-May-13	10:31	17T	527183	5081709		Massasauga Rattlesnake	THR	MASS		tall dry grassy floodplain area	dull and dusty looking snake					
9-May-13		17T	527183	5081709		Massasauga Rattlesnake	THR	MASS				22	0	0	None	None
14-May-13	12:13	17T	525263	5075698		Massasauga Rattlesnake	THR	MASS			coiled up and resting (temp 7C)					
14-May-13		17T	525263	5075698		Massasauga Rattlesnake	THR	MASS		Milton's Bay		9-10	2	100	None	None
15-May-13	12:06	17T	526936	5077230		Massasauga Rattlesnake	THR	MASS			Juvenile basking					
15-May-13	13:35	17T	532379	5078851		Blandings Turtle	THR	BLTU			dead, juvenile or sub-adult					
15-May-13		17T	532381	5078849		Blandings Turtle	THR	BLTU			remains of subadult	7-15	2-4	0-100	None	None
15-May-13		17T	526936	5077230		Massasauga Rattlesnake	THR	MASS			yearling	7-15	2-4	0-100	None	None
16-May-13	9:00	17T	524895	5080998		Snapping Turtle	SC	SNTU			adult basking on a log					
16-May-13	10:06	17T	527032	5081612		Massasauga Rattlesnake	THR	MASS		grassy floodplain	basking on a log					
16-May-13	10:26	17T	526870	5081680		Massasauga Rattlesnake	THR	MASS		grassy floodplain	adult					
16-May-13		17T	526870	5081680		Massasauga Rattlesnake	THR	MASS			adults	6	2-3	0-100	None	None
16-May-13		17T	527032	5081612		Massasauga Rattlesnake	THR	MASS			adults	6	2-3	0-100	None	None
16-May-13		17T	524895	5080998		Snapping Turtle	SC	SNTU		end of migration transect 15		6	2-3	0-100	None	None
24-May-13	10:47	17T	525143	5077208		Massasauga Rattlesnake	THR	MASS		rock barrens	adult basking in lichen/rock/moss					
24-May-13	11:25	17T	525017	5076731		Blandings Turtle	THR	BLTU		shore and water in inlet	adult					
24-May-13	16:33	17T	566913	5033340		Snapping Turtle	SC	SNTU		highway/wetland	on highway, moved to wetland					
25-May-13	8:41	17T	524965	5081001		Blandings Turtle	THR	BLTU		pond/marsh	adult basking with other turtles					
30-May-13	8:57	17T	523970	5080884		Massasauga Rattlesnake	THR	MASS			yearling, very tiny and quick					



Location/Utm					Type of Survey	Observation	SARA Status	4-LTR CODE	# of Individuals	Habitat	Other Notes	Weather				last 24 hrs?
Date	Time	Zone	Easting	Northing								Temp	Wind	Cloud	precipitation	
30-May-13	9:14	17T	523777	5081083		Massassauga Rattlesnake	THR	MASS			adult, very fat, possibly gravid female?					
30-May-13	10:55	17T	524943	5081008		Blandings Turtle	THR	BLTU	2		adults basking on log					
30-May-13	10:58	17T	524955	5081008		Blandings Turtle	THR	BLTU	1	grassy area	adult basking on grassy hummock					
30-May-13	10:59	17T	524929	5081034		Blandings Turtle	THR	BLTU	2		adult basking on a log					
30-May-13	11:07	17T	524936	5081023		Blandings Turtle	THR	BLTU	2		adults basking on log					
30-May-13	11:37	17T	523994	5081431		Blandings Turtle	THR	BLTU		mainland to Key River	adult moving from land to water					
4-Jun-13	10:50	17T	524938	5080971	Reptile Survey	Blandings Turtle	THR	BLTU	1	Fairly open beaver pond	Very large for species	4 -16	1 to 4	5-10%	none	none
4-Jun-13	12:30		528432	5078333	Reptile Survey	Snapping Turtle	SC	SNTU	1	inlet	basking near surface	17	3	50%	none	none
4-Jun-13	14:13	17T	524723	5079179	Reptile Survey	Blandings Turtle	THR	BLTU	1	Bog/fen ponds		4 -16	1 to 4	5-10%	none	none
4-Jun-13	14:15	17T	524723	5079179	Reptile Survey	Snapping Turtle	SC	SNTU	1	second larger pond		4 -16	1 to 4	5-10%	none	none
4-Jun-13	14:45	17T	524092	5078574	Reptile Survey	Milksnake	SC	MISN	1	rock barrens beside small bog/pond	Juvenile, about 15 cm long	4 -16	1 to 4	5-10%	none	none
4-Jun-13	15:07	17T	532783	5080227		Blandings Turtle	THR	BLTU		wetland	adult, basking on log					
5-Jun-13	9:40	17T	527554	5074934	Reptile Survey	Blandings Turtle	THR	BLTU	1	Marsh	basking on stump	10 - 17	3	50	none	none
5-Jun-13	12:15	17T	523169	5076383		Blandings Turtle	THR	BLTU		water/inlet	adult, basking on a rock at waters edge					
5-Jun-13	13:14	17T	528472	5078338		Five-lined skink	SC	FLSK		landing, end of Beckanon Road	Adult male on rocks					
5-Jun-13	13:20	17T	527079	5074581	Reptile Survey	Blandings Turtle	THR	BLTU	1	Marsh	basking on log, very large adult	10 - 17	3	50	none	none
5-Jun-13	13:25	17T	527045	5074586	Reptile Survey	Blandings Turtle	THR	BLTU	1	Marsh	basking on log, large adult	10 - 17	3	50	none	none
5-Jun-13	13:31	17T	526939	5074627	Reptile Survey	Blandings Turtle	THR	BLTU	1	Marsh	basking on log, medium sized adule	10 - 17	3	50	none	none
5-Jun-13	16:35	17T	526416	5075293	Reptile Survey	Blandings Turtle	THR	BLTU	1	Marsh	basking on log with 2 painted turtles	10 - 17	3	50	none	none
5-Jun-13	17:10	17T	525450	5075515	Reptile Survey	Snapping Turtle	SC	SNTU	1	Marsh	basking in water, large about 16cm long	10 - 17	3	50	none	none
6-Jun-13	6:30	17T	533576	5081870	Reptile Survey	Five-lined skink	SC	FLSK	1	Rock outcrop	juvenile	8 -18	3	10-100	none	none
6-Jun-13	6:36	17T	533564	5081958	Reptile Survey	Five-lined skink	SC	FLSK	1	Rock outcrop	adult, missing tail	8 -18	3	10-100	none	none
6-Jun-13	8:00	17T	526319	5076654	Reptile Survey	Blandings Turtle	THR	BLTU	2	Marsh	basking on log	10 - 15	3	80	none	none
6-Jun-13	11:06	17T	531103	5080750		Blandings Turtle	THR	BLTU	12	wetland	many basking throughout wetland,					
6-Jun-13	11:35	17T	527527	5075897	Reptile Survey	Blandings Turtle	THR	BLTU	6	Marsh	basking on logs in marsh	10 - 15	3	80	none	none
6-Jun-13	13:16	17T	530385	5079844		Blandings Turtle	THR	BLTU	7	wetland	adults basking					
6-Jun-13	13:16	17T	530385	5079844		Snapping Turtle	SC	SNTU	1	wetland	adult basking					
6-Jun-13	13:30	17T	526591	5076142	Reptile Survey	Blandings Turtle	THR	BLTU	4	Marsh	basking	10 - 15	3	80	none	none
7-Jun-13	7:11	17T	528569	5676631	Reptile Survey	Five-lined skink	SC	FLSK	1	Rock barren		10-17	2	50	none	none
7-Jun-13	9:10	17T	528297	5076644	Reptile Survey	Five-lined skink	SC	FLSK	1	Rock barren		10-17	2	50	none	none
7-Jun-13	10:00	Exact location will not be made public due to threat of poaching				Restricted species	-	-	1	bog	basking in water	10-17	2	50	none	none
7-Jun-13	10:20	17T	527182	5080275	Reptile Survey	Massassauga Rattlesnake	THR	MASS	1	Rocky shore near wetland	base of a juniper	9 - 19	3	60-100	none	none
7-Jun-13	13:10	17T	527775	5078847	Reptile Survey	Milksnake	SC	MISN	1	Rock outcrop	about 15 cm long	9 - 19	3	60-100	none	none
7-Jun-13	14:21	17T	529514	5078211		Blandings Turtle	THR	BLTU		roadside ditch beckanon road	adult					
8-Jun-13	13:50	17T	530524	5078771	Reptile Survey	Blandings Turtle	THR	BLTU		man-made wet area (pond) along Bekman Road	large but not fully grown	8 - 18	1-2	90-100	none	none
8-Jun-13		17T	528565	5079450	Reptile Survey	Massassauga Rattlesnake	THR	MASS		Jack pine barren, in rock outcrop	about 45-50cm with a large rattle	8 - 18	1-2	90-100	none	none
15-Jun-13	7:37	17T	526691	5073341		Massassauga Rattlesnake	THR	MASS		forested wetland	adult, rattled, didn't strike					
17-Jun-13	11:56	17T	529478	5077343		Massassauga Rattlesnake	THR	MASS		mixed woods	hid under log, tapped on log, no rattle heard					
18-Jun-13	11:35	17T	532449	5078909		Snapping Turtle	SC	SNTU			7-10 predated nests, both painted and snapping					
20-Jun-13	10:50	17T	527379	5080387	Reptile Survey	Massassauga Rattlesnake	THR	MASS		N of Joes Cabin, base of Juniper along rock outcrop	photos taken, large rattle (8 or 9) did not rattle; MC added UTM based on last known location during BB survey (B8 at 10:15am)	8-18	1-3	30-Oct	none	none
22-Jun-13	16:20	17T	531043	5078720		Snapping Turtle	SC	SNTU		Beckanon Road	Possibly nesting at road edge					
24-Jun-13	7:40	17T	528062	5077029	Breeding Birds	Blandings Turtle	THR	BLTU	2		mating pair	20	3	10	None	Showers
25-Jun-13	9:30		526179	5074681	Breeding Birds	Massassauga Rattlesnake	THR	MASS	1		about 2 ft long	17-23	0	60	None	None
25-Jun-13	15:10		525666	5075046	Breeding Birds	Snapping Turtle	SC	SNTU	2			17-23	0	60	None	None
26-Jun-13	14:00	17T	522218	5077102	Reptile Survey	Fox snake	THR	FOSN		off shore island (chain of islands) in rock crevice about 1m from water	about 3 ft long	19-27	3	10	none	none
26-Jun-13		17T	526734	5073715	Reptile Survey	Five-lined skink	SC	FLSK		rock barrens	juvenile	19-27	3	10	none	none
26-Jun-13		17T	524537	5076645	Reptile Survey	Milksnake	SC	MISN		near shore half under rock	pretending to be a rattle snake	19-27	3	10	none	none
27-Jun-13	10:02	17T	527497	5075963	Reptile Survey	Five-lined skink	SC	FLSK		rock barrens near beaverpond	juvenile about 14cm	17-25	0-3	90-100	none	none
27-Jun-13		17T	526679	5076227	Reptile Survey	Blandings Turtle	THR	BLTU		Large beaverpond (small lake in core of BBS route)	GPS lost; UTM estimated by MC based on description in field notes	17-25	0-3	90-100	none	none
5-Aug-13		17T				Blandings Turtle	THR	BLTU			predated nest, size and number suggest blandings	23	3	10	None	None
5-Aug-13		17T	564188	5055210		Five-lined skink	SC	FLSK		open to under cover	pale colouration, but still blue on tail	23	3	10	None	None

Location/Utm					Type of Survey	Observation	SARA Status	4-LTR CODE	# of Individuals	Habitat	Other Notes	Weather				last 24 hrs?
Date	Time	Zone	Easting	Northing								Temp	Wind	Cloud	precipitation	
5-Aug-13		17T	564143	5055355		Five-lined skink	SC	FLSK		bare rocks	juvenile	23	3	10	None	None
8-Aug-13		17T	566290	5051148		Milksnake	SC	MISN			probable milksnake, skin found, ~36 inches	23	0	50	None	Rain
9-Aug-13		17T	577310	5030573		Snapping Turtle	SC	SNTU		road puddle	about 30cm diameter carapace	23	0	0	None	None
23-Aug-13		17T	526791	5073049	Fall Passerine	Blandings Turtle	THR	BLTU		Sandy Bay passerine transect		23-25	2	30	None	None
6-Sep-13	9:03	17T	523879	5081036		Massassauga Rattlesnake	THR	MASS				9-20	4	100	None	None
6-Sep-13	11:28	17T	527117	5081654		Massassauga Rattlesnake	THR	MASS				9-20	4	100	None	None
6-Sep-13			527117	5081654	Fall Passerine	Massassauga Rattlesnake	THR	MASS				18	4	80-100	None	None
12-Sep-13		17T	526090	5077019		Blandings Turtle	THR	BLTU			predated					
23-Sep-13	10:59	17T	523667	5081298		Massassauga Rattlesnake	THR	MASS			shed snake skin					
6-Aug-03		17T	562389	5058507		Five-lined skink	SC	FLSK			Juvenil, 5-6cm long					
6-Sep-03			523879	5081036	Fall Passerine	Massassauga Rattlesnake	THR	MASS				1	3	75	None	None



Location/Utm											
Date	Time	Zone	Easting	Northing	Type of Survey	Observation	# of individuals	Habitat	Other Notes	SARA Status	4-letter Code
9-Jul	N/A	17T	529555	5078479	Breeding birds	Pine Imperial Moth	Eacles imperialis pini	1	found dead on road near truck	S3?	PIMO

Location/Utm				Type of Survey	Observation	# of individuals	Habitat	Other Notes	SARA Status	4-letter Code
Date	Time	Easting	Northing							
23-May-13	9:09	541470	5063041		Blanding's Turtle	1	roadkill, photographed		THR	BLTU
23-May-13	9:10	541458	5063070		Blanding's Turtle	1	juvenile, roadkill, photographed		THR	BLTU
23-May-13	9:14	541439	5063066		Blanding's Turtle	1	roadkill, photographed		THR	BLTU
23-May-13	9:16	541460	5063023		Blanding's Turtle	1	roadkill, photographed		THR	BLTU
23-May-13	12:48	565257	5035189		Blanding's Turtle	1	female, roadkill, photographed		THR	BLTU
9-Jun-13	9:29	539962	5066371		Blanding's Turtle	1	juvenile, roadkill, photographed		THR	BLTU
10-Jun-13	13:01	540875	5064366		Blanding's Turtle	1	bones		THR	BLTU
12-Jun-13	15:39	539969	5066327		Blanding's Turtle	1	juvenile, roadkill, photographed		THR	BLTU
13-Jun-13	15:51	533589	5081140		Blanding's Turtle	1	female, roadkill, photographed		THR	BLTU
18-Jun-13	16:22	533687	5081580		Blanding's Turtle	1	female with eggs, roadkill, photographed, likely purposely hit		THR	BLTU
30-Jun-13	13:08	540281	5065697		Blanding's Turtle	1	roadkill, photographed		THR	BLTU
1-Jul-13	14:38	541453	5063087		Blanding's Turtle	1	roadkill, photographed		THR	BLTU
3-Jul-13	13:15	571691	5031142		Blanding's Turtle	1	female, roadkill, photographed		THR	BLTU
23-Jul-13	9:34	532600	5090302		Blanding's Turtle	1	juvenile, roadkill, photographed		THR	BLTU
24-Jul-13	15:41	541474	5062984		Blanding's Turtle	1	juvenile, roadkill, photographed		THR	BLTU
4-Jul-13	17:20	540599	5065047		Five- lined skink	1	adult		SC	FLSK
2-Jul-13	13:46	559561	5040797		Massasauga Rattlesnake	1	healthy adult		THR	MASS
23-May-13	6:21	547561	5052455		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
23-May-13	6:34	547166	5053320		Snapping Turtle	1	roadkill, photographed		SC	SNTU
23-May-13	12:44	565257	5035204		Snapping Turtle	1	roadkill, photographed		SC	SNTU
23-May-13	12:50	565253	5035193		Snapping Turtle	1	baby, photographed		SC	SNTU
23-May-13	12:56	565249	5035222		Snapping Turtle	1	roadkill, photographed		SC	SNTU
23-May-13	12:58	565276	5035203		Snapping Turtle	1	roadkill, photographed		SC	SNTU
23-May-13	13:15	564321	5036198		Snapping Turtle	1	roadkill, photographed		SC	SNTU
23-May-13	16:11	555962	5044211		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
23-May-13	16:55	554428	5045162		Snapping Turtle	1	roadkill, photographed		SC	SNTU
24-May-13	8:33	566913	5033341		Snapping Turtle	1	roadkill, photographed		SC	SNTU
9-Jun-13	8:37	563350	5037120		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
9-Jun-13	8:49	554605	5045088		Snapping Turtle	1	roadkill, photographed		SC	SNTU
9-Jun-13	8:57	552204	5046325		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
9-Jun-13	9:03	548781	5049515		Snapping Turtle	1	roadkill, photographed		SC	SNTU
9-Jun-13	9:17	541713	5062471		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
10-Jun-13	10:40	538815	5069576		Snapping Turtle	1	nesting on road shoulder, photographed		SC	SNTU
10-Jun-13	13:17	541415	5063130		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
10-Jun-13	15:15	538407	5069771		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
13-Jun-13	14:39	556296	5043978		Snapping Turtle	1	roadkill, photographed		SC	SNTU
13-Jun-13	16:06	532604	5090178		Snapping Turtle	1	roadkill, photographed		SC	SNTU
14-Jun-13	8:59	550426	5047310		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
14-Jun-13	16:53	551654	5046565		Snapping Turtle	1	baby, roadkill, photographed		SC	SNTU
30-Jun-13	14:19	533603	5082505		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
30-Jun-13	14:32	533420	5093083		Snapping Turtle	1	roadkill, photographed		SC	SNTU
3-Jul-13	16:08	533088	5091677		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
23-Jul-13	9:38	532600	5090293		Snapping Turtle	1	roadkill, photographed		SC	SNTU
23-Jul-13	9:46	532605	5090219		Snapping Turtle	1	roadkill, photographed		SC	SNTU
24-Jul-13	10:23	563139	5037291		Snapping Turtle	1	juvenile, roadkill, photographed		SC	SNTU
12-Jun-13	15:42	Exact location will not be made public due to threat of poaching			Restricted species	1	-		-	-
14-Jun-13	10:27	Exact location will not be made public due to threat of poaching			Restricted species	1	-		-	-
23-May-13	7:01	546938	5054154		turtle nest		predated turtle nests, SNTU and others		SC	SNTU
23-May-13	8:58	541947	5061927		turtle nest		predated turtle nests, SNTU and others		SC	SNTU
30-Jun-13	11:04	534765	5075263		turtle nest	1	predated turtle nests, SNTU and others		SC	SNTU



## Appendix B

Stantec's Terrestrial Survey Work Program (Stantec, 2013)



**2013 TERRESTRIAL SURVEY  
WORK PROGRAM**

File No. 160960770  
March 2013

Prepared for:

**Nigig Power Corp.**  
Henvey Inlet Wind Project

Prepared by:

**Stantec Consulting Ltd.**  
1 – 70 Southgate Drive  
Guelph ON N1G 4P5



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Figure 1: Study Area for the proposed Nigig Power Corp. Henvey Inlet Wind Project and Transmission Corridor	
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## 1.0 Terrestrial Field Program

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Stantec Consulting Ltd. ("Stantec") is providing this work plan to Environment Canada for the terrestrial field investigations for the 300 MW, Feed-In Tariff ("FIT") Contracted, Henvey Inlet Wind Project (the "Project"). The key Project elements include:

- i) *On-Reserve Facilities:* up to 120 wind turbines, a transformer station, operations and maintenance building, access roads, collector lines, and ancillary facilities on Henvey Inlet First Nation Lands (Reserve No. 2); and
- ii) *Off-Reserve Facilities:* approximately 90 km of 230 kV, double circuit overhead transmission line from Reserve No. 2 to the Town of Parry Sound, Ontario where the project will interconnect with the provincial electricity grid at Hydro One Networks Inc.'s ("Hydro One") existing Parry Sound Transformer Station. The transmission line, as presently proposed, would be located within the current and future rights-of-way held by the Ontario Ministry of Transportation for King's Highway 69/400.

Save the Project's transmission line and interconnection works at the Parry Sound Transformer Station, all Project infrastructure will be located on Henvey Inlet First Nation Reserve Lands (Reserve No. 2). Preliminary siting of the wind turbines, collector lines, operations and maintenance building, transformer station, and access roads are in progress and are taking into account important cultural and environmental features as they are identified through field surveys, traditional ecological knowledge studies, and engagement efforts with the Henvey Inlet First Nation community.

For the transmission line, as proposed to be located within the current and future rights-of-way held by the Ontario Ministry of Transportation for King's Highway 69/400, the natural heritage field investigations for the majority of the transmission corridor fall under the requirements of Ontario Regulation 116/01 of Ontario's *Environmental Assessment Act* and will therefore be subject to review and approval by the Ministry of the Environment. However, portions of the highway corridor traverses roughly 35 ha of the Magnetewan First Nation Reserve (No. 1) and about 11 ha of the Shawanaga First Nation Reserve (No. 17), lands which are under federal jurisdiction.

Throughout this document, the wind project component on the Reserve Lands will be referred to as the Project Location and the transmission line corridor will be referred to as the Transmission Line. Collectively, these areas will be referred to as the Study Area for the purpose of the terrestrial survey work program.



**2013 TERRESTRIAL SURVEY****WORK PROGRAM**

Terrestrial Field Program

March 2013

The Project Location and Transmission Line alignment are shown on **Figure 1**. The purpose of the natural environment field program is to collect data relevant to vegetation communities (ecosites), wetlands, wildlife habitat, and Species at Risk. The objective of this work plan is to seek Environment Canada's agreement with the study methodologies and protocols set out herein for terrestrial investigations of the Project during the late winter, spring, summer and fall of 2013.

## **2.0 Field Program Overview**

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The Project Location is within the Henvey Inlet First Nation Reserve along the eastern shore of Georgian Bay, south of French River Provincial Park and directly north of North Georgian Bay Shoreline and Islands Conservation Reserve. Generally, the Project Location has shallow soils, with many rocky outcrops forming longitudinal ridges running on a northwest to southeast axis, and is divided roughly in half by Henvey Inlet. Numerous wetland pockets are located between the ridges and across the Project Location, with upland areas supporting forested areas of poplar and jack pine.

The characteristics of terrestrial habitat and areas of potential significance or sensitivity will first be identified as part of the early-on consultation with Henvey Inlet First Nations and relevant agencies, as well as a review of the available natural heritage information. Information gained through the consultation process and desktop review will be supplemented by general aerial and ground-level (by foot or boat) surveys of the Study Area to fine-tune the field program and assist in siting monitoring stations. Wildlife and vegetation surveys will begin in March, when raptors begin their spring migration and will continue into November, when the final fall migratory waterfowl are expected to move through the Study Area.

### **2.1 ECOSITE CLASSIFICATION AND WETLANDS**

Ecosite classification forms the backbone of wildlife habitat assessment. For the Project, the Ecosites of Ontario classification system (Banton *et al.*, 2009) will be used as it includes forest and non-forest communities as well as wetlands.

A wetland is land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation and various kinds of biological activity which are adapted to a wet environment (The Federal Policy on Wetland Conservation ("FPWC"), Environment Canada, 1991). The protection and conservation of wetlands on federal lands is mandated by the FPWC. Mitigation of adverse environmental effects on wetlands is guided by the FPWC goal of achieving 'no net loss of wetland functions'. The no net loss principal can be achieved by using a hierarchical sequence of mitigation alternatives: avoidance, minimization, and compensation. Wetlands on federal lands can be described using The Canadian Wetland Classification System (National Wetlands Working Group, Second Edition, 1997).

Provincially, the Ontario Wetland Evaluation System (Ministry of Natural Resources, 2002), is used to map and score wetlands based on biological productivity and diversity, human use, hydrologic functions, and unique characteristics such as geographical rarity. It is anticipated that no wetlands have been evaluated using the OWES on the Henvey Inlet First Nation Reserve Lands.



## 2013 TERRESTRIAL SURVEY

## WORK PROGRAM

Field Program Overview

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## 2.2 WILDLIFE HABITAT

Wildlife habitat is defined as an area where plants, animals and other organisms live, including areas where species concentrate at a vulnerable point in their life cycle and that are important to migratory and non-migratory species. The work program has been designed to capture those wildlife species and their habitats which may occur in the Study Area and may be influenced by the Project.

## 2.3 ENDANGERED, THREATENED AND SPECIAL CONCERN SPECIES

A desktop review of the MNR Natural Heritage Information Centre (NHIC) database, as well as provincial atlases for breeding birds, mammals, reptiles and amphibians, was conducted to identify species of conservation concern in the vicinity of the Study Area. Twenty-seven terrestrial species listed as endangered, threatened or special concern at the provincial and federal level have the potential to occur within the Study Area (Table 1). Several of these species were recorded within the Project Location during previous terrestrial field investigations by LGL Limited. Site investigations in the proposed 2013 terrestrial work program will assess the presence and identify preferred habitat of these species.

**Table 1: Endangered, threatened and special concern terrestrial wildlife species potentially present within the Study Area**

Type	Common Name	Scientific Name	S - Rank	COSSARO	COSEWIC
Reptile	Stinkpot / Eastern Musk Turtle	<i>Sternotherus odoratus</i>	S3	THR	THR
Reptile	Blanding's Turtle	<i>Emydoidea blandingii</i>	S3	THR	THR
Reptile	Snapping Turtle	<i>Chelydra serpentina</i>	S3	SC	SC
Reptile	Northern Map Turtle	<i>Graptemys geographica</i>	S3	SC	SC
Reptile	Eastern Hog-nosed Snake	<i>Heterodon platirhinos</i>	S3	THR	THR
Reptile	Eastern Foxsnake (Georgian Bay)	<i>Pantherophis gloydi</i>	S3	THR	END
Reptile	Eastern Massasauga (Great Lakes/ St Lawrence)	<i>Sistrurus catenatus catenatus</i>	S3	THR	THR
Reptile	Eastern Ribbonsnake	<i>Thamnophis sauritus</i>	S3	SC	SC
Reptile	Milksnake	<i>Lampropeltis triangulum</i>	S3	SC	SC
Reptile	Five-lined Skink (Southern Shield population)	<i>Plestiodon fasciatus</i>	S3	SC	SC
Bird	Least Bittern	<i>Ixobrychus exilis</i>	S4B	THR	THR
Bird	Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	S4B	THR	THR
Bird	Chimney Swift	<i>Chaetura pelagica</i>	S4B, S4N	THR	THR
Bird	Barn Swallow	<i>Hirundo rustica</i>	S4B	THR	THR (NS)
Bird	Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	THR	THR (NS)
Bird	Eastern Meadowlark	<i>Sturnella magna</i>	S4B	THR	THR (NS)
Bird	Bald Eagle	<i>Haliaeetus leucocephalus</i>	S4B, S2N	SC	SC
Bird	Common Nighthawk	<i>Chordeiles minor</i>	S4B	SC	THR
Bird	Olive-sided Flycatcher	<i>Contopus borealis</i>	S4B	SC	THR
Bird	Eastern Wood-Pewee	<i>Contopus virens</i>	S4B	-	SC (NS)
Bird	Wood Thrush	<i>Hylocichla mustelina</i>	S4B	-	THR (NS)

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**Table 1: Endangered, threatened and special concern terrestrial wildlife species potentially present within the Study Area**

Type	Common Name	Scientific Name	S - Rank	COSSARO	COSEWIC
Bird	Golden-winged Warbler	<i>Vermivora chrysoptera</i>	S4B	SC	THR
Bird	Canada Warbler	<i>Wilsonia canadensis</i>	S4B	SC	THR
Mammal	Little Brown Myotis	<i>Myotis lucifugus</i>	S5	END	END (NS)
Mammal	Northern Myotis	<i>Myotis septentrionalis</i>	S3?	END	END (NS)
Mammal	Tri-coloured Bat	<i>Perimyotis subflavus</i>	S3?	-	END (NS)

COSSARO: Committee on the Status of Species at Risk in Ontario

COSEWIC: Committee on the Status of Endangered Species in Canada

S2 – Imperiled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.

S3: Vulnerable—Vulnerable in the province, relatively few populations (often 80 or fewer)

S4: Apparently Secure—Uncommon but not rare

S5: Secure—Common, widespread, and abundant in the province

S#B: Breeding status rank

S#N – Non-breeding status rank

S? – Rank Uncertain

NAR: Not At Risk

END: Endangered

THR: Threatened

SC: Special Concern

N/A: not applicable

NS: Not on Species at Risk Act Schedule



### **3.0 Proposed Field Work Program**

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Due to the known presence of Species at Risk, the project is considered to have “Very High” site sensitivity and would be ranked as “Category 4” by Environment Canada’s “Wind Turbines and Birds: A Guidance Document for Environmental Assessment” (2007a). Projects in this category usually require comprehensive baseline surveys; a requirement that has been considered in the development of this work program.

The survey protocols are consistent with Environment Canada’s “Recommended Protocols for Monitoring Impacts on Wind Turbines on Birds” (Environment Canada, 2007b) and on Environment Canada’s comments on LGL Limited’s 2011 workplan for the Project. Recommended protocols for species at risk are based on Stantec’s technical expertise and on experience with the Ministry of Natural Resources species-specific surveys requirements.

Detailed protocols of each survey type are outlined below. The suite of surveys proposed along the Transmission Line differs slightly than those within the Project Location, due to differences in potential environmental effects. For example, migratory bird surveys are not proposed along the Transmission Line. **Table 4** provides a summary of all proposed surveys, including a breakdown of which surveys are to be conducted within the Project Location and those to be conducted along the Transmission Line.

#### **3.1 GENERAL RECONNAISSANCE (EARLY APRIL)**

Given the limited access in and around the Project Location and the relatively rugged topography and abundance of wetlands in the Study Area, multi-purpose broad-scale surveys will be completed to obtain an overall understanding of the landscape, and to put the detailed field study locations in context.

An aerial survey by helicopter will be conducted in early April to observe the landscape without leaf cover and at a time of pronounced hydrological activity (i.e. spring melt). Leaf-off conditions will also allow a search for habitat features such as stick nests and wetland types. A reconnaissance survey of the Project Location by boat and foot will be undertaken in early April, guided by local members of the Henvey Inlet First Nations. The purpose of the reconnaissance survey will be to gain a better understanding of site access and points of interest, including locations of rare species, based in local knowledge.

#### **3.2 SPRING MIGRATORY BIRD SURVEYS**

##### **3.2.1 Spring raptor migration (Ten surveys, early March to end of April):**

Monitoring will consist of ten surveys throughout the spring migration period (March to end of April) to record presence of diurnal migrant raptors. Surveys will be comprised of six-hour point counts starting at 9:00 am, conducted by two observers stationed at two appropriate vantage

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points within the Project Location. When site access allows, surveys stations will be situated in the east and west portions of the Project Location. However, during times of year when site access is limited (i.e. late winter, early spring) alternative locations may be used with efforts to maximize spatial coverage.

All raptors observed during the surveys will be recorded and mapped. Behaviour of the raptors will be noted with emphasis on flight height and determining which individuals were actively migrating as opposed to staging (e.g. hunting, perching, etc.). For actively migrating raptors, flight paths will be mapped.

**3.2.2 Spring passerine migration (Eight surveys, early April to late May):**

Natural habitat located in close proximity to the Georgian Bay shoreline provides stopover habitat for migrating passerine birds. Eight weekly surveys are proposed in April and May. Monitoring will consist of ten, 500m long transects distributed throughout the Project Location. Transects will be placed in different habitat types (i.e. woodland, rock barren and wetland). Given the variable nature of vegetation communities within the Project Location, it is likely most 500m transects will include more than one habitat type. A description of the habitat along each of the 10 transects will be recorded.

Surveys will be conducted in the morning, between dawn and approximately 10:00 am. A tally of all species observed will be recorded on each transect. These surveys will include characterizing the abundance and diversity of passerines within the Project Location.

**3.2.3 Spring waterfowl migration (Four surveys, April to late May):**

Spring monitoring for migrating waterfowl will be focused along Henvey Inlet and will consist of four bi-weekly surveys undertaken by boat in April and May. Surveys will include waterfowl counts to record species and number of individuals observed along the inlet, as well as characteristics of the wetlands to support migrating waterfowl (e.g. size, vegetation, permanence, etc.).

The use of scattered wetlands and ponds throughout the Project Location by staging waterfowl will be assessed through the spring passerine surveys.

**3.3 BREEDING BIRD SURVEYS****3.3.1 Daytime breeding birds (Two surveys, late May to early July):**

Two rounds of breeding bird surveys will be conducted in each major habitat type with the Study Area (woodland, rock barren and wetland). Surveys will consist of ten-minute point counts, in conjunction with area searches (wandering transects) between point count locations. The area searches will allow for collection a comprehensive species list, whereas point counts will provide information on species density.



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Surveys would take place starting 30 minutes before sunrise and continue until approximately 10:00 am. As per Environment Canada guidance, a minimum of 20 point counts will be sited in each major habitat type. However, given the variability of habitat types that occur within the Study Area, it is anticipated that many point counts may cover more than one habitat type.

In marsh habitat, play-back call surveys for marsh breeding birds will be conducted following the ten-minute point count, to assist in detection of more secretive marsh bird species, specifically, the threatened Least Bittern.

Location of all species at risk observations will be geo-referenced using a hand-held GPS unit, mapped and compared to ecosite classification to develop habitat mapping for each species.

**3.3.2 Crepuscular breeding birds (Two surveys, May and June):**

Eastern Whip-poor-will surveys will be conducted in suitable open habitat within forested areas. Surveys will be conducted in May and June and will consist of six-minute point counts at stations spaced within the Project Location and Transmission Line corridor. Due to the remote location of much of the Study Area, survey locations may be selected with consideration to access and surveyor safety.

Surveys will begin approximately 30 minutes after sunset within appropriate weather conditions (not in high winds, persistent rain or an overcast sky) and will, if possible, coincide with the full moon. All individuals heard will be recorded, with an estimated direction and distance from the observer.

**3.3.3 Owls (One survey, April):**

Given the difficulty in detecting owl species, the use of playback calls to elicit a response will be used. A single survey in April is proposed, and will include various stations throughout the Project Location. Due to the remote location of much of the Study Area, survey locations may be selected based on facility of access and surveyor safety.

Surveys will begin approximately 30 minutes after dark and will consist of 10 minute point counts incorporating playback and periods of silent listening. All individual heard will be recorded, with an estimated direction and distance from the observer.

**3.3.4 Raptor and colonial nesting birds (Two surveys, April and June):**

Searches for large stick nests or “nest bowls” in trees, typically exhibiting a DBH (diameter at breast height) of >50 cm, will be conducted during the aerial reconnaissance prior to leaf-out. Searches will target trees along watercourses, with special attention afforded to large white pines, and swamps along large bodies of water, as well as other appropriate habitat within the Study Area. If present, nests will be surveyed for activity concurrent with breeding bird point counts and area searches in June.

### **3.4 AMPHIBIAN AND REPTILE SURVEYS**

#### **3.4.1 Western Chorus Frog and Salamanders (April):**

Western Chorus Frog surveys will consist of 3-minute call counts at potential breeding habitat conducted in April, during appropriate weather conditions. This species breeds in small or shallow aquatic habitats associated with moist, open terrestrial habitat (COSEWIC, 2008c). Males call from the water and are typically active when air temperatures are above 5°C, although calls have been detected at air temperatures as low as -1°C (COSEWIC, 2008c).

Unlike many anurans, Western Chorus Frogs are generally very active throughout the day. As such, daytime survey will be used to cover larger portions of the Study Area than evening call surveys would permit.

Surveys for amphibian egg masses will take place concurrent with calling surveys. These will consist of perimeter surveys of suitable breeding ponds by trained field personnel. Egg masses of different species are often characteristic based on features such as where they are laid, how many eggs are in the mass, density of the egg mass, and whether or not the eggs are encased in jelly.

### **3.5 REPTILE HABITAT AND TARGETED SURVEYS (MAY AND JUNE):**

Reptile habitat and targeted species surveys will take place in three stages.

Preliminary surveys for reptiles will also take place throughout the migratory and breeding bird survey periods. Field biologists familiar with reptile species identification will be conducting area searches and wandering transect surveys in a variety of areas providing habitat for reptiles at both the Project Location, weekly from early April until early July, and along the Transmission Line, weekly from late May until early July. Any incidental observations of turtles, snakes or lizards, including shed skins or shells, will be recorded on survey forms and used to refine the field survey program proposed for June.

Potential snake or turtle habitat within the Study Area will also be identified during Ecosite surveys, beginning in May. The habitat assessment will involve identification of potential reptile habitat features, including:

- Turtle overwintering habitat and snake/skink hibernacula;
- Nesting sites; and,
- Foraging habitats.

Targeted field surveys for reptile species at risk will occur in June. Timing of these surveys will coincide with a period of high activity for reptiles (nesting and foraging), but also when air temperatures encourage basking behavior. Surveys for snake species at risk and Five-lined Skink will consist of wandering transects through all appropriate habitat types (**Table 2**).



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Additional survey effort will be directed toward areas with previous observations of these species which may indicate high quality or limited habitat. To the extent possible, surveys will be conducted on sunny days when air temperatures are a minimum of 15°C (ideally 20°C). Surveys for turtles will consist of daytime basking surveys from land or boat in suitable wetland and open water habitat (Table 2), and evening nesting surveys in potential upland nesting sites identified during Ecosite surveys. Basking surveys will be conducted on sunny days when air temperatures are a minimum of 15°C (ideally 20°C). Nesting surveys will take place on warm evenings (daytime air temperature >20°C), ideally before or after rainfall. All surveys will record species, number, location and behaviour of observed reptiles.

The purpose of the targeted surveys is to confirm habitat used by the various reptile species at risk within the Study Area and provide information on general abundance and distribution. Survey results will be used to produce detailed mapping of reptile habitat features which will be used to guide the siting layout process and maximize avoidance of sensitive features.

Table 2: General Habitat Description and Use by Reptile Species at Risk

Common Name	General Habitat and Use*
<b>Turtles</b>	
Blanding's Turtle	Lakes, ponds and wetlands with clear shallow water and muck bottoms. Will move between habitats within active season; aerial basking; nesting in late May to early July, in open sandy soil up to 2.5km from primary wetland, but typically within 400m of water; overwinter in marsh, bog or fen with >0.5m water depth.
Stinkpot	Shallow water in rivers, lakes and ponds with slow current and soft bottom; aquatic basking, often under floating vegetation; nesting in June, in shallow soil near water, occasionally in or under leaf litter; overwinter in primary habitat with muck bottom.
Northern Map Turtle	Large rivers and lakes with soft bottom; aerial basking; nesting June and July in sandy soil; overwinter in general habitat in areas with >5m water depth.
Snapping Turtle	All aquatic habitats, but rarely in moving water, prefer large water bodies associated with marsh and/or swamp; aquatic basking
<b>Snakes and Lizard</b>	
Eastern Hog-nosed Snake	Open forest and forest edges with sandy soil in proximity to water; egg-laying in late June and July in nests excavated in sandy soil, often under cover objects; hibernation in mammal burrows.
Eastern Foxsnake	Georgian Bay populations inhabit rock barrens with sparse trees and shrubs in close proximity to shoreline; basking under or near rocks or in rock crevices; egg-laying late June to July in rock crevices or decaying vegetation; communal hibernation in rock crevices near shoreline.
Eastern Massasauga	Georgian Bay populations use rock barrens, wetlands and shorelines; viviparous, bearing young in late summer; communal gestation under rock cover; hibernation in rock crevices or animal burrows where water level is close to surface.
Eastern Ribbonsnake	Wetland edges with low vegetation and open basking areas; often seen swimming; viviparous, bearing young in late summer; hibernation in rock crevices and mammal burrows.

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**Table 2: General Habitat Description and Use by Reptile Species at Risk**

Common Name	General Habitat and Use*
Milksnake	Forest edges and open meadow; bask under cover objects; egg-laying May to July in loose soil, decomposing wood or vegetation; hibernation in rock crevices and mammal burrows, often communally and with other species.
Five-lined Skink	Open forest and rock barren; abundance of cover objects (rocks and woody debris) is important, longer/larger cover is preferred; nesting in shallow soil under cover objects.

\* Habitat description and use data obtained from COSEWIC assessment and status reports.

**3.6 BAT SURVEYS (TWO SURVEYS, JUNE):**

Bat surveys will be conducted in conjunction with Whip-poor-will surveys. A portable, hand-held broad band acoustic monitor will be used to detect bat calls. Recorded bat calls will be analysed to guild or species, where possible, following completion of the field program. The goal of the bat surveys will be to determine the presence and relative abundance of bat species at risk.

**3.7 ECOSITE, WETLAND AND VEGETATION SURVEYS****3.7.1 Ecosite Classification, including Wetlands (May to July):**

Vegetation communities within the Study Area will be delineated on aerial photographs and confirmed during field investigations. Community characterizations will be based on the Ecosites of Ontario system (Banton et al., 2009) and will be identified to the Vegetation Type unit level.

The Ecosites of Ontario classification system includes wetlands. Searches for wetlands not previously identified within the Study Area will be conducted as part of the Ecosite surveys. If encountered, previously unidentified wetlands will be recorded through field notes, photographs and geo-referenced using handheld GPS units.

**3.7.2 Rare flora (May to July):**

Searches for rare plants and habitat supporting these plants will be conducted concurrent with Ecosite surveys, where possible, but may also require spring assessments for ephemeral species or mid-summer assessments for species where identification is dependent on the flowering period of the species. If encountered, rare plants or habitat will be recorded through field notes, photographs and geo-referenced using handheld GPS units.

A review of the MNR Natural Heritage Information Centre (NHIC) database (NHIC, 2012) indicates that two provincially rare vegetation communities are known to occur within the Study Area:

- Atlantic Coastal Plain Shallow Marsh Type; and,
- Buttonbush Organic Thicket Swamp Type



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The following rare plant species (Table 3) may also be encountered in the Study Area:

Table 3: Rare Plant Species and Flowering Period		
Common Name	Scientific Name	Flowering Period
<b>Flowering Plants</b>		
St. Lawrence Grape Fern	<i>Botrychium rugulosum</i>	Mid-Spring
Thread-like Naiad	<i>Najas gracillima</i>	Summer to Fall, seeds important to ID so survey at end of period
Large Round-leaved Orchid	<i>Plantathera macrophylla</i>	June to August
Snailseed Pondweed	<i>Potamogeton bicupulatus</i>	Early Summer to Fall, seeds important to ID so survey at end of period
Alga Pondweed	<i>Potamogeton confervoides</i>	Summer, seeds important to ID so survey at end of period
Twin-stemmed Bladderwort	<i>Utricularia geminiscapa</i>	July to August
<b>Liverworts</b>		
Liverwort sp.		Unknown, best period for general identification is June-August

### 3.8 FALL MIGRATORY BIRD SURVEYS

#### 3.8.1 Fall passerine migration (Eight surveys, end of August to mid October)

Natural habitat located in close proximity to shorelines provides stopover habitat for migrating birds. Eight weekly surveys are proposed between the end of August and mid October. Monitoring will consist of ten, 500 m long transects distributed throughout the Project Location. The same transects will be used as in the Spring Passerine Migration surveys.

Survey will be conducted in the morning, between dawn and approximately 10:00 am. A tally of all species observed will be recorded on each transect. These surveys will include characterizing the abundance and diversity of passerines within the Project Location.

#### 3.8.2 Fall waterfowl migration (Six surveys, September to October):

Fall monitoring for migrating waterfowl will be focused along Henvey Inlet and will consist of four bi-weekly surveys undertaken by boat in September through October. Surveys will include waterfowl counts to record species and number of individuals observed along the inlet, as well as characteristics of the wetlands to support migrating waterfowl (e.g. size, vegetation, permanence, etc.).

The use of scattered wetlands and ponds throughout the Project Location by staging waterfowl will be assessed through the Fall Passerine surveys.

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**3.8.3 Fall raptor migration (Ten surveys, September to October):**

Monitoring will consist of ten surveys throughout the fall migration period (September to October) to record presence of diurnal migrant raptors. Surveys will be comprised of six-hour point counts starting at 9:00 am, conducted by two observers stationed at two appropriate vantage points within the Project Location. When site access allows, surveys stations will be situated in the east and west portions of the Project Location.

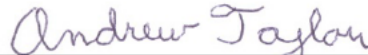
All raptors observed during the survey will be recorded and mapped. Behaviour of the raptors will be noted with emphasis on flight height and determining which individuals were actively migrating as opposed to staging (e.g. hunting, perching, etc.). For actively migrating raptors, flight paths will be mapped.

**3.9 INCIDENTAL OBSERVATIONS**

In addition to targeted wildlife surveys described above, all incidental observations of terrestrial wildlife or other significant sightings made during surveys throughout the 2013 field season will be recorded. Notes will be taken on the species, number of individuals, locations and behavior. Observations made early in the field season may be used to refine the remainder of the field program.

**STANTEC CONSULTING LTD.**

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Table 4: Summary of Natural Environment Field Program

Study	Mode	Frequency	Timing	Study Area
<b>General Reconnaissance</b>				
Aerial survey	Helicopter	Once	early April, prior to leaf-out	PL
Ground survey	Foot / boat survey with Henvey Inlet First Nations	Once	early April	PL
<b>Bird Surveys</b>				
<b>Spring Migration</b>				
Passerines	Ten, 500m long transects	Once per week, each transect (8 surveys)	Early April to late May	PL
Waterfowl Stopover and Staging	Henvey Inlet	Once every other week (4 surveys)	April to Late May	PL
Raptors	2 stations	Ten surveys	Early March to end April	PL
<b>Breeding Birds</b>				
Point Counts	Minimum of 20 stations in each major habitat type	Two rounds of surveys	Late May to early July	PL, TL
Area Searches	Wandering transect between point count stations	Two rounds of surveys	Late May to early July	PL, TL
Play-back call surveys	Stations in suitable habitat	Owls – once Marsh Birds – Two rounds of surveys	Owls – April Marsh Birds – May to July	PL, TL
Crepuscular surveys	In suitable Whip-poor-will habitat	Two round of surveys	May - June	PL, TL
Raptor and Colonial Bird Nests	Visual survey for raptor and colonial nesting bird nests	Twice – once to locate, once to confirm use	Concurrent with aerial reconnaissance, then with point counts to confirm use	PL, TL
<b>Fall Migration</b>				
Passerines	Ten, 500m long transects	Once per week, each transect (8 surveys)	End August to mid-October	PL
Waterfowl Stopover and Staging	Henvey Inlet only	Once every other week (4 surveys)	September to October	PL
Raptors	2 stations	Ten surveys	September to October	PL

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Table 4: Summary of Natural Environment Field Program

Study	Mode	Frequency	Timing	Study Area
<b>Bat Surveys</b>				
Ultrasonic Recording Units	Handheld units	Twice	June, in conjunction with crepuscular surveys	PL, TL
<b>Reptile Surveys</b>				
General Habitat Survey	Habitat Assessment	Once	Concurrent with Ecosite and vegetation surveys	PL, TL
SAR Surveys	Targeted surveys for turtle, snake and lizard species at risk	Once	June	PL, TL
<b>Amphibian Surveys</b>				
Western Chorus Frog Call Counts	Daytime call surveys, including audio recordings	Once	April	PL, TL
Salamander Egg Mass	Daytime surveys in wetlands	Once	April, concurrent with frog call counts	PL, TL
<b>FEC / Botanical Surveys</b>				
Ecosite classification, including wetlands	Ground surveys	Once	May to July	PL, TL
Rare Plants – Spring Ephemerals	Ground surveys	Once	May and June	PL, TL
Rare Plants – Summer Botanical	Ground surveys	Once	July	PL, TL

PL – Project Location.

TL – Transmission Line.



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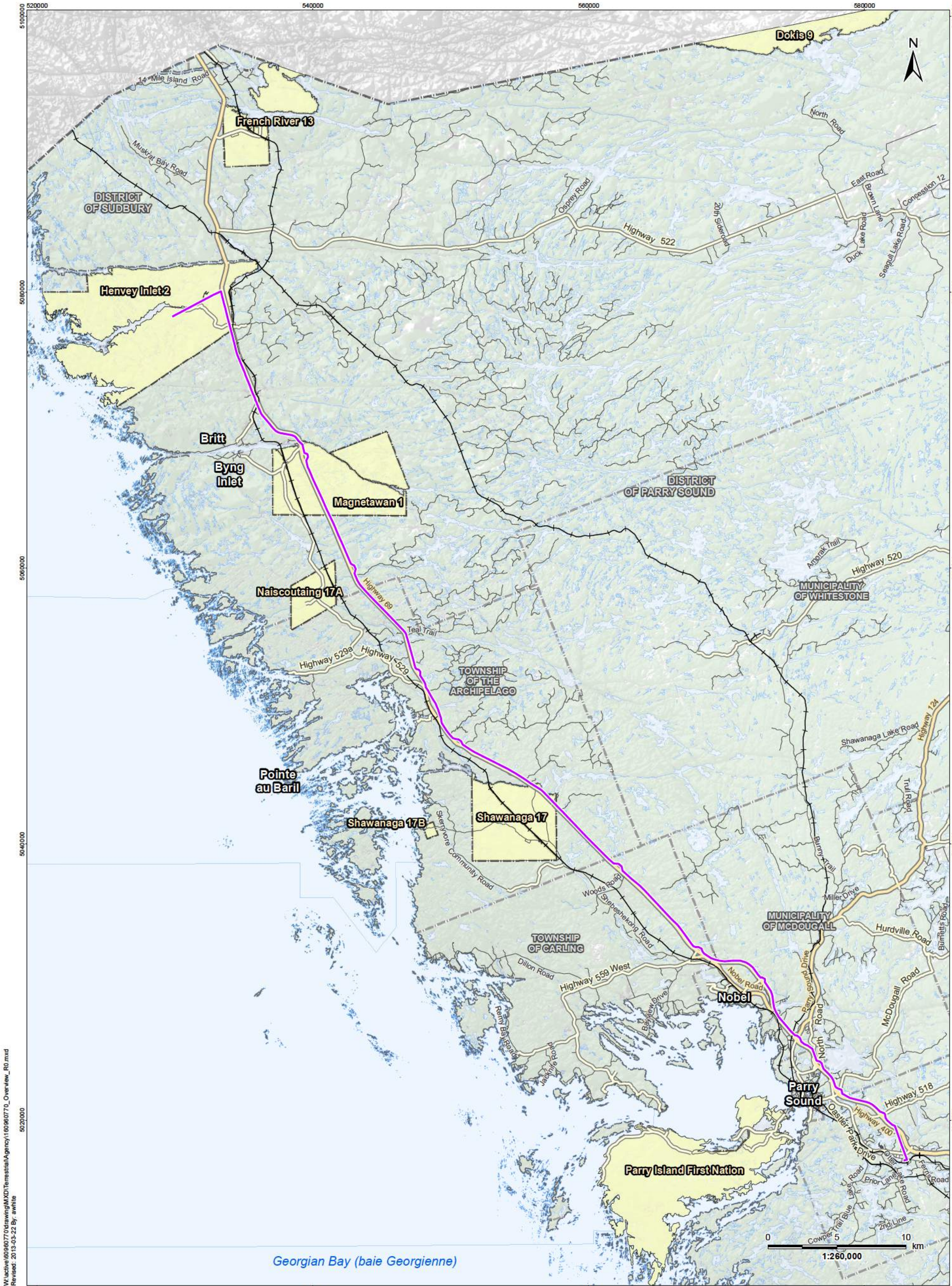
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# **Appendix A**


## **Figures**





W:\active\60960770\drawing\MXD\Terrestrial\Agency\160960770\_Overview\_R0.mxd  
Revised: 2013-03-22 By: awhite

March 2013  
160960770



### Legend

Proposed Transmission Line

Existing Features

Highway

Major Road

Local Road

Railway

Watercourse

First Nation Reserve

Upper Tier Boundary

Lower Tier Boundary

Waterbody

### Notes

- Coordinate System: NAD 1983 UTM Zone 17N
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

\*Precise location of transmission line within highway corridor to be determined

Client/Project  
NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
1

Title  
**Study Area Overview**

**DRAFT**



# Appendix C

## Results of Stantec 2013 Field Studies

Table C-1. Amphibian Survey Locations Along the Route B Transmission Line Study Area

						111				112				113			
Station						Small Cattail Shallow Marsh				Open Water / Marsh (Beaver Meadow?)				Open Water & Thicket Swamp			
Habitat						Yes				Yes				Yes			
Water Present						11-14				11-14				11-14			
Temperature (°C)						3-4 km S				3-4 km S				3-4 km S			
Wind						100				100				100			
Cloud (%)						Rain				Rain				Rain			
Precipitation						Heavy Rain				Heavy Rain				Heavy Rain			
Precipitation (24h)						20:13				20:13				20:13			
Sundown						20:45				20:45				20:45			
Start Time						23:20				23:20				23:20			
End Time						1				1				1			
Visit Number						20:40				22:48				22:58			
Start Time at Station						18-Apr-13				18-Apr-13				18-Apr-13			
Survey Date						Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT
AMTO	American Toad	<i>Anaxyrus americanus</i>	-	-	S5	No amphibians heard calling				No amphibians heard calling							
GRTR	Gray Treefrog	<i>Hyla versicolor</i>	-	-	S5												
NLFR	Northern Leopard Frog	<i>Lithobates pipiens</i>	NAR	NAR	S5												
SPPE	Spring Peeper	<i>Pseudacris crucifer</i>	-	-	S5									1	1		
WOFR	Wood Frog	<i>Lithobates sylvaticus</i>	-	-	S5												

Note: Data were transcribed as recorded on the field notes provided by Stantec Consulting Ltd. (Stantec) to AECOM in October 2014.

Legend

- 1 ESA Status: The Endangered Species Act 2007 (ESA) protects Species at Risk (Threatened and Endangered) at a Provincial Level:  
NAR - Not at Risk
- 2 SARA Status: The Species at Risk Act (SARA) protects Species at Risk (Special Concern, Threatened and Endangered) at a Federal Level. Species listed under Schedule 1 receive protection under SARA:  
NAR - Not at Risk  
THR - Threatened. A species likely to become endangered if nothing is done to reverse the factors leadings to its extirpation and extinction
- 3 S-rank: The natural Heritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species. Definitions are as follows:  
S3 - Rare to uncommon in Ontario; usually between 20 and 100 occurrences in Ontario; may be susceptible to large-scale disturbances. Most species with an S3 rank are assigned to the watch list, unless they have a relatively high  
S4 - Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors.  
S5 - Very common and demonstrably secure in Ontario



Table C-1. Amphibian Survey Locations Along the Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Herpetological Surveys -  
Route B Transmission Line Study Area

						Station				114				115				116			
						Habitat				Open Water & Marsh				Not Recorded				Lake & Cattail Fringe & Island			
						Water Present				Yes				Yes				Yes			
						Temperature (°C)				11-14				11-14				Not Recorded / Not Provided by Stantec			
						Wind				3-4 km S				3-4 km S				Not Recorded / Not Provided by Stantec			
						Cloud (%)				100				100				Not Recorded / Not Provided by Stantec			
						Precipitation				Rain				Rain				Not Recorded / Not Provided by Stantec			
						Precipitation (24h)				Heavy Rain				Heavy Rain				Not Recorded / Not Provided by Stantec			
						Sundown				20:13				20:13				Not Recorded / Not Provided by Stantec			
						Start Time				8:45				8:45				Not Recorded / Not Provided by Stantec			
						End Time				23:20				23:20				Not Recorded / Not Provided by Stantec			
						Visit Number				1				1				Not Recorded / Not Provided by Stantec			
						Start Time at Station				23:05				23:16				23:19			
						Survey Date				18-Apr-13				18-Apr-13				1-May-13			
Code	Common Name	Scientific Name	COSSARO <sup>1</sup>	COSEWIC <sup>2</sup>	S-rank <sup>3</sup>	Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT
AMTO	American Toad	<i>Anaxyrus americanus</i>	-	-	S5	No amphibians heard calling				No amphibians heard calling											
GRTR	Gray Treefrog	<i>Hyla versicolor</i>	-	-	S5																
NLFR	Northern Leopard Frog	<i>Lithobates pipiens</i>	NAR	NAR	S5									1	1						
SPPE	Spring Peeper	<i>Pseudacris crucifer</i>	-	-	S5									1	4	3					
WOFR	Wood Frog	<i>Lithobates sylvaticus</i>	-	-	S5																

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Legend

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S5 - Very common and demonstrably secure in Ontario

Table C-1. Amphibian Survey Locations Along the Route B Transmission Line Study Area

					Station	117				118				119			
					Habitat	Black Spruce Swamp				Cattail Marsh / Open Water				Shallow Marsh			
					Water Present	Yes - Limited				Yes				Yes			
					Temperature (°C)	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Wind	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Cloud (%)	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Precipitation	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Precipitation (24h)	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Sundown	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Start Time	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					End Time	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Visit Number	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Start Time at Station	23:06				22:59				22:51			
					Survey Date	1-May-13				1-May-13				1-May-13			
Code	Common Name	Scientific Name	COSSARO <sup>1</sup>	COSEWIC <sup>2</sup>	S-rank <sup>3</sup>	Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT
AMTO	American Toad	<i>Anaxyrus americanus</i>	-	-	S5					3				2	7		
GRTR	Gray Treefrog	<i>Hyla versicolor</i>	-	-	S5												
NLFR	Northern Leopard Frog	<i>Lithobates pipiens</i>	NAR	NAR	S5					1	3			1	2		
SPPE	Spring Peeper	<i>Pseudacris crucifer</i>	-	-	S5	1	4			3				3			
WOFR	Wood Frog	<i>Lithobates sylvaticus</i>	-	-	S5	1	2										

Note: Data were transcribed as recorded on the field notes provided by Stantec Consulting Ltd. (Stantec) to AECOM in October 2014.

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Table C-1. Amphibian Survey Locations Along the Route B Transmission Line Study Area

					Station	120				121				122			
					Habitat	Barrens				Creek & Shallow Marsh				Sedge Meadow			
					Water Present	Yes				Yes				Yes			
					Temperature (°C)	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Wind	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Cloud (%)	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Precipitation	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Precipitation (24h)	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Sundown	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Start Time	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					End Time	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Visit Number	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Start Time at Station	22:40				22:31				22:19			
					Survey Date	1-May-13				1-May-13				1-May-13			
Code	Common Name	Scientific Name	COSSARO <sup>1</sup>	COSEWIC <sup>2</sup>	S-rank <sup>3</sup>	Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT
AMTO	American Toad	<i>Anaxyrus americanus</i>	-	-	S5	1	4										
GRTR	Gray Treefrog	<i>Hyla versicolor</i>	-	-	S5					1	1						
NLFR	Northern Leopard Frog	<i>Lithobates pipiens</i>	NAR	NAR	S5					1	4			1	1		
SPPE	Spring Peeper	<i>Pseudacris crucifer</i>	-	-	S5	2	6	3		3				2	7		
WOFR	Wood Frog	<i>Lithobates sylvaticus</i>	-	-	S5												

Note: Data were transcribed as recorded on the field notes provided by Stantec Consulting Ltd. (Stantec) to AECOM in October 2014.

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Table C-1. Amphibian Survey Locations Along the Route B Transmission Line Study Area

					Station	123				124				125			
					Habitat	JPB Wetlands				Large JPB Wetland				JPB Wetlands (Small)			
					Water Present	Yes				Yes				Yes			
					Temperature (°C)	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Wind	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Cloud (%)	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Precipitation	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Precipitation (24h)	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Sundown	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Start Time	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					End Time	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Visit Number	Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec				Not Recorded / Not Provided by Stantec			
					Start Time at Station	22:12				22:00				21:07			
					Survey Date	1-May-13				1-May-13				1-May-13			
Code	Common Name	Scientific Name	COSSARO <sup>1</sup>	COSEWIC <sup>2</sup>	S-rank <sup>3</sup>	Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT	Call Code	# of Calls IN	Call Code	# of Calls OUT
AMTO	American Toad	<i>Anaxyrus americanus</i>	-	-	S5							2					
GRTR	Gray Treefrog	<i>Hyla versicolor</i>	-	-	S5									1	1		
NLFR	Northern Leopard Frog	<i>Lithobates pipiens</i>	NAR	NAR	S5					1	2						
SPPE	Spring Peeper	<i>Pseudacris crucifer</i>	-	-	S5	3				3				3			
WOFR	Wood Frog	<i>Lithobates sylvaticus</i>	-	-	S5												

Note: Data were transcribed as recorded on the field notes provided by Stantec Consulting Ltd. (Stantec) to AECOM in October 2014.

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S5 - Very common and demonstrably secure in Ontario



Table C-2. Results of the Reptile Habitat and Targeted Survey - Route B Transmission Line Study Area

Henvey Inlet Wind  
Summary of 2013 Herpetological Surveys -  
Route B Transmission Line Study Area

Survey Site			Survey Results				
Location	Easting	Northing	Species Observed		No. of Inds.	Evidence/ Condition	Habitat Descirption <sup>1</sup>
			Common Name	Scientific Name			
N5	539998	5066300	Turtle species	Unknown	1	N / D	Creek channel, marsh edge, beaver dam, basking rocks and logs, rocky outcrop around
S6	-	-	-	-	-	-	Some cattail marsh surrounded by mixed forest swamp.
S7	-	-	-	-	-	-	Black spruce (dead standing) leatherleaf bog
S8	-	-	-	-	-	-	Cattail marsh with mixed wood/treed swamp/forest on east, further north along the road is large wetland.
S9	-	-	-	-	-	-	cattail/leatherleaf bog/fen on east side, pare of larger complex.
S10	-	-	-	-	-	-	Lake culverted under road, more wetland habitat on east side. Beaver Pond
S11	558992	5041342	Turtle species	Unknown	N/D	Roadkill; carcass remains	Part of previous point's lake; different connections; on east side, beaver pond and big dam, marshy perimeter and upland mixed woodland
S12	558506	5041842	Turtle species	Unknown	N/D	Roadkill; carcass remains	Portion of parallel water system, small lake with swampy edge
S13	-	-	-	-	-	-	Small pond with marshy/swamp edge. Forest surround.
S14	-	-	-	-	-	-	Creek system empties into pond/lake(marshy sides). Forest and water sides.
S15	-	-	-	-	-	-	Channelized wetland. Folows east, marshy on both sides (sedge/grasses), rock updand on south side and mixedwood forest on northside
S16	-	-	-	-	-	-	Alder swamp; steep sides from road to water opens to larger lake.
S17	-	-	-	-	-	-	Arm of a lake, shrubby low border along highway on east side.
S18	555912	5044248	Snapping Turtle	<i>Chelydra serpentina</i>	1	N / D	Shawanoga River, steep sandy and rocky sides
S19	554557	5045111	Snapping Turtle	<i>Chelydra serpentina</i>	1	Roadkill	Slow flowing creek, marshy on roadsides, steep but short slopes on road sides
S20	-	-	-	-	-	-	Beaver pond on east side with wetland/mostly perimeter
S21	-	-	-	-	-	-	Cattail marsh, shrubby boarder, rocky uplands surrounding.
S22	-	-	-	-	-	-	Creek/stream boarded by sedge marsh and dead tammarak/shrub bog
S23	-	-	-	-	-	-	Beaver pond
S24	-	-	-	-	-	-	Small lake. Rocky/forest edge. Some saidtail and shruby edge. Broad sandy area by road, turtle nest habitat
S25	-	-	-	-	-	-	small river goes under road (Sucker Creek). Slow on East.
S26	-	-	-	-	-	-	Several small wetlands connecting to large Moose Lake. Marshy and swampy.
S27	547562	5052456	Snapping Turtle	<i>Chelydra serpentina</i>	1	Dead	Very small marsh but great habitat, cattails, lilypads bordered by forest
S28	547176	5053258	Snapping Turtle	<i>Chelydra serpentina</i>	1	Dead	Stream on east; marsh on west suitable habitat
S29	-	-	-	-	-	-	Channel lake. Forest/rocky. Some edge of welands.
S30	546997	5053981	Snapping Turtle	<i>Chelydra serpentina</i>		Prededated nest	Marsh, grasses, beaver dam, edge of forest, culvert, high sides
S31	546793	5054808	Blanding's Turtle	<i>Emydoidea blandingii</i>	1	N / D	6 Mile Lake, mostly rocky shores, some veg along edge
S32	-	-	-	-	-	-	Large beaver pond with standing dead trees and cattails. Fairly steep forested slopes, rocky too.
S33	-	-	-	-	-	-	Small cattail marsh surrounded by forest, some open water (marginal).
S34	544092	5057998	Turtle species	Unknown	1	Dead	Large pond, marsh, grass, forest edge; rocky slopes, sandy banks and gravel pit, nesting bits
S35	543730	5058373	Midland Painted Turtle	<i>Chrysemys picta marginata</i>	1	Dead	Wetland with open water cattails, beaver pond, steep sides, forest around
S36	-	-	-	-	-	-	Small beaver pond, marsh with grassy meadow. Sides rocky/forest.
S37	-	-	-	-	-	-	Small grassy pond with grasses. Boarder rocky/forest.
S38	542785	5059949	Turtle species	Unknown	1	Dead	Beaver pond, channelized with grassy/sedgy areas, both sides bordered by rocky uplands with mixed woods
S39	542637	5060291	Turtle species	Unknown	1	Dead	New beaver meadow and pond, forest surrounds
S39	542637	5060291	Midland Painted Turtle	<i>Chrysemys picta marginata</i>	1	Dead	New beaver meadow and pond, forest surrounds
S40	-	-	-	-	-	-	Beaver pond 100 m away. Creek between raod and pond. Also ponds along road, good habitat. Boardered forest and rocky areas.
S41	541944	5061924	Turtle species	Unknown		Prededated nest	Slow meandering stream with grassy marsh along border rocky and forest
S43	541477	5063025	Midland Painted Turtle	<i>Chrysemys picta marginata</i>	1	Dead	Beaver pond and drainage, swampy/marshy bordered by rocky forested area
S43	541477	5063025	Blanding's Turtle	<i>Emydoidea blandingii</i>	4	Dead	Beaver pond and drainage, swampy/marshy bordered by rocky forested area
S43	541470	5063041	Blanding's Turtle	<i>Emydoidea blandingii</i>	1	roadkill, photographed	Beaver pond and drainage, swampy/marshy bordered by rocky forested area
S43	541458	5063070	Blanding's Turtle	<i>Emydoidea blandingii</i>	1	juvenile, roadkill, photographed	Beaver pond and drainage, swampy/marshy bordered by rocky forested area
S43	541439	5063066	Blanding's Turtle	<i>Emydoidea blandingii</i>	1	roadkill, photographed	Beaver pond and drainage, swampy/marshy bordered by rocky forested area
S44	-	-	-	-	-	-	Series of sedge/grass marshes, cattails, meandering open water channel.

<sup>1</sup> Data were transcribed exactlv as presented in 60824 Reptile.pdf

**Legend**

N / D - No data recorded in the field notes provided in 60824 Reptile.pdf by Stantec to AECOM in October 2014.

Table C-3. Important  
Herpetological Observations – Route B Transmission Line Study Area

Survey Date and Site Location				Significant Reptile Observations						
Date	Zone	Easting	Northing	Common Name	Scientific Name	CODE	S-rank <sup>1</sup>	ESA Status <sup>2</sup>	SARA Status <sup>3</sup>	Notes
5/23/2013	17T	541470	5063041	Blanding's Turtle	<i>Emydoidea blandingii</i>	BLTU	S4	THR	THR	roadkill, photographed
5/23/2013	17T	541458	5063070	Blanding's Turtle	<i>Emydoidea blandingii</i>	BLTU	S4	THR	THR	juvenile, roadkill, photographed
5/23/2013	17T	541439	5063066	Blanding's Turtle	<i>Emydoidea blandingii</i>	BLTU	S4	THR	THR	roadkill, photographed
5/23/2013	17T	541460	5063023	Blanding's Turtle	<i>Emydoidea blandingii</i>	BLTU	S4	THR	THR	roadkill, photographed
5/23/2013	17T	547561	5052455	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	juvenile, roadkill, photographed
5/23/2013	17T	547166	5053320	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	roadkill, photographed
5/23/2013	17T	555962	5044211	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	juvenile, roadkill, photographed
5/23/2013	17T	554428	5045162	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	roadkill, photographed
5/23/2013	17T	546938	5054154	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	predated turtle nests, SNTU and others
5/23/2013	17T	541947	5061927	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	predated turtle nests, SNTU and others
6/9/2013	17T	539962	5066371	Blanding's Turtle	<i>Emydoidea blandingii</i>	BLTU	S4	THR	THR	juvenile, roadkill, photographed
6/9/2013	17T	554605	5045088	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	roadkill, photographed
6/9/2013	17T	552204	5046325	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	juvenile, roadkill, photographed
6/9/2013	17T	548781	5049515	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	roadkill, photographed
6/9/2013	17T	541713	5062471	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	juvenile, roadkill, photographed
6/9/2013	17T	563350	5037120	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	juvenile, roadkill, photographed
6/10/2013	17T	540875	5064366	Blanding's Turtle	<i>Emydoidea blandingii</i>	BLTU	S4	THR	THR	bones
6/10/2013	17T	538815	5069576	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	nesting on road shoulder, photographed
6/10/2013	17T	541415	5063130	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	juvenile, roadkill, photographed
6/10/2013	17T	538407	5069771	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	juvenile, roadkill, photographed
6/12/2013	17T	539969	5066327	Blanding's Turtle	<i>Emydoidea blandingii</i>	BLTU	S4	THR	THR	juvenile, roadkill, photographed
6/12/2013	Exact location will not be made public due to threat of poaching			Restricted Species	-	-	-	-	-	-
6/13/2013	17T	556296	5043978	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	roadkill, photographed
6/14/2013	17T	550426	5047310	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	juvenile, roadkill, photographed
6/14/2013	17T	551654	5046565	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	baby, roadkill, photographed
6/14/2013	Exact location will not be made public due to threat of poaching			Restricted Species	-	-	-	-	-	-
6/30/2013	17T	540281	5065697	Blanding's Turtle	<i>Emydoidea blandingii</i>	BLTU	S4	THR	THR	roadkill, photographed
6/30/2013	17T	534765	5075263	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	predated turtle nests, SNTU and others
7/1/2013	17T	541453	5063087	Blanding's Turtle	<i>Emydoidea blandingii</i>	BLTU	S4	THR	THR	roadkill, photographed
7/2/2013	17T	559561	5040797	Massasauga Rattlesnake	<i>Sistrurus catenatus</i>	MASS	S3	THR	THR	healthy adult
7/4/2013	17T	540599	5065047	Five-lined Skink	<i>Plestiodon fasciatus</i>	FLSK	S3	SC	SC	adult
7/24/2013	17T	541474	5062984	Blanding's Turtle	<i>Emydoidea blandingii</i>	BLTU	S4	THR	THR	juvenile, roadkill, photographed
7/24/2013	17T	563139	5037291	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	juvenile, roadkill, photographed
8/9/2013	17T	577310	5030573	Snapping Turtle	<i>Chelydra serpentina</i>	SNTU	S3	SC	SC	about 30cm diameter carapace



# Appendix C3

## Summary of 2011, 2012 and 2013 Incidental Wildlife Observations – Henvey Inlet Wind Energy Centre Study Area

Henvey Inlet Wind LP

# Henvey Inlet Wind

## Summary of 2011, 2012 and 2013 Incidental Wildlife Observations – Henvey Inlet Wind Energy Centre Study Area

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## Statement of Qualifications and Limitations

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- may be based on information provided to Consultant which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and sections thereof should not be read out of such context;
- was prepared for the specific purposes described in the Report and the Agreement; and
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- Appendix A. Stantec 2013 Field Notes and Documentation
- Appendix B. Stantec's Terrestrial Survey Work Program (Stantec, 2013)



# 1. Introduction

In 2011 and 2012, LGL Limited (LGL) collected field data to determine baseline conditions within the Henvey Inlet Wind Energy Centre (HIWEC) study area. The data collected by LGL included:

- Raptor Migration;
- Passerine Migration;
- Breeding Birds;
- Herpetological Surveys; and
- Bat Acoustic Monitoring.

In 2013, Stantec Consulting Ltd. (Stantec) continued field data collection within the Henvey Inlet Wind Energy Centre (HIWEC) study area, and collected field data within the Route B Transmission Line study area. The data collected by Stantec included:

- Raptor Migration;
- Passerine Migration;
- Waterfowl Migration;
- Breeding Birds;
- Herpetological Surveys;
- Bat Acoustic Monitoring;
- Ecosite Classification and Rare Flora; and
- Incidental Wildlife Observations.

This report has been prepared by AECOM to summarize the **Incidental Wildlife Observations** field data for the HIWEC study area and Route B Transmission Line study area. This is based on raw field and GIS data collected by LGL and Stantec during the 2011, 2012 and 2013 seasons. This information was provided to AECOM by Stantec in October 2014 and by WSP for the LGL data in May 2015. The following provides the work plans written by LGL and Stantec which outline data collection methods as well as AECOM's summary and analysis of the data collected, and assumptions made concerning the data.

Stantec provided AECOM with the following documents which were used to produce this report:

- Scanned handwritten field notes entitled “60824\_Incidental\_WildlandHabitat.pdf”;
- An Excel spreadsheet entitled “Significant species Observations.xlsx”; and
- A map of important wildlife observation locations entitled “160960824\_SignificantObservations\_Wind\_20131205.pdf”.

A copy of the above files is provided in **Appendix A**<sup>1</sup>.

LGL and Stantec provided AECOM with several other scanned handwritten field note packages and / or field data summaries used to prepare other technical reports. These were also searched for incidental wildlife observations during preparation of this report.

1. Records of Species At Risk considered to be restricted are not being made public due to the threat of poaching experienced by these species. These records will be provided under a separate cover to the Ministry of Natural Resources and Forestry (MNRF) and / or Environment Canada – Canadian Wildlife Service (EC-CWS) for permitting purposes.

## 2. Methods

### 2.1 Work Plan

The following section provides a description of work plan methods written by Stantec for the **Incidental Wildlife Observations**. This description is taken directly from Stantec's *Terrestrial Survey Work Program* (Stantec, 2013).

A complete copy of Stantec's *Terrestrial Survey Work Program* (Stantec, 2013) is provided in **Appendix B<sup>2</sup>**.

#### 2.1.1 Incidental Observations

*"In addition to targeted wildlife surveys described above, all incidental observations of terrestrial wildlife or other significant sightings made during surveys throughout the 2013 field season will be recorded. Notes will be taken on the species, number of individuals, locations and behaviour. Observations made early in the field season may be used to refine the remainder of the field program."*

---

2. *Records of Species At Risk considered to be restricted are not being made public due to the threat of poaching experienced by these species. These records will be provided under a separate cover to the Ministry of Natural Resources and Forestry (MNR) and / or Environment Canada – Canadian Wildlife Service (EC-CWS) for permitting purposes.*



## 3. Results

### 3.1 Study Area

The UTM co-ordinates of wildlife observations and wildlife habitat were not recorded for most of the observed species with the exception of important species, which included Federal Species at Risk (i.e., species listed as Threatened or Endangered under the federal *Species At Risk Act*), Provincial Species at Risk (i.e., species listed as Threatened or Endangered under the provincial *Endangered Species Act, 2007*), and species listed as Special Concern either provincially or federally. As a result, it is unclear from the field notes provided which study area (i.e., the HIWEC study area or Route B Transmission Line study area) many of the observations were recorded within. In some cases, it is also unclear during which survey type the wildlife observations were recorded.

It is possible that these observations could have been made in either the HIWEC study area or Route B Transmission Line study area. However, based on the subset of observations having UTM co-ordinates in the field notes provided, it appears that the majority of the observations are from the HIWEC study area.

Wildlife habitat was also recorded where incidental wildlife observations were identified. As stated above, UTM co-ordinates were not always recorded for the wildlife habitat observations.

### 3.2 Incidental Wildlife Observations Results

#### 3.2.1 Wildlife Habitat

Three (3) types of wildlife habitats were recorded in the document entitled *60824\_Incidental\_WildlifeandHabitat.pdf*. These include the following as summarized in **Table 3-2**. UTM co-ordinates for these recorded wildlife habitats were not included in the field notes provided (refer to **Appendix A**).

**Table 3-1: Wildlife Habitats Recorded in 2013**

Type of Wildlife Habitat	Location	Page of Document (refer to Appendix A)
<b>Mature White Pine and Red Spruce Forest</b>	Unknown (UTM co-ordinates not provided)	6
<b>Mature White Spruce – White Cedar Moist Woods</b>	Unknown (UTM co-ordinates not provided)	6
<b>Suitable Hog-nosed Snake Habitat</b>	Unknown (UTM co-ordinates not provided)	64

#### 3.2.2 Incidental Wildlife Observations

Stantec grouped incidental wildlife observation records into the following taxonomic categories:

- Birds;
- Mammals;
- Herpetofauna;
- Butterflies / Dragonflies; and
- Other.

This report is generally organized according to the same five (5) taxonomic categories.

When an incidental wildlife observation was made, observers identified the species to the species level, where possible. However, there are several incidences where the species could not be identified further than the family or genus level. A summary of the numbers of identified and unidentified species in each taxonomic category is provided in **Table 3-2** below. Based on the data provided, bird species were the most commonly observed taxonomic category, followed by butterflies, dragonflies and moths. Observer bias may be present in the records (i.e., one observer may be more knowledgeable in identification of birds than in insects) which may influence the number of observations for each taxonomic group.

**Table 3-2: Summary of Incidental Wildlife Observations**

Taxon	No. of Identified Species	No. of Unidentified Species
<b>Birds</b>	145	12
<b>Mammals</b>	15	4
<b>Herpetofauna</b>	30	1
<b>Butterflies, Dragonflies and Moths</b>	68	5
<b>Other</b>	0	5

### 3.2.2.1 Birds

Based on the field notes provided, a total of 144 bird species were incidentally observed by LGL or Stantec during the 2011, 2012 and 2013 field seasons, within either the HIWEC study area or the Route B transmission line study area (**Table 3-3**). Four (4) of these species are Federal Species at Risk: Canada Warbler (*Cardellina pusilla*), Common Nighthawk (*Chordeiles minor*), Olive-sided Flycatcher (*Contopus cooperi*), and Eastern Whip-poor-will (*Caprimulgus vociferus*). Two (2) Provincial Species at Risk, Chimney Swift (*Chaetura pelagica*) and Bobolink (*Dolichonyx oryzivorus*), were also recorded. Where recorded, the locations of these Species At Risk observations in the vicinity of the HIWEC study area are shown on **Figure 3-1**. Additionally, where recorded, the locations of these Species At Risk observations in the vicinity of the Route B Transmission Line study area are shown on **Figure 3-2**.

In addition, a total of ten (10) bird Species of Conservation Concern were recorded incidentally in 2013. These include four (4) species listed as Special Concern under the provincial *Endangered Species Act, 2007*: Bald Eagle (*Haliaeetus leucocephalus*), Black Tern (*Chlidonias niger*), Eastern Wood-pewee (*Contopus virens*) and Yellow Rail (*Coturnicops noveboracensis*). Six (6) provincially rare species, Caspian Tern (*Hydroprogne caspia*), Great Black-backed Gull (*Larus marinus*), Lapland Longspur (*Calcarius lapponicus*), Long-tailed Duck (*Clangula hyemalis*), Prairie Warbler (*Setophaga discolor*) and Ring-necked Grebe (*Podiceps grisegena*), were also recorded. Where recorded, the locations of these Species of Conservation Concern observations in the vicinity of the HIWEC study area are shown on **Figure 3-1**. Additionally, where recorded, the locations of these Species of Conservation concern observations in the vicinity of the Route B Transmission Line study area are shown on **Figure 3-2**.

Stantec provided a map called *160960824\_SignificantObservations\_Wind\_20131205.pdf*. (refer to Appendix A), this map included the location of one (1) Great Blue Heron Heronry and two (2) Osprey stick nests in or within the vicinity of the HIWEC study area. Neither of these are Species At Risk or Species of Conservation Concern.



**Table 3-3: List of Bird Species Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
Accipiter species	N/a	-	-			X
American Bittern	<i>Botaurus lentiginosus</i>	-	-	S4	X	X
American Black Duck	<i>Anas rubripes</i>	-	-	S4	X	X
American Coot	<i>Fulica americana</i>	-	-	S4		X
American Crow	<i>Corvus brachyrhynchos</i>	-	-	S5	X	X
American Goldfinch	<i>Carduelis tristis</i>	-	-	S5	X	
American Kestrel	<i>Falco sparverius</i>	-	-	S4	X	
American Pipit	<i>Anthus rubescens</i>	-	-	S4	X	
American Redstart	<i>Setophaga ruticilla</i>	-	-	S5	X	
American Robin	<i>Turdus migratorius</i>	-	-	S5	X	X
American Tree Sparrow	<i>Spizella arborea</i>	-	-	S4	X	X
American Wigeon	<i>Anas americana</i>	-	-	S4	X	
American Woodcock	<i>Scolopax minor</i>	-	-	S4	X	X
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Special Concern	-	S2	X	X
Bay-breasted Warbler	<i>Setophaga castanea</i>	-	-	S5	X	
Belted Kingfisher	<i>Megaceryle alcyon</i>	-	-	S4	X	X
Black-and-white Warbler	<i>Mniotilta varia</i>	-	-	S5	X	
Black-backed Woodpecker	<i>Picoides arcticus</i>	-	-	S4	X	X
Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	S5	X	X
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	-	-	S5	X	X
Black-throated Blue Warbler	<i>Setophaga caerulescens</i>	-	-	S5	X	
Black-throated Green Warbler	<i>Setophaga virens</i>	-	-	S5	X	X
Blackburnian Warbler	<i>Setophaga fusca</i>	-	-	S5	X	
Black Scoter	<i>Melanitta nigra</i>	-	-	S4	X	
Blackbird species	Unknown	-	-	-	X	
Black Tern	<i>Chlidonias niger</i>	Special Concern	-	S3		X
Blue Jay	<i>Cyanocitta cristata</i>	-	-	S5	X	X
Blue-headed Vireo	<i>Vireo solitarius</i>	-	-	S5	X	X
Bobolink	<i>Dolichonyx oryzivorus</i>	Threatened	-	S4	X	
Bohemian Waxwing	<i>Bombycilla garrulus</i>	-	-	SNA	X	
Broad-winged Hawk	<i>Buteo platypterus</i>	-	-	S5	X	X
Brown Creeper	<i>Certhia americana</i>	-	-	S5	X	X
Brown Thrasher	<i>Toxostoma rufum</i>	-	-	S4	X	
Bufflehead	<i>Bucephala albeola</i>	-	-	S4	X	X
Canada Goose	<i>Branta canadensis</i>	-	-	S5	X	X
Canada Warbler	<i>Wilsonia canadensis</i>	Special Concern	Threatened (Schedule 1)	S4	X	X
Caspian Tern	<i>Hydroprogne caspia</i>	-	-	S3	X	X

**Table 3-3: List of Bird Species Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	-	-	S5	X	
Chimney Swift	<i>Chaetura pelagica</i>	Threatened	-	S4	X	X
Chipping Sparrow	<i>Spizella passerina</i>	-	-	S5	X	
Common Goldeneye	<i>Bucephala clangula</i>	-	-	S5	X	X
Common Grackle	<i>Quiscalus quiscula</i>	-	-	S5	X	X
Common Loon	<i>Gavia immer</i>	-	-	S5	X	X
Common Merganser	<i>Mergus merganser</i>	-	-	S5	X	X
Common Nighthawk	<i>Chordeiles minor</i>	Special Concern	Threatened (Schedule 1)	S4		X
Common Raven	<i>Chordeiles minor</i>	-	-	S5	X	X
Common Redpoll	<i>Carduelis flammea</i>	-	-	S4		X
Common Snipe	<i>Gallinago gallinago</i>	-	-	S5		X
Common Tern	<i>Sterna hirundo</i>	-	-	S5	X	X
Common Yellowthroat	<i>Geothlypis trichas</i>	-	-	S5	X	X
Cooper's Hawk	<i>Accipiter cooperi</i>	-	-	S4	X	X
Dark-eyed Junco	<i>Junco hyemalis</i>	-	-	S5	X	X
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	-	S5	X	X
Downy Woodpecker	<i>Picoides pubescens</i>	-	-	S5	X	X
Duck species	Unknown	-	-	-	X	X
Eastern Kingbird	<i>Tyrannus tyrannus</i>	-	-	S4	X	
Eastern Phoebe	<i>Sayornis phoebe</i>	-	-	S5	X	X
Eastern Whip-poor-will	<i>Caprimulgus vociferus</i>	Threatened	Threatened (Schedule 1)	S4	X	X
Eastern Wood-pewee	<i>Contopus virens</i>	Special Concern	-	S4	X	X
European Starling	<i>Sturnus vulgaris</i>	-	-	SNA	X	
Fox Sparrow	<i>Passerella iliaca</i>	-	-	S4		X
Golden-crowned Kinglet	<i>Regulus satrapa</i>	-	-	S5	X	
Gray Catbird	<i>Dumetella carolinensis</i>	-	-	S4	X	
Great Black-backed Gull	<i>Larus marinus</i>	-	-	S2	X	
Great Blue Heron	<i>Ardea herodias</i>	-	-	S4	X	X
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	-	-	S4	X	
Great Gray Owl	<i>Strix nebulosa</i>	-	-	S4		X
Greater Yellowlegs	<i>Tringa melanoleuca</i>	-	-	S4	X	X
Green-winged Teal	<i>Anas crecca</i>	-	-	S4		X
Gull species	Unknown	-	-	-	X	
Hairy Woodpecker	<i>Picoides villosus</i>	-	-	S5	X	X
Hermit Thrush	<i>Catharus guttatus</i>	-	-	S5	X	X
Herring Gull	<i>Larus argentatus</i>	-	-	S5	X	X
Hooded Merganser	<i>Lophodytes cucullatus</i>	-	-	S5	X	X



**Table 3-3: List of Bird Species Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
Horned Lark	<i>Eremophila alpestris</i>	-	-	S5	X	X
Killdeer	<i>Charadrius vociferus</i>	-	-	S5	X	X
Lapland Longspur	<i>Calcarius lapponicus</i>	-	-	S3	X	
Least Flycatcher	<i>Empidonax minimus</i>	-	-	S4	X	
Lesser Scaup	<i>Aythya affinis</i>	-	-	S4	X	
Lesser Yellowlegs	<i>Tringa flavipes</i>	-	-	S4		X
Lincoln's Sparrow	<i>Melospiza lincolni</i>	-	-	S5	X	
Long-tailed Duck	<i>Clangula hyemalis</i>	-	-	S3	X	X
Magnolia Warbler	<i>Setophaga magnolia</i>	-	-	S5	X	
Mallard	<i>Anas platyrhynchos</i>	-	-	S5	X	X
Merlin	<i>Falco columbarius</i>	-	-	S5	X	X
Mourning Warbler	<i>Geothlypis philadelphia</i>	-	-	S4		X
Nashville Warbler	<i>Oreothlypis ruficapilla</i>	-	-	S5	X	
Northern Flicker	<i>Colaptes auratus</i>	-	-	S4	X	X
Northern Goshawk	<i>Accipiter gentilis atricapillus</i>	-	-	S4	X	X
Northern Harrier	<i>Circus cyaneus</i>	-	-	S4	X	X
Northern Parula	<i>Parula americana</i>	-	-	S4	X	
Northern Shrike	<i>Lanius excubitor</i>	-	-	S4	X	X
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Special Concern	Threatened (Schedule 1)	S4		X
Orange-crowned Warbler	<i>Oreothlypis celata</i>	-	-	S4	X	
Osprey	<i>Pandion haliaetus</i>	-	-	S5	X	X
Ovenbird	<i>Seiurus aurocapillus</i>	-	-	S4	X	X
Owl species	Unknown	-	-	-	X	X
Palm Warbler	<i>Dendroica palmarum</i>	-	-	S5	X	
Passerine species	Unknown	-	-	-	X	
Pectoral Sandpiper	<i>Calidris melanotos</i>	-	-	SH	X	
Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	S5	X	X
Pine Siskin	<i>Carduelis pinus</i>	-	-	S4	X	
Pine Warbler	<i>Setophaga pinus</i>	-	-	S5	X	X
Plover species	Unknown	-	-	-	X	
Prairie Warbler	<i>Setophaga discolor</i>	-	-	S3		X
Purple Finch	<i>Carpodacus purpureus</i>	-	-	S4	X	X
Red-breasted Merganser	<i>Mergus serrator</i>	-	-	S4	X	
Red-breasted Nuthatch	<i>Sitta canadensis</i>	-	-	S5	X	
Redhead	<i>Aythya americana</i>	-	-	S5	X	
Red-necked Grebe	<i>Podiceps grisegena</i>	-	-	S3B, S4N		X
Red-tailed Hawk	<i>Buteo jamaicensis</i>	-	-	S4	X	X

**Table 3-3: List of Bird Species Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
Red-shouldered Hawk	<i>Buteo lineatus</i>	-	-	S4		X
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	-	-	S4	X	
Ring-billed Gull	<i>Larus delawarensis</i>	-	-	S5	X	X
Ring-necked Duck	<i>Aythya collaris</i>	-	-	S5	X	X
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	-	-	S4	X	
Rock Pigeon	<i>Columba livia</i>	-	-	SNA		X
Ruby-crowned Kinglet	<i>Regulus calendula</i>	-	-	S4	X	X
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	-	-	S5	X	X
Ruffed Grouse	<i>Bonasa umbellus</i>	-	-	S4	X	X
Sandhill Crane	<i>Grus canadensis</i>	-	-	S5	X	X
Sandpiper species	Unknown	-	-	-	X	X
Scarlet Tanager	<i>Piranga olivacea</i>	-	-	S4		X
Scaup species	Unknown	-	-	-	X	X
Sedge Wren	<i>Cistothorus platensis</i>	-	-	S4		X
Sharp-shinned Hawk	<i>Accipiter striatus</i>	-	-	S5	X	X
Shorebird species	Unknown	-	-	-	X	
Slate-coloured Junco or Dark eyed Junco	<i>Junco hyemalis</i>	-	-	S5	X	
Snow Bunting	<i>Plectrophenax nivalis</i>	-	-	SNA	X	X
Snow Goose	<i>Chen caerulescens</i>	-	-	S5		X
Song Sparrow	<i>Melospiza melodia</i>	-	-	S5	X	X
Spotted Sandpiper	<i>Actitis macularius</i>	-	-	S5	X	X
Spruce Grouse	<i>Falcipennis canadensis</i>	-	-	S5	X	X
Surf Scoter	<i>Melanitta perspicillata</i>	-	-	S4	X	
Swainson's Thrush	<i>Catharus ustulatus</i>	-	-	S4	X	X
Three-toed Woodpecker	<i>Picoides tridactylus</i>	-	-	S4	X	
Tree Swallow	<i>Tachycineta bicolor</i>	-	-	S4	X	X
Trumpeter Swan	<i>Cygnus buccinator</i>	-	-	S4		X
Tundra Swan	<i>Cygnus columbianus</i>	-	-	S4	X	
Turkey Vulture	<i>Cathartes aura</i>	-	-	S5	X	X
Upland Sandpiper	<i>Bartramia longicauda</i>	-	-	S4		X
Veery	<i>Catharus fuscescens</i>	-	-	S4	X	X
Vesper Sparrow	<i>Poocetes gramineus</i>	-	-	S4	X	X
Virginia Rail	<i>Rallus limicola</i>	-	-	S5	X	X
Warbler species	Unknown	-	-	-	X	
Waxwing species	Unknown	-	-	-	X	
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	-	-	S4	X	
White-throated Sparrow	<i>Zonotrichia albicollis</i>	-	-	S5	X	X



**Table 3-3: List of Bird Species Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
White Winged Scoter	<i>Melanitta fusca</i>			S4	X	X
Wilson's Snipe	<i>Gallinago delicata</i>	-	-	S5	X	X
Winter Wren	<i>Troglodytes troglodytes</i>	-	-	S5	X	
Wood Duck	<i>Aix sponsa</i>	-	-	S5	X	X
Wood Thrush	<i>Hylocichla mustelina</i>	-	-	S4		X
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	-	-	S5	X	X
Yellow Rail	<i>Coturnicops noveboracensis</i>	Special Concern	-	S4		X
Yellow-rumped Warbler	<i>Setophaga coronata</i>	-	-	S5	X	X

- Notes:
- ESA Status:** The Endangered Species Act 2007 (ESA) protects Species at Risk (Threatened and Endangered) at a provincial level.
  - SARA Status:** The Species at Risk Act (SARA) protects Species at Risk (Special Concern, Threatened and Endangered) at a federal level.
  - S-rank:** The natural heritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follows:
    - S1 Extremely rare in Ontario; usually 5 or fewer occurrences in the province or very few remaining individuals; often especially vulnerable to extirpation.
    - S2 Very rare in Ontario; usually between 5 and 20 occurrences in the province or with many individuals in fewer occurrences; often susceptible to extirpation.
    - S3 Rare to uncommon in Ontario; usually between 20 and 100 occurrences in the province; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances. Most species with an S3 rank are assigned to the watch list, unless they have a relatively high global rank.
    - S4 Common and apparently secure in Ontario; usually with more than 100 occurrences in the province.
    - S5 Very common and demonstrably secure in Ontario.
    - SH Possibly Extirpated (Historical). Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years.
    - S#S# A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community.
    - S#? Rank uncertain.



Figure 3-1: Important Wildlife Observations Wind Energy Centre

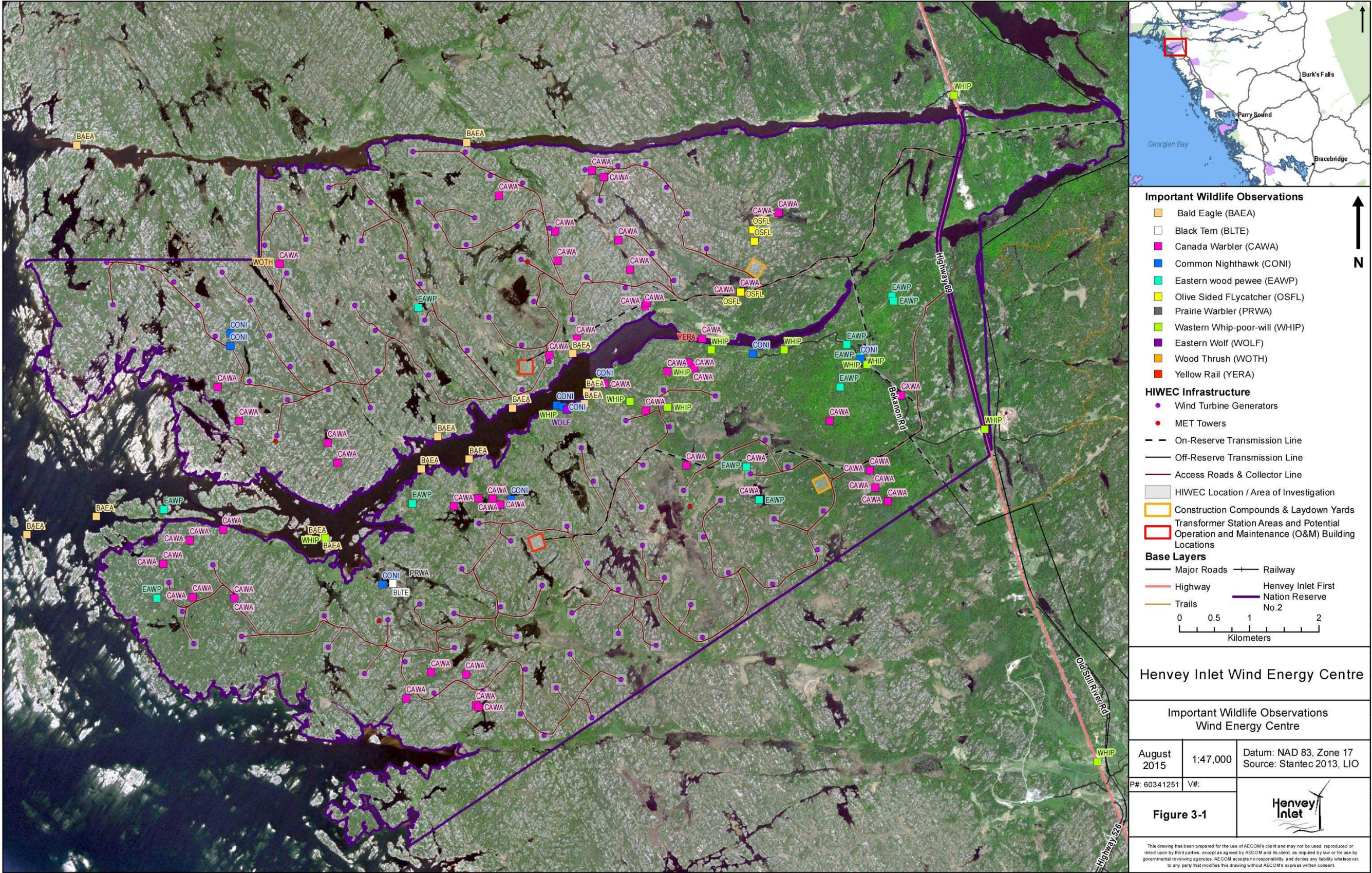
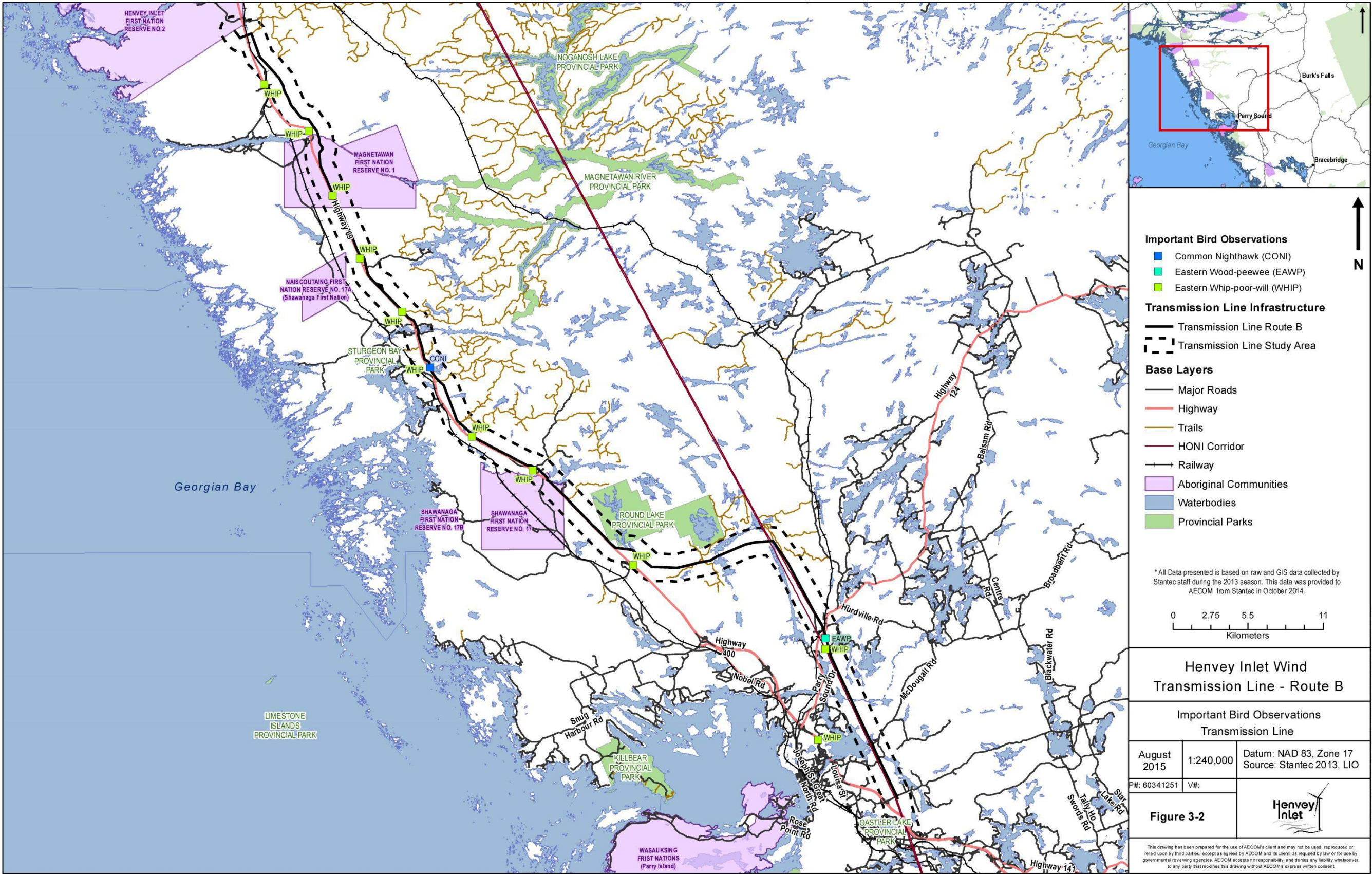




Figure 3-2: Important Bird Observations Transmission Line Route B





### 3.2.2.2 Mammals

Based on the field notes provided, a total of 15 mammal species, as well as four (4) mammals not identified to the species level, were incidentally observed by LGL or Stantec during the 2011, 2012 or 2013 field seasons, within either the HIWEC study area or the Route B transmission line study area (**Table 3-4**). None of these are Species at Risk; however, one (1) Species of Conservation Concern was recorded. Eastern Wolf (*Canis lupus lycaon*) is listed as Special Concern under both the provincial *Endangered Species Act, 2007* and the Federal *Species At Risk Act*. Where recorded, the locations of these Species of Conservation Concern observations in the vicinity of the HIWEC study area are shown on **Figure 3-1**.

**Table 3-4: List of Mammal Species Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
American Black Bear	<i>Ursus americanus</i>	-	-	S5		X
Beaver	<i>Castor canadensis</i>	-	-	S5		X
Eastern Chipmunk	<i>Tamias striatus</i>	-	-	S5		X
Eastern Wolf	<i>Canis lupus lycaon</i>	Special Concern	Special Concern (Schedule 1)	S4		X
Northern Flying Squirrel	<i>Glaucomys sabrinus</i>	-	-	S5		X
Long-tailed Weasel	<i>Mustela frenata</i>	-	-	S4		X
Mole species	Unknown	-	-	-		X
Moose	<i>Alces americanus</i>	-	-	S5		X
Muskrat	<i>Ondatra zibethicus</i>	-	-	S5		X
Mustelid species	Unknown	-	-	-		X
Myotis species	Unknown	-	-	-		X
River Otter	<i>Lontra canadensis</i>	-	-	S5		X
Northern Raccoon	<i>Procyon lotor</i>	-	-	S5		X
Porcupine	<i>Erethizon dorsatum</i>	-	-	S5		X
Red Fox	<i>Vulpes vulpes</i>	-	-	S5		X
Red Squirrel	<i>Tamiasciurus hudsonicus</i>	-	-	S5		X
Snowshoe Hare	<i>Lepus americanus</i>	-	-	S5		X
Weasel species	Unknown	-	-	-		X
White-tailed Deer	<i>Odocoileus virginianus</i>	-	-	S5		X

- Notes: 1. **ESA Status:** The Endangered Species Act 2007 (ESA) protects Species at Risk (Threatened and Endangered) at a provincial level.
2. **SARA Status:** The Species at Risk Act (SARA) protects Species at Risk (Special Concern, Threatened and Endangered) at a federal level.
3. **S-rank:** The natural heritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follows:
- S1 Extremely rare in Ontario; usually 5 or fewer occurrences in the province or very few remaining individuals; often especially vulnerable to extirpation.
  - S2 Very rare in Ontario; usually between 5 and 20 occurrences in the province or with many individuals in fewer occurrences; often susceptible to extirpation.
  - S3 Rare to uncommon in Ontario; usually between 20 and 100 occurrences in the province; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances. Most species with an S3 rank are assigned to the watch list, unless they have a relatively high global rank.
  - S4 Common and apparently secure in Ontario; usually with more than 100 occurrences in the province.
  - S5 Very common and demonstrably secure in Ontario.
  - SH Possibly Extirpated (Historical). Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years.
  - S#S# A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community.
  - S#? Rank uncertain.



### 3.2.2.3 Herpetofauna

Based on the field notes provided, a total of 30 herpetofaunal species, as well as one (1) salamander not identified to the species level, were incidentally observed by LGL or Stantec during the 2011, 2012 and 2013 field seasons, within either the HIWEC study area or the Route B transmission line study area (**Table 3-5**). These include three (3) Federal Species at Risk, Blanding's Turtle (*Emydoidea blandingii*), Massasauga Rattlesnake (*Sistrurus catenatus* pop. 1) and a restricted species. Blanding's Turtle and Massasauga Rattlesnake are both listed as Threatened under the federal *Species at Risk Act*. In addition, two (2) Species of Conservation Concern were recorded. Five-lined Skink (*Plestiodon fasciatus* pop. 2) and Eastern Milksnake (*Lampropeltis triangulum*) are both listed as Special Concern under both the provincial *Endangered Species Act, 2007* and the federal *Species At Risk Act*. Records of these Species at Risk and Species of Conservation Concern are further discussed and mapped in the following technical reports:

- *Summary of 2011, 2012 and 2013 Herpetological Surveys – Henvey Inlet Wind Energy Centre Study Area (AECOM, 2015a)*; and
- *Summary of 2013 Herpetological Surveys – Route B Transmission Line Study Area (AECOM, 2015b)*.

**Table 3-5: List of Herpetofaunal Species Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
American Bullfrog	<i>Lithobates catesbeianus</i>	-	-	S4	X	X
American Toad	<i>Anaxyrus americanus</i>	-	-	S5	X	X
Blanding's Turtle	<i>Emydoidea blandingii</i>	Threatened	Threatened (Schedule 1)	S3	X	X
Blue-spotted Salamander	<i>Ambystoma laterale</i>	-	-	S4	X	
Dekay's Brownsnake	<i>Storeria dekayi</i>	-	-	S5	X	X
Eastern Foxsnake	<i>Pantherophis gloydi</i>	Threatened	Endangered (Schedule 1)	S2	X	X
Eastern Gartersnake	<i>Thamnophis sirtalis sirtalis</i>	-	-	S5	X	X
Eastern Milksnake	<i>Lampropeltis triangulum</i>	Special Concern	Special Concern (Schedule 1)	S3		X
Eastern Musk Turtle	<i>Sternotherus odouratus</i>	Special Concern	Special Concern (Schedule 1)	S3	X	
Red-spotted Newt	<i>Notophthalmus viridescens viridescens</i>	-	-	S5	X	
Eastern Red-backed Salamander	<i>Plethodon cinereus</i>	-	-	S5	X	X
Five-lined Skink	<i>Plestiodon fasciatus</i> pop. 2	Special Concern	Special Concern (Schedule 1)	S3	X	X
Gray Treefrog	<i>Hyla versicolor</i>	-	-	S5	X	X
Green Frog	<i>Lithobates clamitans</i>	-	-	S5	X	X
Massasauga Rattlesnake	<i>Sistrurus catenatus</i> pop. 1	Threatened	Threatened (Schedule 1)	S3	X	X
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	-	-	S4	X	X
Mink Frog	<i>Lithobates septentrionalis</i>	-	-	S5	X	X
Northern Leopard Frog	<i>Lithobates pipiens</i>	-	-	S5	X	X
Northern Map Turtle	<i>Graptemys geographica</i>	Special Concern	Special Concern (Schedule 1)	S3	X	
Northern Watersnake	<i>Nerodia sipedon sipedon</i>	-	-	S5	X	X
Pickerel Frog	<i>Lithobates palustris</i>	-	-	S4	X	
Red-bellied Snake	<i>Storeria occipitomaculata</i>	-	-	S5	X	X

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
<b>Restricted Species</b>						
Ring-necked Snake	<i>Diadophis punctatus</i>	-	-	S4	X	
Salamander species	Unknown	-	-	-		X
Smooth Greensnake	<i>Opheodrys vernalis</i>	-	-	S4	X	X
Snapping Turtle	<i>Chelydra serpentina</i>	Special Concern	Special Concern (Schedule 1)	S3	X	X
Spotted Salamander	<i>Ambystoma maculatum</i>	-	-	S4	X	X
Spring Peeper	<i>Pseudacris crucifer</i>	-	-	S5	X	X
Western Chorus Frog	<i>Pseudacris triseriata</i> pop. 1	-	Threatened (Schedule 1)	S3	X	
Wood Frog	<i>Lithobates sylvaticus</i>	-	-	S5	X	X

- Notes: 1. **ESA Status:** The Endangered Species Act 2007 (ESA) protects Species at Risk (Threatened and Endangered) at a provincial level.
2. **SARA Status:** The Species at Risk Act (SARA) protects Species at Risk (Special Concern, Threatened and Endangered) at a federal level.
3. **S-rank:** The natural heritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follows:
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- S3 Rare to uncommon in Ontario; usually between 20 and 100 occurrences in the province; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances. Most species with an S3 rank are assigned to the watch list, unless they have a relatively high global rank.
- S4 Common and apparently secure in Ontario; usually with more than 100 occurrences in the province.
- S5 Very common and demonstrably secure in Ontario.
- SH Possibly Extirpated (Historical). Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years.
- S#S# A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community.
- S#? Rank uncertain.

### 3.2.2.4 Butterflies, Dragonflies and Moths

Based on the field notes provided, a total of 68 butterfly, dragonfly and moth species, as well as four (4) butterflies and dragonflies not identified to the species level, were incidentally observed by LGL or Stantec during the 2011, 2012 or 2013 field seasons, within either the HIWEC study area or the Route B transmission line study area (Table 3-6). None of these are Species at Risk; however, four (4) Species of Conservation Concern were recorded. Monarch (*Danaus plexippus*) is listed as Special Concern under both the provincial *Endangered Species Act, 2007* and the federal *Species At Risk Act*. Horned Clubtail (*Arigomphus cornutus*), Mottled Darner (*Aeshna clepsydra*) and Pine Imperial Moth (*Eacles imperialis pini*) are rare in the province of Ontario.

**Table 3-6: List of Butterfly, Dragonfly and Moth Species Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
American Copper	<i>Lycaena phlaeas</i>	-	-	S5		X
American Emerald	<i>Cordulia shurtleffii</i>	-	-	S5		X
American Lady	<i>Vanessa virginiensis</i>	-	-	S5		X
Aphrodite Fritillary	<i>Speyeria aphrodite</i>	-	-	S5		X
Arctic Skipper	<i>Carterocephalus palaemon</i>	-	-	S5		X
Aurora Damsel	<i>Chromagrion conditum</i>	-	-	S5		X
Black-shouldered Spinyleg	<i>Dromogomphus spinosus</i>	-	-	S5		X



**Table 3-6: List of Butterfly, Dragonfly and Moth Species Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
Black-tipped Darner	<i>Aeshna tuberculifera</i>	-	-	S4		X
Cabbage White	<i>Pieris rapae</i>	-	-	SNA		X
Canada Darner	<i>Aeshna canadensis</i>	-	-	S5		X
Chalk-fronted Corporal	<i>Ladona julia</i>	-	-	S5		X
Comma species	Unknown	-	-	-		X
Common Baskettail	<i>Epithea cynosura</i>	-	-	S5		X
Common Buckeye	<i>Junonia coenia</i>	-	-	SNA		X
Common Green Darner	<i>Anax junius</i>	-	-	S5		X
Common Roadside Skipper	<i>Amblyscirtes vialis</i>	-	-	S4		X
Common Whitetail	<i>Plathemis lydia</i>	-	-	S5		X
Compton Tortoiseshell	<i>Nymphalis l-album</i>	-	-	S5		X
Coral Hairstreak	<i>Satyrus titus</i>	-	-	S5		X
Crossline Skipper	<i>Polites origenes</i>	-	-	S4		X
Damselfly species	Unknown	-	-	-		X
Dragonhunter	<i>Hagenius brevistylus</i>	-	-	S5		X
Dreamy Duskywing	<i>Erynnis icelus</i>	-	-	S5		X
Dusky Clubtail	<i>Gomphus spicatus</i>	-	-	S5		X
Eastern Comma	<i>Polygonia comma</i>	-	-	S5		X
Eastern Pine Elfin	<i>Callophrys niphon</i>	-	-	S5		X
Eastern Tent Caterpillar Moth	<i>Malacosoma americanum</i>	-	-	S5		X
Eastern Tiger Swallowtail	<i>Papilio glaucus</i>	-	-	S5		X
Ebony Jewelwing	<i>Calopteryx maculata</i>	-	-	S5		X
Elegant Spreadwing	<i>Lestes inaequalis</i>	-	-	S4		X
Elfin Skimmer	<i>Nannothemis bella</i>	-	-	S4		X
Emerald Dragonfly species	Unknown	-	-	-		X
Four-spotted Skimmer	<i>Libellula quadrimaculata</i>	-	-	S5		X
Frosted Whiteface	<i>Leucorrhinia frigida</i>	-	-	S5		X
Green Comma	<i>Polygonia faunus</i>	-	-	S4		X
Harvester	<i>Feniseca tarquinius</i>	-	-	S4		X
Henry's Elfin	<i>Callophrys henrici</i>	-	-	S4		X
Hobomok Skipper	<i>Poanes hobomok</i>	-	-	S5		X
Horned Clubtail	<i>Argomphus cornutus</i>	-	-	S3		X
Hudsonian Whiteface	<i>Leucorrhinia hudsonica</i>	-	-	S5		X
Illinois River Cruiser	<i>Macromia illinoensis</i>	-	-	S4		X
Indian Skipper	<i>Hesperia sassacus</i>	-	-	S4		X
Isabella Tiger Moth	<i>Pyrrharctia isabella</i>	-	-	S5		X
Juvenal's Duskywing	<i>Erynnis juvenalis</i>	-	-	S5		X
Leonard's Skipper	<i>Hesperia leonardus</i>	-	-	S4		X
Long Dash Skipper	<i>Polites mystic</i>	-	-	S5		X
Luna Moth	<i>Actias luna</i>	-	-	S4		X
Monarch	<i>Danaus plexippus</i>	Special Concern	Special Concern (Schedule 1)	S2N, S4B		X
Mottled Darner	<i>Aeshna clepsydra</i>	-	-	S3		X
Mourning Cloak	<i>Nymphalis antiopa</i>	-	-	S5		X
Northern/Vernal Bluet	unknown	-	-	-		X

**Table 3-6: List of Butterfly, Dragonfly and Moth Species Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
Northern Crescent	<i>Phyciodes cocyta</i>	-	-	S5		X
Northern Pearly-Eye	<i>Enodia anthedon</i>	-	-	S5		X
Pine Imperial Moth	<i>Eacles imperialis pini</i>	-	-	S3?		X
Powdered Dancer	<i>Argia moesta</i>	-	-	S5		X
Prince Baskettail	<i>Epithea princeps</i>	-	-	S5		X
Racket-tailed Emerald	<i>Dorocordulia libera</i>	-	-	S5		X
Red-spotted Purple	<i>Limenitis arthemis astyanax</i>	-	-	S5		X
Sedge Sprite	<i>Nehalennia irene</i>	-	-	S5		X
Shadow Darner	<i>Aeshna umbrosa</i>	-	-	S5		X
Silvery Blue	<i>Glaucopsyche lygdamus</i>	-	-	S5		X
Somatochlora species	Unknown	-	-	-		X
Sphagnum sprite	<i>Nehalennia gracilis</i>	-	-	S4		X
Spotted Slender Spreadwing	Unknown	-	-	-		X
Spring Azure	<i>Celastrina ladon</i>	-	-	SU		X
Stream Cruiser	<i>Didymops transversa</i>	-	-	S4		X
Summer Azure	<i>Celastrina neglecta</i>	-	-	S5		X
Sweetflag Spreadwing	<i>Lestes forcipatus</i>	-	-	S4		X
Twelve-spotted Skimmer	<i>Libellula pulchella</i>	-	-	S5		X
Two-spotted Skipper	<i>Euphyes bimacula</i>	-	-	S4		X
Variable Darner	<i>Aeshna interrupta</i>	-	-	S5		X
Viceroy	<i>Limenitis archippus</i>	-	-	S5		X

- Notes: 1. **ESA Status:** The Endangered Species Act 2007 (ESA) protects Species at Risk (Threatened and Endangered) at a provincial level.
2. **SARA Status:** The Species at Risk Act (SARA) protects Species at Risk (Special Concern, Threatened and Endangered) at a federal level.
3. **S-rank:** The natural heritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follows:
- S1 Extremely rare in Ontario; usually 5 or fewer occurrences in the province or very few remaining individuals; often especially vulnerable to extirpation.
  - S2 Very rare in Ontario; usually between 5 and 20 occurrences in the province or with many individuals in fewer occurrences; often susceptible to extirpation.
  - S3 Rare to uncommon in Ontario; usually between 20 and 100 occurrences in the province; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances. Most species with an S3 rank are assigned to the watch list, unless they have a relatively high global rank.
  - S4 Common and apparently secure in Ontario; usually with more than 100 occurrences in the province.
  - S5 Very common and demonstrably secure in Ontario.
  - SH Possibly Extirpated (Historical). Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years.
  - S#S# A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community.
  - S#? Rank uncertain.

### 3.2.2.5 Other Wildlife

Based on the field notes provided, a total of four (4) other wildlife categories not identified to the species level were incidentally observed by LGL or Stantec during the 2011, 2012 and 2013 field seasons, within either the HIWEC study area or the Route B transmission line study area (**Table 3-7**). None of these are Species at Risk or Species of Conservation Concern.



**Table 3-7: List of Other Wildlife Incidentally Observed**

Common Name	Scientific Name	ESA Status <sup>1</sup>	SARA Status <sup>2</sup>	S-rank <sup>3</sup>	Observed by LGL	Observed by Stantec
Antlion	Unknown <i>Myrmeleontidae</i> species	-	-	-		X
Bumblebees	Unknown <i>Bombus</i> species	-	-	-		X
Bee Fly Species	Unknown	-	-	-		X
Firefly Species	Unknown	-	-	-		X

- Notes: 1. **ESA Status:** The Endangered Species Act 2007 (ESA) protects Species at Risk (Threatened and Endangered) at a provincial level.
2. **SARA Status:** The Species at Risk Act (SARA) protects Species at Risk (Special Concern, Threatened and Endangered) at a federal level.
3. **S-rank:** The natural heritage provincial ranking system (provincial S-rank) is used by the MNRF Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follows:
- S1 Extremely rare in Ontario; usually 5 or fewer occurrences in the province or very few remaining individuals; often especially vulnerable to extirpation.
- S2 Very rare in Ontario; usually between 5 and 20 occurrences in the province or with many individuals in fewer occurrences; often susceptible to extirpation.
- S3 Rare to uncommon in Ontario; usually between 20 and 100 occurrences in the province; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances. Most species with an S3 rank are assigned to the watch list, unless they have a relatively high global rank.
- S4 Common and apparently secure in Ontario; usually with more than 100 occurrences in the province.
- S5 Very common and demonstrably secure in Ontario.
- SH Possibly Extirpated (Historical). Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years.
- S#S# A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community.
- S#? Rank uncertain.

## 4. Summary

Stantec recorded incidental wildlife observations during the 2013 field season within either the HIWEC study area or Route B Transmission Line study area. These included:

- A total of 106 bird species, including four (4) Federal Species at Risk (Canada Warbler, Common Nighthawk, Olive-sided Flycatcher and Eastern Whip-poor-will) and eight (8) Species of Conservation Concern (Bald Eagle, Black Tern, Eastern Wood-pewee, Yellow Rail, Caspian Tern, Long-tailed Duck, Prairie Warbler and Red-necked Grebe).
- A total of 16 mammal species, including one (1) Species of Conservation Concern (Eastern Wolf).
- A total of 23 herpetofaunal species, including three (3) Federal Species at Risk (Blanding's Turtle, Eastern Foxsnake and Massasauga Rattlesnake) and three (3) Species of Conservation Concern (Five-lined Skink, Snapping Turtle and Eastern Milksnake).
- A total of 68 butterfly, dragonfly and moth species, including four (4) Species of Conservation Concern (Monarch, Horned Clubtail, Mottled Darner and Pine Imperial Moth).

LGL recorded incidental wildlife observations during the 2011 and 2012 field seasons within the HIWEC study area or Route B Transmission Line study area. These included:

- A total of 133 bird species, including two (2) Federal Species at Risk (Canada Warbler and Eastern Whip-poor will ) and two (2) Species of Conservation Concern (Bald Eagle and Eastern Wood-pewee)
- A total of 28 herpetofaunal species, including three (3) Federal Species at Risk (Blanding's Turtle, Eastern Foxsnake, Massasauga Rattlesnake and Western Chorus Frog and four (4) Species of Conservation Concern (Eastern Musk Turtle, Five-lined Skink, Northern Map Turtle and Snapping Turtle)



## 5. Assumptions and Clarification

The following are assumptions and clarifications made and / or required by AECOM based on the field notes provided by Stantec in October 2014:

- It is assumed that the majority of the wildlife observation records are from the HIWEC study area based on the UTM co-ordinates that were recorded on the field notes.
- The bird species code “MYWA” recorded on field sheets was assumed to be Myrtle Warbler (*Setophaga coronata*). However, the currently accepted name for this species is Yellow-rumped Warbler (*Dendroica coronata*). Therefore records of Myrtle Warbler are shown as Yellow-rumped Warbler herein. Stantec provided comments to AECOM on February 26, 2015 that confirmed this assumption.
- The bird species code “WYWA” was interpreted to be Wilson’s Warbler (*Wilsonia pusilla*). Stantec provided comments to AECOM on February 26, 2015 that indicated that the code WYWA was unknown, therefore the species unknown.
- Stantec recorded “*Myotis* sp.” on the field notes provided. Stantec provided comments to AECOM on February 26, 2015 that confirmed that this observation could be of any Ontario *Myotis* species.
- Stantec recorded “Northern Vernal Bluet” on the field notes provided but there is no known species having this common name. Stantec provided comments to AECOM on February 26, 2015 that confirmed that this observation was of a Northern / Vernal Bluet complex.
- Stantec recorded “Spotted Slender Spreadwing” on the field notes provided but there is no known species having this common name. This record may have been either Spotted Spreadwing (*Lestes congener*) or Slender Spreadwing (*Lestes rectangularis*). The species for this record is treated as unknown herein as it is unclear which of these two (2) species the observer meant to record. Stantec provided comments to AECOM on February 26, 2015 that confirmed that either species may have been observed.

## 6. References

AECOM, 2015a:

Summary of 2011, 2012 and 2013 Herpetological Surveys – Henvey Inlet Wind Energy Centre Study Area.  
Prepared for Henvey Inlet Wind LP.

AECOM, 2015b:

Summary of 2013 Herpetological Surveys – Route B Transmission Line Study Area. Prepared for Henvey Inlet Wind LP.

Stantec Consulting Ltd., 2013:

2013 Terrestrial Survey Work Program. Prepared for Nigig Power Corp., 25 p.



# Appendix A

## Stantec 2013 Field Notes and Documentation

**Stantec**

Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number: 16100824Project Name: NB, 9Date / Time: Apr 9, 13Field Personnel: RA NB**Weather Conditions:**

Temp:

4°C

Wind:

2-3 W

Cloud:

low

PPT:

/

PPT in last 24 hrs:

Rain

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO	<p>River Otter near Station 1 ② 9:45am</p> <p>River Otter 1-at Station 2 at 3pm</p> <p>Muskat- Bone fragments found.</p>	<p>Trails =</p> <p>Moose - E. Wolf -</p>	<p>Parapike Den Discovered</p>	

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

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**Stantec**

Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-8050  
Fax: (519) 836-2493

1 dam -  
**Wildlife Habitat and Incidental Wildlife  
Observation Form**

Project Number: 160960824

Project Name: Nigiz

Date / Time: Apr 16, 13

Field Personnel: BH BM

**Weather Conditions:**

Temp:

5C-7

Wind:

1-4 W

Cloud:

100-40

PPT:

/

PPT in last 24 hrs:

RAIN

**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, OP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO FOBP - VO YBSA - VO NOFL - VO KILL - VO ATSP - FE HETH - OB				

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

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Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: NigigDate / Time: Apr 17, 2013Field Personnel: B. Holden B. Miller

Weather Conditions:

Temp:

9°C

Wind:

4-ESE

Cloud:

0-35

PPT:

/

PPT in last 24 hrs:

/

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

W-4pm

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, OP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i>  Several SACK feeding along Inlet.  <u>MYWA.</u>	<u>River Otter-OB</u>  <u>Mease -Scat</u>		<u>Mourning Dove-OB</u> <u>Cemma sp. -OB</u>	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

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Stantec Consulting Ltd.  
70 Southington Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number: 160960824Project Name: NigigDate / Time: Apr 22, 13Field Personnel: BA BM

Weather Conditions:

Temp:

10C-14C

Wind:

3-4S

Cloud:

0-20%

PPT:

/

PPT in last 24 hrs:

/**Wildlife Habitat**11am - 7pm

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

utm -337 Mature Red/White Pine + Red Spruce  
338 - Mature white spruce - white cedar Moist woods

OBSCENE  
LATE WINTER  
MOUSE

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO PUF1-OB BEK1-OB GUTE-OB WAPU-OB RMDV-OB BLER-OB	WT Deer-4-OB Mouse-TK Am. Beaver-OP	BLANDING'S TURTLE-17 0528097 5077355 Large Adult. Photos	Mourning Cloak-OB Compton's Tortoise-OB -OB	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)


Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

REV: May, 07 Form 006

7am - 5pm

 <b>Stantec</b>	Stantec Consulting Ltd. 70 Southgate Drive Guelph, Ontario, Canada N1G 4P5 Tel: (519) 836-6050 Fax: (519) 836-2493		<b>Wildlife Habitat and Incidental Wildlife Observation Form</b>		
	Project Number: <u>160960824</u>		Project Name: <u>Nigig</u>		
Date / Time: <u>Apr 23, 13</u>		Field Personnel: <u>BH</u> <u>BM</u>			
<b>Weather Conditions:</b>	Temp: <u>7°C</u>	Wind:	Cloud: <u>25-</u>	PPT:	PPT in last 24 hrs: <u>/</u>

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO WPWA-OB SAER-OB  HOLA-OB CATE-OB	Am. Beaver - 2 OBS. along Honey Inlet.	Large Suspected BULLFROG seen on shore of the Inlet.	Marmoset -OB.	

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

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**Stantec**

Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number: 160960824Project Name: Hervey/NigigDate / Time: Apr 30/13Field Personnel: N. Burckhardt, S. Richer**Weather Conditions:**

Temp:

19°C

Wind:

3-beakart

Cloud:

100% - 15%

PPT:

none

PPT in last 24 hrs:

4-5mm**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> upland sandpiper - South shore of inlet ~ 50m E of Joe's cabin.	mole tunnels on road - Bear ~ 2-3 years old on island 3/4's of the way out the inlet	Blundings turtle - 522 671, adult 507 4966 snapping turtle - 522 773, 507 5058 snapping turtle - 522 514, 507 4861 also out above station ~ 10 painted turtles. 5-lined skink - adult ♀ - 522 468, 507 5992	missing part of rear right foot and part of tail	

Quality Control: This form is complete (✓) & legible (✓).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

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**Stantec**

Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-8050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Nigig Henvey InletDate / Time: Wed May 1st 2013Field Personnel: Nathan Burne & Sarah Richer**Weather Conditions:**

Temp:

18

Wind:

Leew 3-4

Cloud:

15-80%

PPT:

0

PPT in last 24 hrs:

0throughout day**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> COLO - OB, VO GBHE - TK Long-tailed Duck - 2 1m, 1A, OB COME - 1 OB, male COCO - OB, 1 BTNW - 1, VO EAPH - nesting on cabin at Hawk	Moose female on Beckman Road (OB) Beaver - in (OB) main channel of Henvey Inlet Red squirrel - OB Beckman Road Otter, 2, OB	Blanding's Turtle - OB (adult) 525556 (17T) 5073401 (M003) Red-backed Salamander Transect 13, OB NLFR - VO SPPE - VO WOFR - VO? approx 5 times in a 5 minute period Green Frog - OB Gray Tree Frog 1 - VO Eastern Garter Snake OB (?)	Mourning Cloak 3, OB Eastern Pine Elf - 1, OB Spring Azure (4) - OB	Bumblebees Trout lilies for the 1st time this season are in bloom today

Quality Control: This form is complete (✓) &amp; legible (✓).

Signature: [Signature] (Field Personnel)Signature: [Signature] (Project Manager)Page 1 of 1

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70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Nigig Henvey InletDate / Time: Thurs May 2 2013Field Personnel: Sarah Richer / Nathan Burnett**Weather Conditions:**

Temp:

20

Wind:

Beauf 2-3

Cloud:

10

PPT:

0

PPT in last 24 hrs:

0

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> RVGR-1, OB, Flowerpot bay COME-O, OB Broad-winged Hawk at waspot along Beckton Rd.	Murrelet sp-TK (2); Beckton Porcupine, adult OB-Beckton Rd Bear-TK Raccoon-TK Wolf-TK	NLFR-VO SPPE-VO Blanding's Turtle 532316 5078607-OB Blanding's Turtle nest; possibly remains of successful one that hatched on Beckton Rd 529532 5078465	Spring Azure, Mourning Cloak	Spring Beanties

Quality Control: This form is complete (✓) & legible (✓).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

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70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 1609 60824Project Name: Nigig Henvey InletDate / Time: May 3/13 FridayField Personnel: NB, SR

Weather Conditions:	Temp: <u>20°C</u>	Wind: <u>3-4 knots</u>	Cloud: <u>Trace-cirrus</u>	PPT: <u>None</u>	PPT in last 24 hrs: <u>trace last eve.</u>
---------------------	-------------------	------------------------	----------------------------	------------------	--

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> GAYE - 4 OB LEYE - 2 OB OCAP - 1 OB Key River COLO - 3 OB 2 @ Henvey Inlet 1 @ Key River Sandhill Crane at key 70 Bufflehead on the Key River	Beaver - 2 OB 1 on Henvey Inlet 2 inland from Key River Bear by Beckman Landing on road; kind of fat for this time of year - OB Otter - SC Raccoon - TK	Blainings Turtle, same spot (roadside pond) as observed earlier this week May 1 2013 530509 5078763 Snapping Turtles - 2 OB, mating 523861 5081045 <div style="background-color: black; width: 150px; height: 80px; margin: 10px 0;"></div> Smooth Green Snake 523819 5080864	Mourning Cloak several OB Spring Azure several OB Eastern Pine Elf A	Pitcher Plants!

Quality Control: This form is complete (✓) & legible (✓).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

REV: May, 07 Form 006



**Stantec**

Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 106960824Project Name: Nigig/Henvey InletDate / Time: Tues May 7 2013Field Personnel: Sarah Richert & B. Miller

Weather Conditions:	Temp: <u>23</u>	Wind: <u>Beauf 0-1</u>	Cloud: <u>Trace-0</u>	PPT: <u>None</u>	PPT in last 24 hrs: <u>None</u>
---------------------	-----------------	------------------------	-----------------------	------------------	---------------------------------

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> Wilson's snipe pair Broad-winged Hawk along Beckton Road Sandhill Crane in large marsh by MET Tower 3 trail	Wolf tracks on Beckton Rd; TK Wolf pack howling to the west of abandoned truck, + 1 single wolf howling to east of abandoned truck came from south side of inlet Black bear along MET tower 4 trail	Blanding's Turtle - female 529516 adult 5078224 American Toad tadpoles, + 1 inch long American Toad adults Salamander sp egg casings, at least 2 different species	Mourning Cloak Spring Azure Henry's Elfin Unknown Emerald sp (Dragonfly)	Trailing Arbutus blooms Ant lion pits Blackflies. biting crop.

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

REV: May, 07 Form 006

**Stantec**

Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Nigig/Henvey InletDate / Time: May 8 2013 WedField Personnel: J. Richer & B. Miller

Weather Conditions:	Temp: <u>21°C</u>	Wind: <u>Beauf 0-1</u>	Cloud: <u>0</u>	PPT: <u>None</u>	PPT in last 24 hrs: <u>None</u>
---------------------	-------------------	------------------------	-----------------	------------------	---------------------------------

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> COLO - pair on inlet by Joe's cabin Bald Eagle - OB adult flying W over Hawkwatch 3	Beaver OB Red squirrel OB Chipmunk VO Raccoon TK Otter TK	Ponding's Turtle -523089 5076266 2 Northern Watermats 1 adult, 1 quite small adult NCFR - OB GULL - OB GRFR - OB GRTR - VO	Emerald Dragonfly sp. Common Green Darner Henry's Elfin	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

REV: May, 07 Form 006



**Stantec**

Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Nigig/ Henvey InletDate / Time: May 9 2013 ThursField Personnel: J Richer & B Miller**Weather Conditions:**

Temp:

22

Wind:

Breez 0

Cloud:

0

PPT:

0

PPT in last 24 hrs:

0**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> BAE4-adult circling near Hawkwatch 3	Black bear adult on Beckanon Road, near landing @ inlet	Massasauga Snake adult 17T 527183 5081709 Salamander egg casings! Road killed Smooth Green Snake on Beckanon Rd 17T 529498 5077982 Baby painted turtle in one of ponds by end of Tron 1	Mourning Cloak Spring Azure Woolly Bear Caterpillar (overwinter as larva)	

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: May, 07 Form 006

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Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Nigig/Heavey InletDate / Time: May 14 2013 TuesField Personnel: S Richer & B Miller

Weather Conditions:	Temp: <u>9-10</u>	Wind: <u>Bea f 2</u>	Cloud: <u>100</u>	PPT: <u>None</u>	PPT in last 24 hrs: <u>None</u>
---------------------	-------------------	----------------------	-------------------	------------------	---------------------------------

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, OP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> 2 SACR foraging in inlet at beginning of Transect 3 1st female warbler observed today - a MYWA BAEA-adult, soaring/circling over Flash's cabin area	Red fox-adult OB at end of Transect II Beaver in small treed swamp area near end of Transect 3 Bear-SC all over Transect 3	Red-bellied Snake, Roadkilled on Beckman 17T 508846 5078150 Massasauga Snake, adult 17T 525263 5075698 (Miltonic Bay)	Several nests of early instar Eastern Tent Caterpillar	Blooming as of May 14 2013: Bearberry Blueberry Black huckleberry Trailing arbutus Leatherleaf Several Violets Dutchman's Greasewood Dwarf Raspberry Kidney leaf Buttercup Red Elderberry

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

REV: May, 07 Form 006



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Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Nigig/Henvey InletDate / Time: May 15 (Wed) 2013Field Personnel: S Richer & G Miller

Weather Conditions:	Temp: <u>15 at 6</u> <u>7 at start</u>	Wind: <u>3-4 at 6</u> <u>Brave 2 at end</u>	Cloud: <u>100% at start</u> <u>0% at end</u>	PPT: <u>None</u>	PPT in last 24 hrs: <u>None</u>
---------------------	---	--	---	------------------	---------------------------------

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacule, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

Possible Moose winter yard, in area of  
17T 527149  
5077047

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, OP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> Bald Eagle - OB (adult) soaring around Milton's Bay area COLO pair in inlet Scarlet Tanager - VO, singing near Beaton Landing 1st BTRW of the season today	Otters - 3, all same size more or less feeding in water by Transit 13 start point	Massasauga Snake, yearling? 17T 526936 5077230 Gartersnake Painted Turtles & the remains of a subadult Blanding's Turtle as well as turtle nesting habitat 17T 532381 5078849	Cabbage White butterfly - OB	Black Morels (mushrooms) Earthstar mushrooms

Quality Control: This form is complete ( ) & legible ( ).

Signature: Paul R  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

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## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Vigin/Henvey InletDate / Time: Thurs May 16 2013Field Personnel: S Richer / R Miller

Weather Conditions:	Temp: range <u>6<sup>5</sup></u>	Wind: <u>Beauf 2-3</u>	Cloud: all day range 100%-0%	PPT: <u>None</u>	PPT in last 24 hrs: <u>None</u>
---------------------	-------------------------------------	---------------------------	---------------------------------	---------------------	------------------------------------

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO Caspian Tern (2), foraging on Key River  SACR-1, Key River (OB)  Broad-winged Hawk at Reckan Landing;  a Broad-winged hawk carrying a snake at Key River	White-tailed Deer, end of Migration Transect 15  Beaver, swimming in inlet	Snapping Turtle, pond at end of Migration Transect 15  17T 524895 5080998  Painted Turtle CA - just the plastron, in a pile of pine needles beside a beaver pond  2 Massasauga snakes (adults) 17T 526870 5081680 17T 527032 5081612	The season's first damselfly  Spring Azures  An enormous dragonfly, too fast to 10; size says some kind of Darner maybe?	a boat in the inlet, 3 fishermen; small craft, maybe 15ft long? Unknown occupants

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: Daniel Richer

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

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54 Jan - 630 pm  
**Wildlife Habitat and Incidental Wildlife  
Observation Form**

Project Number 160460829

Project Name: Nizy

Date / Time: Jun 4, 13

Field Personnel: B. Holden

Weather Conditions:	Temp: <u>4°C - 16°C</u>	Wind: <u>1-2-3-4</u>	Cloud: <u>5-10</u>	PPT: <u>—</u>	PPT in last 24 hrs: <u>✓</u>
---------------------	-------------------------	----------------------	--------------------	---------------	------------------------------

**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

ROCKY

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	<del>Amphibians</del> Herps	Butterflies / Dragonflies	<del>Other</del> Other
<u>ie. AMROALD</u>  <u>HONG</u>  <u>WOU</u> <u>WKA</u> <u>OSPR</u>  <u>GGW</u> Feather <u>fund.</u>	<u>Bear - FE</u> <u>Moose - SC</u> <u>B. Bear - SC</u>	<u>Green Frog - VO</u> <u>Mink Frog - VO</u>	<u>American Lady</u> <u>Can. Tiger</u> <u>Swallowtail</u> <u>Spring Azure</u> <u>Mourning Cloak</u> <u>C. Roadside Skipper</u> <u>Arctic Skipper</u> <u>Silvery Blue</u> <u>Harvester</u>	<u>C.F. Corporal</u> <u>Hudsonian Whiteface</u> <u>Ousky Clubtail</u> <u>Am. Emerald</u> <u>Frosted? Whiteface</u> <u>Four-spotted Skimmer</u> <u>Common Green Darter</u> <u>Rocket-tailed Emerald</u> <u>Stream Cruiser</u> <u>Common Baskettail</u>

Appared freshly  
molted - secondary.

See Reptile survey form for reptiles.

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of \_\_\_\_\_

REV: May, 07 Form 006

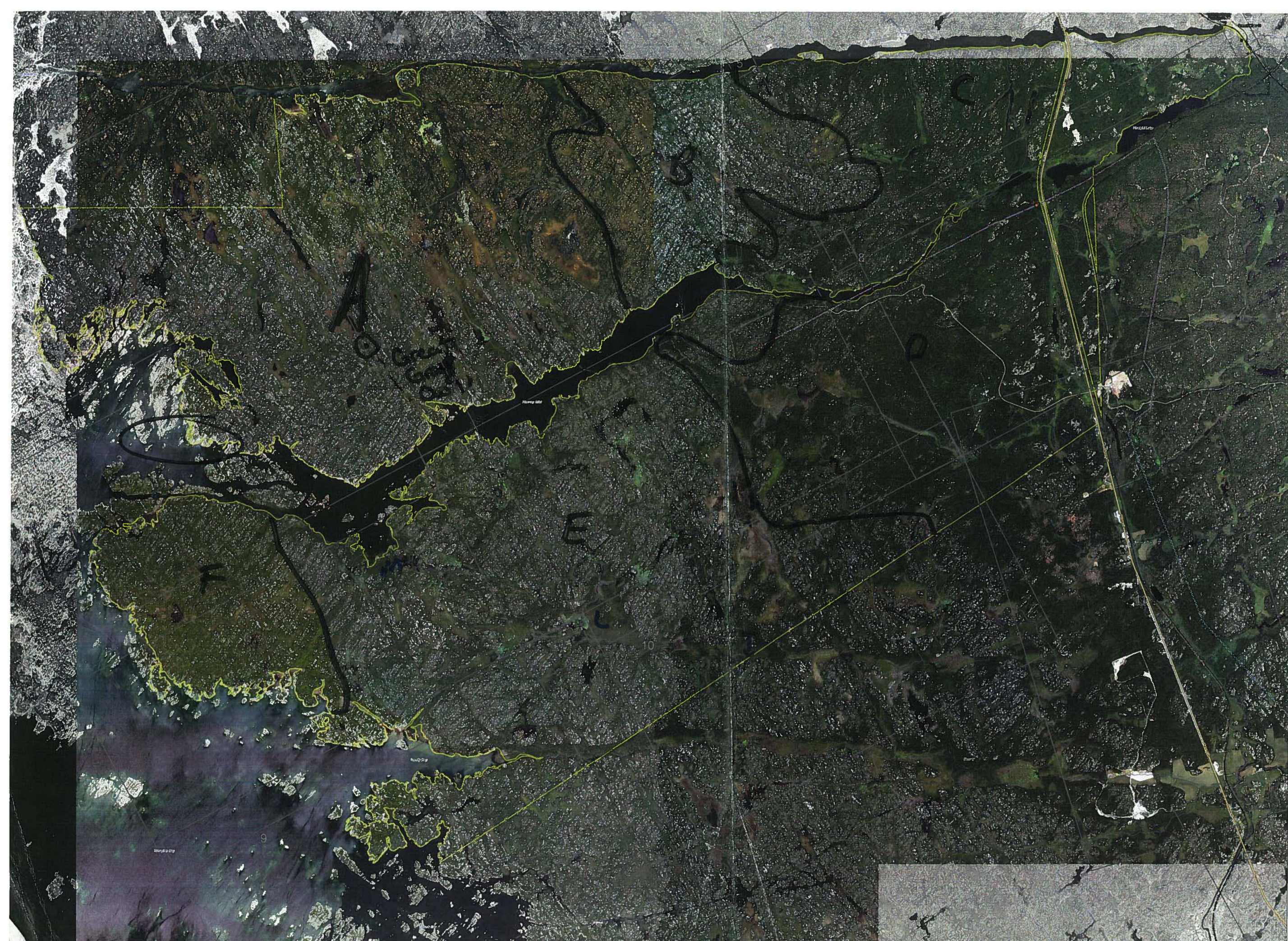
Very  
or the  
after  
dam  
reading  
insisted

species

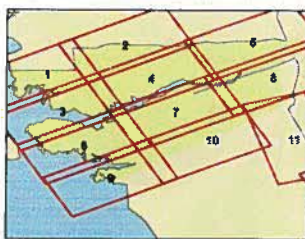
Slender Snipe

Northern Vernal  
Bluet?





- Hydro Station
- City or Town
- Contour (5m)
- Highway
- Major Road
- Local Road
- Trail
- Existing Transmission Line
- Watercourse
- Railway
- First Nations Reserve



**Notes**

- Coordinate System: NAD 1983 UTM Zone 17N
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.
- Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, GIS User Community, and the Parry Sound Geograph



Client/Project

NIGIG POWER CORP.  
HENVEY INLET WIND PROJ





## Wildlife Habitat and Incidental Wildlife Observation Form

Field Personnel:         BT        

PPT in last 24 hrs:

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## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Nigig Henvey InletDate / Time: June 6 2013Field Personnel: J. Richer**Weather Conditions:**

Temp:

12  
-20

Wind:

B-12

Cloud:

100

PPT:

None

PPT in last 24 hrs:

None

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i>	Long-tailed weasel (Geckbaron Rd) OB	Northern Water snake -OB	Harvester -OB 12-spotted -OB Skimmer 4-spotted -OB Skimmer Common White-tail -OB Chalk-fronted Corporal -OB Viceroy -OB Eastern Common -OB Spring Azure -OB Mourning Cloak -OB Tiger Swallowtail -OB	Luna -OB moth Bee fly sp -OB Wasp -OB

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)Page 1 of 1

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5:45 am - 3 pm  
**Wildlife Habitat and Incidental Wildlife  
Observation Form**

Project Number: 160960824

Project Name: Nigig

Date / Time: Jan 7, 13

Field Personnel: B. Holden

<b>Weather Conditions:</b>	Temp: <u>8-19°C</u>	Wind: <u>3 E</u>	Cloud: <u>100-60-80</u>	PPT: <u>/</u>	PPT in last 24 hrs: <u>/</u>
----------------------------	---------------------	------------------	-------------------------	---------------	------------------------------

**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, OP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

*New for site only*

Birds	<del>Observed</del> Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO SACR- Flightless young	River otters - OB - in inlet  - Black Bear - Belknap Rd 3 May 04  Black Bear - OB #2 on site  White-tailed Deer - OB	AMTO  GRAR  MIFR	Sphagnum Sprite  Indian Skipper	

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

(Field Personnel)

(Project Manager)

Page 1 of 1

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Fax: (519) 836-2493

5:30am - 2pm  
**Wildlife Habitat and Incidental Wildlife  
Observation Form**

Project Number

160960824

Project Name:

Nigiz

Date / Time:

Sun 8/13

Field Personnel:

P. Holden

**Weather Conditions:**

Temp:

8-18°C

Wind:

1-2 E

Cloud:

100-90-100

PPT:

PPT in last 24 hrs:

**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO	Moose - cow + 2 calves	Bullfrog Greenfrog  Spring Reeper	No New Species	
	WT Deer (Buck)			

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

REV: May, 07 Form 006



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Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number: 160960824Project Name: NizigDate / Time: Jun 20, 2013Field Personnel: B. Holden

Weather Conditions:

Temp:

6-16°C

Wind:

1-3 W

Cloud:

10-30

PPT:

/

PPT in last 24 hrs:

/

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> CATE	LT Deer - OB Red Fox - OB ♀ on Belknap rd.	Leopard mink Green Bull ↓ 1-2 species	<i>New species</i> White Admiral Black-shouldered spiny leg Sedge Sprite	

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

REV: May, 07 Form 006

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N1G 4P6  
Tel: (519) 836-6050  
Fax: (519) 836-2493

0575 - 1600  
**Wildlife Habitat and Incidental Wildlife  
Observation Form**

Project Number: <u>160960824</u>		Project Name: <u>Nigig</u>	
Date / Time: <u>Jun 24, 13</u>		Field Personnel: <u>B. Holden</u>	
Weather Conditions:	Temp: <u>18-25</u>	Wind: <u>3 SW</u>	Cloud: <u>0-20</u>
		PPT: <u>/</u>	PPT in last 24 hrs: <u>Rain</u>

**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO	Snowshoe Hare -OB  Moose -OB		Prince Baskettail  Northern Parula Swift River Crow	Eye

Quality Control: This form is complete (\_\_\_) & legible (\_\_\_).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

REV: May, 07 Form 006



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0530-1600  
**Wildlife Habitat and Incidental Wildlife  
Observation Form**

Project Number: 160960824Project Name: M34Date / Time: Jun 25, 13Field Personnel: B. Holden**Weather Conditions:**

Temp:

19-24

Wind:

0-2

Cloud:

50-75

PPT:

PPT in last 24 hrs:

**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

CAWA-SM-17T 0528479 5081439  
CAWA-SM-17T 0528809 5080300 - 75m ENE of vrm.  
CAWA-SM-17T 0528430 5081360  
CAWA-SM-17T 0528597 5081266

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Only new species recorded for tracks, birds, herps)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO see CAWA info above	Red Fox-OB Red Squirrel-OB W.T. Deer -2 ♂-OB		Elfia Skimmer Horned Clubtail Elephant Spreading	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: [Signature]  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)Page 1 of \_\_\_\_\_

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**5:30am - 8pm**  
**Wildlife Habitat and Incidental Wildlife  
Observation Form**

Project Number: <b>160960824</b>	Project Name: <b>M3ry</b>
Date / Time: <b>Sun 26, 13</b>	Field Personnel: <b>BH, MC, AT</b>
Weather Conditions: <b>19-27°C</b>	Temp: <b>19-27°C</b>
Wind: <b>3-SW</b>	Cloud: <b>10%</b>
PPT: <b>✓</b>	PPT in last 24 hrs: <b>✓</b>

**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

**CAWA - SM - Soe's Cabin - 8:30pm - UTM-17T**

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO  <b>OB mo</b> <b>Poss. Rckl</b> <b>SHAM</b> <b>monA</b>	<b>WT Deer-OB</b>  <b>Red Squirrel-OB</b>	<b>N. Watersnake</b> <b>- Sandy Bay</b>  <b>2 Painted Turtles</b> <b>on coastal islands.</b>  <b>- Northern</b>	<b>Swift Hawk</b> <b>Cruiser</b> <b>White Admiral</b> <b>Long Dash Skipper</b> <b>Oberg's Seawing</b> <b>Summer Azure</b> <b>Long Dash Skipper</b> <b>Two-spotted Skipper</b>	

**Watersnake**

**- Soe's Cabin**

**Araucaria Damsel**  
**Canada Damsel**

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of 1

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Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number: 160960824Project Name: MizigDate / Time: Jun 27, 13Field Personnel: B. Ho / 12m**Weather Conditions:**

Temp:

17-25

Wind:

0-3

Cloud:

90-100

PPT:

/

PPT in last 24 hrs:

/

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

CAWA-SM- 17T 0526801 5076662  
CAWA-SM- 17T 0527108 5076571

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO	Black Bear - OB WT Deer - HH OBS	Garter snake - OB		

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

REV: May, 07 Form 006

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Fax: (519) 836-2493

*Passerine Week #1***Wildlife Habitat and Incidental Wildlife Observation Form**Project Number 160960824Project Name: NisigDate / Time: Aug 22-24 2013Field Personnel: B. Holden B. Miller**Weather Conditions:**

Temp:

Wind:

Cloud:

PPT:

PPT in last 24 hrs:

**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

*Spring Baskettail - very late occurrence***Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, OP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i>  BAEA-1-Ad. flying along S. shore of Heavy Inlet.	Black Bear +3 1 on Inlet 2 on Belknap Rd.	N. Redbelly snake @ Boat launch  5 Garter snakes ④ Boat launch 1 on Belknap Rd.  N. Water snake - on Inlet.	Spotted, slender spreadwings Sweetflag spreadwings Pardalid Darter  Green Comma Leonard's Skipper	<i>Darters</i> <del>Other</del> - Canada - Variable - Shadon - Black-tipped.

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

REV: May, 07 Form 006



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Stantec Consulting Ltd.  
70 Southgate Drive  
Guelph, Ontario, Canada  
N1G 4P5  
Tel: (519) 836-6050  
Fax: (519) 836-2493

*Palmer Lake 2*  
**Wildlife Habitat and Incidental Wildlife  
Observation Form**

Project Number 160960824Project Name: NigigDate / Time: Aug 26-28 2013Field Personnel: A. Alden B. Miller**Weather Conditions:**

Temp:

23

Wind:

34

Cloud:

100

PPT:

Rain

PPT in last 24 hrs:

Rain**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
<i>i.e. AMRO/VO</i> CATE - saw on Inlet Islands  HOME	Black Bear - OB - Heavy hkt N. shore  Black Bear ♀ + 2 cubs - Sandy Bay  River Otter (Family) - S shore of Inlet near Flash's Cabin	Blanding's Turtle - 1 TT  Five-lined Skink <del>TT</del>  N. Watersnake 2 - Sandy Bay  Gartersnake Pike Barmes	Monarch - 1 TT  Samatoka larva Emerald sp. on Belknap Rd.	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page 1 of 1

REV: May, 07 Form 006

HONI corridor

Not in Project Location



**mcameron**

**160950269\_Fig\_1\_Blandings\_Turtle\_Habitat\_Ov**  
**04/12/13 10:42 AM**

**XEROX®**

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## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number: <u>60960824</u>		Project Name: <u>Niag - HONI corridor</u>			
Date / Time: <u>Aug 5, 2013</u>		Field Personnel: <u>B. Holden, M. Cameron</u>			
Weather Conditions:	Temp: <u>23°C</u>	Wind: <u>3</u>	Cloud: <u>10%</u>	PPT: <u>Ø</u>	PPT in last 24 hrs: <u>Ø</u>

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO PUFI, MERL -VO		Five-lined skink OB moved from open under cover (stump) - pale coloration but still blue on tail 0564188 5055210  Five-lined skink - Juvenile (small) Obs. in open on bone rock. 0564143 5055355	Coral Hairstreak Aphrodite Fritillary Black-tipped Corner Variable Vanner American Copper	

Probable Blanding's turtle nest, predated  
on access road. Shell fragments; but little  
shell, and size and number (~7-10) suggest  
Blanding's. UTM

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

REV: May, 07 Form 006



**Stantec** 17T

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Tel: (519) 836-6050  
Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Nigig - HONIDate / Time: Aug 6, 2013Field Personnel: B. Holden M. Cameron

Weather Conditions:	Temp:	Wind:	Cloud:	PPT:	PPT in last 24 hrs: <input checked="" type="checkbox"/>
---------------------	-------	-------	--------	------	---

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO EWPW - ♂ flushed from NE. edge of T-Line. 563092 5057253	Myotis sp. under flat rock in open rock barrens 0562319, 5058702	Predated turtle nest. Eggs brittle; ~3cm length. 5-7, but very weathered. Nest in loose soil and dead grass at edge of rock outcropping; ~100m from water. Same UTM as EWPW Five-lined skink juvenile; 5-6cm 0562389 5058507		

Quality Control: This form is complete ( ) & legible ( ).

Signature: [Signature]  
(Field Personnel)

Signature: \_\_\_\_\_  
(Project Manager)

Page 1 of \_\_\_\_\_

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## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number \_\_\_\_\_

Project Name: Nigig - HONI corridorDate / Time: Aug 8<sup>th</sup> ThursdayField Personnel: B. Holden, M. Cameron

Weather Conditions:

Temp:

23°C

Wind:

0

Cloud:

50%

PPT:

Ø

PPT in last 24 hrs:

yes

### Wildlife Habitat

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

### Incidental Species Observations

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO 2 x OSFL in marsh / fen Brandon took photo 05655219, 5052335		probably Milk snake skin; approx. 36" 0566290, 5051148 <hr/> smooth green snake	mottled darter	

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

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## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Nigig - HONI corridorDate / Time: Aug 9, 2013Field Personnel: B. Holden, M. Cameron**Weather Conditions:**

Temp:

23°C

Wind:

Cloud:

0%

PPT:

Ø

PPT in last 24 hrs:

Ø**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

lots of sandy soil - blowvents - and tanks - suitable bog-nosed habitat

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO <del>AMRO/VO</del> EWPE at Seguin Charles		Snapping turtle in road puddle w 30cm dia. carapace 0577310, 5030573	Buckeye Cross-lined skipper Mottled darner	

Quality Control: This form is complete ( ) &amp; legible ( ).

Signature: \_\_\_\_\_  
(Field Personnel)Signature: \_\_\_\_\_  
(Project Manager)

Page \_\_\_\_\_ of \_\_\_\_\_

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Fax: (519) 836-2493

## Wildlife Habitat and Incidental Wildlife Observation Form

Project Number 160960824Project Name: Nigig-HONI corridorDate / Time: Aug 10, 2013Field Personnel: B. Holden, M. Cameron**Weather Conditions:**

Temp:

20°C

Wind:

1

Cloud:

10%

PPT:

Ø

PPT in last 24 hrs:

trace**Wildlife Habitat**

List specific microhabitats present (snags, logs, hibernacula, vernal pools etc.) and what community they were encountered in (use ELC code where applicable).

**Incidental Species Observations**

List species and type of observation:

(TK = track, SC = scat, VO = vocalization, OB = observed, DP = distinctive parts, FE = feeding evidence, CA = carcass, FY = eggs, nest, HO = house/den, SI = other sign)

Birds	Mammals	Herps	Butterflies / Dragonflies	Other
i.e. AMRO/VO whip-poor-will Flushed; open rock barrens 0576825, 5031518		spotted salamander under flattened log brown snake on open rock, in lichen smooth green snake under rock; very cold, damp 0576682, 5031814		
EWPE in woods to west of corridor 0576838 5032282				

Quality Control: This form is complete ( ) & legible ( ).

Signature: \_\_\_\_\_

(Field Personnel)

Signature: \_\_\_\_\_

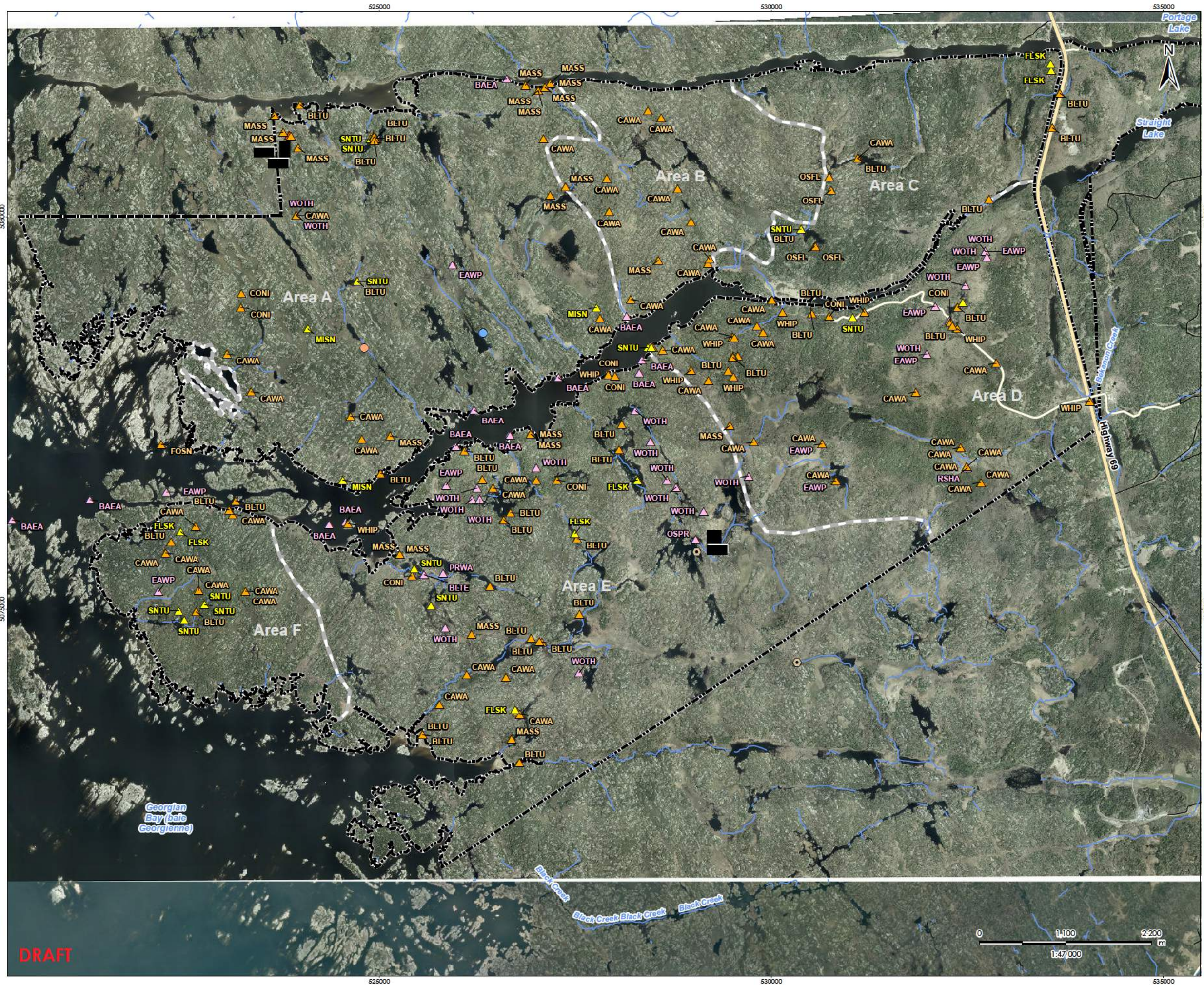
(Project Manager)













Page \_\_\_\_\_ of \_\_\_\_\_

REV: May, 07 Form 006



W:\active\40940770\drawing\WWD\Territorial\_Report\_Figures\EnvironmentCanada\_WildlifeSurveyReport\160960824\_Fig\_3A\_SignificantObservations\_Wind\_20131205.mxd  
Revised: 2013-12-06 By: choney



- Legend**
-  Federal Lands Study Area (Wind)
  -  Highway
  -  Major Road
  -  Local Road
  -  Field Survey Areas
- Significant Species Observations**
-  Great Blue Heron Heronry (GTBH)
  -  Great Gray Owl Feather (GGOW)
  -  Osprey Stick Nest (OSPR)
  -  Other Significant Species Observation
- Species At Risk Observation**
- 
  -  Threatened (THR)
  -  Special Concern (SC)

- Notes**
- Coordinate System: NAD 1983 UTM Zone 17N
  - Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario 2013.
  - Orthoimagery © Blue Earth 2013 © West Parry Sound Geography Network 2013  
Imagery Date 2013 2004
- December 2013  
160960824

Client/Project  
NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
**3-A**

Title  
**Significant Observations-  
Wind**

**DRAFT**



Date	Time	Easting	Northing	Type of Survey	Observation	4-LTR CODE	SARA Status	# of individuals	Habitat	Other Notes
8-May-13					Bald Eagle	BAEA	NAR	1		
9-May-13					Bald Eagle	BAEA	NAR	1		
14-May-13					Bald Eagle	BAEA	NAR	1		
16-May-13	21:28	528490	5078335	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	3	sandy beach surrounded by inlet, and pine barrens	
16-May-13	21:49	529506	5078467	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	4	poplar, birch, pine woodlands	
16-May-13	22:12	532374	5078576	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	3	sandy pine barrens	
28-May-13	21:21	547835	5052136	Crepuscular Survey	Common Nighthawk	CONI	THR	1	forest	
29-May-13	6:04	532282	5078689		Eastern Wood Pewee	EAWP	SC-NS	1		
29-May-13	21:28	530743	5078733		Common Nighthawk	CONI	THR	1		
29-May-13	21:39	528490	5078335	Crepuscular Survey	Common Nighthawk	CONI	THR	3	forest	
29-May-13	21:39	528490	5078335	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	6	forest	
29-May-13	21:54	528977	5078051		Eastern Whip-poor-will	WHIP	THR	1		
29-May-13	21:56	529520	5077966	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	forest/swamp/marsh/bog/ rock/pine barren	
29-May-13	22:09	530146	5078785	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	forest	
29-May-13	22:21	531193	5078785	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	forest/swamp/beaver pond	
29-May-13	22:45	532289	5078663	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	2	forest	
29-May-13	22:48	532289	5078663	Crepuscular Survey	Common Nighthawk	CONI	THR	1	Forest	
4-Jun-13	5:22	523946	5080021	point count	Wood thrush	WOTH	THR-NS	1		only THR in NS?
4-Jun-13	5:50	532736	5079563	point count	Eastern wood pewee	EAWP	estricted Specie	1	-	
4-Jun-13	5:50	532736	5079563	point count	Wood thrush	WOTH	THR-NS	1		
4-Jun-13	6:16	532482	5079124	point count	Wood thrush	WOTH	estricted Specie	1	-	
4-Jun-13	6:22	526328	5078519		Great Blue Heron Heronry					Nesting colony in the beaver pond to the west of UTM, several nests observed
4-Jun-13	7:03	531989	5078254	point count	eastern wood pewee	EAWP	SC-NS	1		
4-Jun-13	8:07	525934	5079390		Eastern Wood Pewee	EAWP	estricted Specie	1	-	
4-Jun-13	8:57	532418	5077061	point count	Canada Warbler	CAWA	estricted Specie	1	-	
4-Jun-13	9:32	532506	5076804		Red Shouldered Hawk	RSHA	NAR	1		
4-Jun-13	9:43	532493	5076815	point count	Canada Warbler	CAWA	THR	1		
4-Jun-13	10:06	532678	5076615	point count	Canada Warbler	CAWA	THR	3		
4-Jun-13	11:46	524603	5086730		Canada Warbler	CAWA	THR	1		
4-Jun-13		see map			Great Gray Owl	GGOW	NAR	1		Freshly molted feather in crack of rocks
4-Jun-13	16:30	525572	5075439	area Search	Black tern	BLTE	NAR	1		H, flying/foraging over marsh
4-Jun-13	16:35	5255677	5075425		Hooded Merganser	HOME		1		male, H, in marsh
5-Jun-13	16:40	525816	5075460		Prairie Warbler	PRWA	NAR	2	rock barren/wetland	displaying over large area, likely unpaired male
5-Jun-13	6:25	522657	5076058	point count	Canada Warbler	CAWA	THR	2		
5-Jun-13	7:00	522275	5075719	point count	Canada Warbler	CAWA	THR	1		
5-Jun-13	8:10	522697	5075239	point count	Canada Warbler	CAWA	THR	2		
5-Jun-13	9:20	527550	5074187		Wood Thrush	WOTH	THR-NS	1	Forest	
5-Jun-13	10:17	523294	5075229	point count	Canada Warbler	CAWA	THR	3		
5-Jun-13	16:55	525422	5075424		Common Nighthawk	CONI	THR	1		
5-Jun-13	22:00	527926	5077992	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	7	Rock barren / forest	
5-Jun-13	22:05	524605	5076092	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	11	Rock barren / forest	
5-Jun-13		527926	5077992	Crepuscular Survey	Common Nighthawk	CONI	THR	1	Rock barren / forest	
6-Jun-13	6:05	530013	5078948		Canada Warbler	CAWA	THR	2		
6-Jun-13	6:05	525853	5076584		Eastern Wood Pewee	EAWP	SC-NS	1		
6-Jun-13	6:30	526185	5076403	point count	Wood thrush	WOTH	THR-NS	1		
6-Jun-13	6:35	526285	5076403		Wood Thrush	WOTH	THR-NS	1		
6-Jun-13	7:08	526451	5076545	point count	Canada Warbler	CAWA	THR	1		
6-Jun-13	7:10	526250	5076545		Wood Thrush	WOTH	THR-NS	1		
6-Jun-13	7:25	530558	5079625		Canada Warbler	CAWA	THR	1		
6-Jun-13	8:07	532092	5078861	point count	Eastern wood pewee	EAWP	SC-NS	1		
6-Jun-13	8:24	527005	5076650	point count	Canada Warbler	CAWA	THR	1		
6-Jun-13	8:30	529895	5078530		Canada Warbler	CAWA	THR	1		
6-Jun-13	8:39	527005	5076800		Wood Thrush	WOTH	THR-NS	1		
6-Jun-13	8:43	530764	5080346	Point Count	Olive-sided flycatcher	OSFL	THR	1		
6-Jun-13	9:20	527271	5076646		Common Nighthawk	CONI	THR	1		
6-Jun-13	9:30	531110	5080754	point count	Canada Warbler	CAWA	THR	1		
6-Jun-13	9:40	529822	5078608		Canada Warbler	CAWA	THR	1		
6-Jun-13	10:10	529511	5078475		Canada Warbler	CAWA	THR	1		



Date	Time	Easting	Northing	Type of Survey	Observation	4-LTR CODE	SARA Status	# of individuals	Habitat	Other Notes
6-Jun-13	11:35	528616	5078303		Canada Warbler	CAWA	THR	1		
6-Jun-13	12:02	530742	5080510		Olive-sided flycatcher	OSFL	THR	1		
6-Jun-13	21:35	528011	5077974		Common Nighthawk	CONI	THR	1		
7-Jun-13	6:30	528464	5077137		Wood Thrush	WOTH	THR-NS	1		
7-Jun-13	7:15	523365	5077772		canada Warbler	CAWA	THR	1		
7-Jun-13	7:44	528209	5078949		Canada Warbler	CAWA	THR	1		
7-Jun-13	7:54	523059	5078254		Canada Warbler	CAWA	THR	2		
7-Jun-13	8:05	528790	5076553		Wood Thrush	WOTH	THR-NS	1		
7-Jun-13	8:40	527935	5080068		Canada Warbler	CAWA	THR	1		
7-Jun-13	8:52	523241	5079024		Common Nighthawk	CONI	THR	1		
7-Jun-13	9:37	527097	5081001		Canada Warbler	CAWA	THR	1		
7-Jun-13	11:48	523238	5078846		Common Nighthawk	CONI	THR	1		
7-Jun-13	12:00	529050	5075730		Stick Nest	OSPR			open marsh	Osprey using the area, potentially an Osprey nest, though use unknown.
7-Jun-13	12:30	529038	5075895		Osprey	OSPR				
7-Jun-13	13:05	529713	5076698		Wood Thrush	WOTH	THR-NS	1		
7-Jun-13	13:24	527818	5078710		Canada Warbler	CAWA	THR	1		
8-Jun-13	5:50	529192	5079411		Canada Warbler	CAWA	THR	1		
8-Jun-13	11:11	527905	5080490		Canada Warbler	CAWA	THR	1		
8-Jun-13		529216	5079462		Canada Warbler	CAWA	THR	1		
15-Jun-13	7:00	area E		area Search	Caspian Tern	CATE	NAR	11		habitat
15-Jun-13	8:00	526765	5073697	point count	Canada Warbler	CAWA	restricted Specie	1	-	
15-Jun-13	8:00	526797	5073664	point count	Canada Warbler	CAWA	THR	1		
15-Jun-13	8:48	526621	5074132	point count	Canada warbler	CAWA	THR	1	tamarack sedge fen	
15-Jun-13	9:35	526118	5074163	point count	Canada Warbler	CAWA	THR	1	marsh meadow/conifer forest	
15-Jun-13	10:19	525769	5073789	Point count	Canada Warbler	CAWA	THR	2	forest	
16-Jun-13	9:47	524778	5077164	point count	Canada warbler	CAWA	THR	3		
16-Jun-13	10:13	524635	5077455	Point count	Canada Warbler	CAWA	THR	1		
16-Jun-13	13:00	522285	5076496		Eastern Wood Pewee	EAWP	SC-NS	1		
17-Jun-13	5:45	529201	5077915	point count	Canada Warbler	CAWA	THR	3		
17-Jun-13	6:10	532871	5078133	point count	Canada Warbler	CAWA	THR	1		
17-Jun-13	6:36	529783	5077131	point count	Canada Warbler	CAWA	THR	2		
17-Jun-13	8:22	503275	5076494	point count	Canada Warbler	CAWA	THR	1		
17-Jun-13	9:07	530830	5076637	point count	Canada Warbler	CAWA	THR	2		
17-Jun-13	10:15	530650	5077108	point count	Canada Warbler	CAWA	THR	1		
17-Jun-13	21:50	533626	5082442	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	2		
17-Jun-13	22:01	534069	5077650	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1		
17-Jun-13	22:12	535685	5072881	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1		
17-Jun-13	22:20	538955	5069441	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1		
17-Jun-13	22:30	540718	5064706	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1		
17-Jun-13	22:40	542710	5060124	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	2	forest and rock barrens	
17-Jun-13	22:50	545810	5056216	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	Rock barren / forest	
17-Jun-13	23:01	547835	5052136	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1		
17-Jun-13	23:11	550947	5047088	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	Forest	
17-Jun-13	23:22	555384	5044617	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	Forest	
18-Jun-13	5:54	523946	5080021	point count	Canada Warbler	CAWA	THR	1		
18-Jun-13	5:54	523946	5080021	point count	Wood Thrush	WOTH	THR-NS	1		
18-Jun-13	6:15	532736	5079563	point count	Wood Thrush	WOTH	THR-NS	1		
18-Jun-13	7:16	531989	5078254	point count	Wood Thrush	WOTH	THR-NS	1		
18-Jun-13	7:39	531846	5077768	point count	Canada Warbler	CAWA	THR	1		
18-Jun-13	8:48	532418	5077061	point count	Canada Warbler	CAWA	THR	1		
18-Jun-13	9:07	532493	5076815	point count	Canada Warbler	CAWA	THR	1		
18-Jun-13	9:26	532678	5076615	point count	Canada Warbler	CAWA	THR	2		
18-Jun-13	11:53	532753	5079493		Eastern Wood Pewee	EAWP	SC-NS	1		
18-Jun-13	22:20	576285	5024876	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	1	forest	
18-Jun-13	22:29	562745	5037659	Crepuscular Survey	Eastern Whip-poor-will	WHIP	THR	2	Forest	
19-Jun-13	6:30	523131	5076211	Point Count	Canada Warbler	CAWA	THR	1		
19-Jun-13	6:30	Area F		area Search	Caspian Tern	CATE		2		habitat
19-Jun-13	6:51	522657	5076058	Point Count	Canada Warbler	CAWA	THR	1		
19-Jun-13	7:22	522275	5075719	Point count	Canada Warbler	CAWA	THR	1		

Date	Time	Easting	Northing	Type of Survey	Observation	4-LTR CODE	SARA Status	# of individuals	Habitat	Other Notes
19-Jun-13	7:56	522185	5075226	point count	Eastern wood pewee	EAWP	SC-NS	1		
19-Jun-13	8:29	522697	5075239	Point count	Canada Warbler	CAWA	THR	1		
19-Jun-13	10:27	523294	5075229	Point count	Canada Warbler	CAWA	THR	1		
20-Jun-13	6:00	Area B		area search	Eastern wood-pewee	EAWP	SC-NS	1		singing male
20-Jun-13	6:15	530010	5078948	point count	yellow rail	_YERA	SC	1	meadow marsh	Unverified
20-Jun-13	7:29	530558	5079625	point count	Canada warbler	CAWA	THR	1		
20-Jun-13	7:29	530558	5079625	Point count	Olive-sided flycatcher	OSFL	THR	1		
20-Jun-13	7:45	530563	5079619		Olive-sided flycatcher	OSFL	THR	1		
20-Jun-13	9:03	531110	5080754	Point count	Canada Warbler	CAWA	THR	3	marsh	
20-Jun-13	9:03	531110	508754	point count	Olive-sided flycatcher	OSFL	THR	1	marsh/forest	
21-Jun-13	6:30	Area A		area search	Canada warbler	CAWA	THR	2		singing male
24-Jun-13	5:45	area E		Area Search	Wood Thrush	WOTH	THR-NS	1		
24-Jun-13	6:05	528268	5077534	Breeding Bird PC	Wood Thrush	WOTH	THR-NS	1		
24-Jun-13	8:10	528675	5076647	Breeding Bird PC	Wood Thrush	WOTH	THR-NS	1		
24-Jun-13	9:30	529143	5076250	Breeding Bird PC	Wood Thrush	WOTH	THR-NS	1		
25-Jun-13	5:40	Area E	Area Search		Wood Thrush	WOTH	THR-NS	1		
25-Jun-13	5:50	Area B		Area Search	Common Nighthawk	CONI	THR	1		observed
25-Jun-13	8:15	525846	5074763	Breeding Bird PC	Wood Thrush	WOTH	THR-NS	1		
25-Jun-13		528430	5081360	Breeding Bird PC	Canada Warbler	CAWA	THR	1		
25-Jun-13		528597	5081266	Breeding Bird PC	Canada Warbler	CAWA	THR	1		
25-Jun-13		528809	5080360	Breeding Bird PC	Canada Warbler	CAWA	THR	1		
25-Jun-13		528979	5079939	Breeding Bird PC	Canada Warbler	CAWA	THR	1		
26-Jun-13	5:30	Area A		Area Search	Caspian Tern	CATE				observed
26-Jun-13	8:30				Canada Warbler	CAWA	THR	1		
27-Jun-13	5:45	Area E		Area Search	Canada Warbler	CAWA	THR	1		singing male
28-Jun-13	5:55	Area A		Area Search	Wood thrush	WOTH	THR-NS	1		singing male
28-Jun-13	9:26	530830	5076637	point count	Eastern wood pewee	EAWP	SC-NS	1		
28-Jun-13	9:50	530650	5077108	point count	Eastern wood pewee	EAWP	SC-NS	1		
7-Jul-13	6:30	542574	5060848		Great Blue Heron Heronry	GTBH				Five nests with young. MTO corridor
6-Aug-13		563092	5057253		Eastern Wood Pewee	EAWP	SC-NS	1		
8-Aug-13		565521	5052335		Olive-sided flycatcher	OSFL	THR	2		
9-Aug-13					Eastern Wood Pewee	EAWP	SC-NS	1		
10-Aug-13					Eastern Whip-poor-will	WHIP	THR	1		
11-Sep-13		520317	5076136		Bald Eagle	BAEA	NAR	1		
11-Sep-13		524365	5076080		Bald Eagle	BAEA	NAR	1		
11-Sep-13		526214	5077542		Bald Eagle	BAEA	NAR	1		
13-Sep-13		528352	5078180		Bald Eagle	BAEA	NAR	1		
14-Sep-13		521032	5081722		Bald Eagle	BAEA	NAR	1		
14-Sep-13		525978	5077077		Bald Eagle	BAEA	NAR	1		
17-Sep-13	16:00	527290	5077954		Bald Eagle	BAEA	NAR	1		
2-Oct-13	12:30	528322	5078012		Bald Eagle	BAEA	NAR	1		
2-Oct-13	12:40	526670	5077218		Bald Eagle	BAEA	NAR	2		Pair, one male and one female perched together both adults
8-Oct-13	7:50	521312	5076396		Bald Eagle	BAEA	NAR	1		
8-Oct-13	10:00	528157	5078735		Bald Eagle	BAEA	NAR	1		
10-Oct-13	7:40	524574	5076114		Bald Eagle	BAEA	NAR	1		
10-Oct-13	11:15	526628	5081767		Bald Eagle	BAEA	NAR	1		
15-May-03					Bald Eagle	BAEA	NAR	1		
10-Aug-03					Eastern Wood Pewee	EAWP	SC-NS	1		



Obs #	Date	Time	Location/Utm		Type of Survey	Observation	SARA Status	4-LTR CODE	# of individuals	Habitat	Other Notes	Weather							
			Zone	Easting								Northing	Temp	Wind	Cloud	precipitation	last 24 hrs?		
	22-Apr-13		17T	528097	5077355	Blandings Turtle	THR	BLTU			large adult	10-14							
	30-Apr-13	11:47	17T	522773	5075058	Snapping Turtle	SC	SNTU		inland marsh/pond	adult submerged		4-Mar	0-20		None		None	
	30-Apr-13	12:10	17T	522671	5074966	Blandings Turtle	THR	BLTU		on land about a metre from water	adult								
	30-Apr-13	13:11	17T	522446	5074984	Snapping Turtle	SC	SNTU		Large beaver pond	basking on log								
	30-Apr-13	13:50	17T	522347	5075863	Blandings Turtle	THR	BLTU		small inland pool									
	30-Apr-13	14:00	17T	522468	5075992	Five-lined skink	SC	FLSK			adult female basking								
	30-Apr-13		17T	522671	5074966	Blandings Turtle	THR	BLTU				19	3	15		None		Rain	
	30-Apr-13		17T	522468	5075992	Five-lined skink	SC	FLSK				19	3	15		None		Rain	
	30-Apr-13		17T	522773	5075058	Snapping Turtle	SC	SNTU				19	3	15		None		Rain	
	30-Apr-13		17T	522514	5074861	Snapping Turtle	SC	SNTU				19	3	15		None		Rain	
	1-May-13	8:22	17T	525556	5073401	Blandings Turtle	THR	BLTU		small inland wetland	adult basking								
	1-May-13		17T	525556	5073401	Blandings Turtle	THR	BLTU				18	3-4	15-80		None		None	
	1-May-13		17T	530509	5078763	Blandings Turtle	THR	BLTU				18	3-4	15-80		None		None	
	2-May-13	15:30	17T	532316	5078607	Blandings Turtle	THR	BLTU			adult basking								
	2-May-13	16:40	17T	529450	5078037	Blandings Turtle	THR	BLTU			adult basking								
	2-May-13		17T	532316	5078607	Blandings Turtle	THR	BLTU				20	2-3	10		None		None	
	2-May-13		17T	529532	5078465	Blandings Turtle	THR	BLTU		beckanon road	nest remains	20	2-3	10		None		None	
	3-May-13	9:36	17T	Exact location will not be made public due to threat of poaching			Restricted Species	-	-		-								
	3-May-13	11:30	17T	523861	5081045	Snapping Turtle	SC	SNTU		pond/marsh	pair of turtles mating at surface								
	3-May-13	11:36	17T	Exact location will not be made public due to threat of poaching			Restricted Species	-	-		-								
	3-May-13		17T	530509	5078763	Blandings Turtle	THR	BLTU		pond	same pond as observation May 1	20	3-4	5		None		Light rain	
	3-May-13		17T	523861	5081045	Snapping Turtle	SC	SNTU	2		mating	20	3-4	5		None		Light rain	
	3-May-13		17T	Exact location will not be made public due to threat of poaching			Restricted Species	-	-		-	20	3-4	5		None		Light rain	
	3-May-13		17T	Exact location will not be made public due to threat of poaching			Restricted Species	-	-		-	20	3-4	5		None		Light rain	
	7-May-13	15:30	17T	529576	5078224	Blandings Turtle	THR	BLTU			adult basking on road								
	7-May-13		17T	529516	5078224	Blandings Turtle	THR	BLTU				23	0-1	0		None		None	
	8-May-13	8:35	17T	523089	5076266	Blandings Turtle	THR	BLTU			adult swimming in shallows near shore								
	8-May-13		17T	523089	5076266	Blandings Turtle	THR	BLTU				21	0-1	0		None		None	
	9-May-13	10:31	17T	527183	5081709	Massassauga Rattlesnake	THR	MASS		tall dry grassy floodplain area	dull and dusty looking snake								
	9-May-13		17T	527183	5081709	Massassauga Rattlesnake	THR	MASS				22	0	0		None		None	
	14-May-13	12:13	17T	525263	5075698	Massassauga Rattlesnake	THR	MASS			coiled up and resting (temp 7C)								
	14-May-13		17T	525263	5075698	Massassauga Rattlesnake	THR	MASS		Milton's Bay		9-10	2	100		None		None	
	15-May-13	12:06	17T	526936	5077230	Massassauga Rattlesnake	THR	MASS			Juvenile basking								
	15-May-13	13:35	17T	532379	5078851	Blandings Turtle	THR	BLTU			dead, juvenile or sub-adult								
	15-May-13		17T	532381	5078849	Blandings Turtle	THR	BLTU			remains of subadult	7-15	2-4	0-100		None		None	
	15-May-13		17T	526936	5077230	Massassauga Rattlesnake	THR	MASS			yearling	7-15	2-4	0-100		None		None	
	16-May-13	9:00	17T	524895	5080998	Snapping Turtle	SC	SNTU			adult basking on a log								
	16-May-13	10:06	17T	527032	5081612	Massassauga Rattlesnake	THR	MASS		grassy floodplain	basking on a log								
	16-May-13	10:26	17T	526870	5081680	Massassauga Rattlesnake	THR	MASS		grassy floodplain	adult								
	16-May-13		17T	526870	5081680	Massassauga Rattlesnake	THR	MASS			adults	6	2-3	0-100		None		None	
	16-May-13		17T	527032	5081612	Massassauga Rattlesnake	THR	MASS			adults	6	2-3	0-100		None		None	
	16-May-13		17T	524895	5080998	Snapping Turtle	SC	SNTU		end of migration transect 15		6	2-3	0-100		None		None	
	24-May-13	10:47	17T	525143	5077208	Massassauga Rattlesnake	THR	MASS		rock barrens	adult basking in lichen/rock/moss								
	24-May-13	11:25	17T	525017	5076731	Blandings Turtle	THR	BLTU		shore and water in inlet	adult								
	24-May-13	16:33	17T	566913	5033340	Snapping Turtle	SC	SNTU		highway/wetland	on highway, moved to wetland								
	25-May-13	8:41	17T	524965	5081001	Blandings Turtle	THR	BLTU		pond/marsh	adult basking with other turtles								
	30-May-13	8:57	17T	523970	5080884	Massassauga Rattlesnake	THR	MASS			yearling, very tiny and quick								
	30-May-13	9:14	17T	523777	5081083	Massassauga Rattlesnake	THR	MASS			adult, very fat, possibly gravid female?								
	30-May-13	10:55	17T	524943	5081008	Blandings Turtle	THR	BLTU	2		adults basking on log								
	30-May-13	10:58	17T	524955	5081008	Blandings Turtle	THR	BLTU	1	grassy area	adult basking on grassy hummock								
	30-May-13	10:59	17T	524929	5081034	Blandings Turtle	THR	BLTU	2		adult basking on a log								
	30-May-13	11:07	17T	524936	5081023	Blandings Turtle	THR	BLTU	2		adults basking on log								
	30-May-13	11:37	17T	523994	5081431	Blandings Turtle	THR	BLTU		mainland to Key River	adult moving from land to water								
	4-Jun-13	10:50	17T	524938	5080971	Reptile Survey	Reptile Survey	THR	BLTU	1	Fairly open beaver pond	Very large for species	4 -16	1 to 4	5-10%		none		none
	4-Jun-13	12:30		528432	5078333	Reptile Survey	Reptile Survey	SC	SNTU	1	inlet	basking near surface	17	3	50%		none		none
	4-Jun-13	14:13	17T	524723	5079179	Reptile Survey	Reptile Survey	THR	BLTU	1	Bog/fen ponds		4 -16	1 to 4	5-10%		none		none
	4-Jun-13	14:15	17T	524723	5079179	Reptile Survey	Reptile Survey	SC	SNTU	1	second larger pond		4 -16	1 to 4	5-10%		none		none
	4-Jun-13	14:45	17T	524092	5078574	Reptile Survey	Reptile Survey	SC	MISN	1	rock barrens beside small bog/pond	Juvenile, about 15 cm long	4 -16	1 to 4	5-10%		none		none
	4-Jun-13	15:07	17T	532783	5080227			THR	BLTU		wetland	adult, basking on log							
	5-Jun-13	9:40	17T	527554	5074934	Reptile Survey	Reptile Survey	THR	BLTU	1	Marsh	basking on stump	10 - 17	3	50		none		none
	5-Jun-13	12:15	17T	523169	5076383			THR	BLTU		water/inlet	adult, basking on a rock at waters edge							
	5-Jun-13	13:14	17T	528472	5078338			SC	FLSK		landing, end of Beckanon Road	Adult male on rocks							
	5-Jun-13	13:20	17T	527079	5074581	Reptile Survey	Reptile Survey	THR	BLTU	1	Marsh	basking on log, very large adult	10 - 17	3	50		none		none
	5-Jun-13	13:25	17T	527045	5074586	Reptile Survey	Reptile Survey	THR	BLTU	1	Marsh	basking on log, large adult	10 - 17	3	50		none		none
	5-Jun-13	13:31	17T	526939	5074627	Reptile Survey	Reptile Survey	THR	BLTU	1	Marsh	basking on log, medium sized adule	10 - 17	3	50		none		none

Location/Utm												Weather					
Obs #	Date	Time	Zone	Easting	Northing	Type of Survey	Observation	SARA Status	4-LTR CODE	# of individuals	Habitat	Other Notes	Temp	Wind	Cloud	precipitation	last 24 hrs?
	5-Jun-13	16:35	17T	526416	5075293	Reptile Survey	Blandings Turtle	THR	BLTU	1	Marsh	basking on log with 2 painted turtles	10 - 17	3	50	none	none
	5-Jun-13	17:10	17T	525450	5075515	Reptile Survey	Snapping Turtle	SC	SNTU	1	Marsh	basking in water, large about 16cm long	10 - 17	3	50	none	none
	6-Jun-13	6:30	17T	533576	5081870	Reptile Survey	Five-lined skink	SC	FLSK	1	Rock outcrop	juvenile	8 -18	3	10-100	none	none
	6-Jun-13	6:36	17T	533564	5081958	Reptile Survey	Five-lined skink	SC	FLSK	1	Rock outcrop	adult, missing tail	8 -18	3	10-100	none	none
	6-Jun-13	8:00	17T	526319	5076654	Reptile Survey	Blandings Turtle	THR	BLTU	2	Marsh	basking on log	10 - 15	3	80	none	none
	6-Jun-13	11:06	17T	531103	5080750		Blandings Turtle	THR	BLTU	12	wetland	many basking throughout wetland,					
	6-Jun-13	11:35	17T	527527	5075897	Reptile Survey	Blandings Turtle	THR	BLTU	6	Marsh	basking on logs in marsh	10 - 15	3	80	none	none
	6-Jun-13	13:16	17T	530385	5079844		Blandings Turtle	THR	BLTU	7	wetland	adults basking					
	6-Jun-13	13:16	17T	530385	5079844		Snapping Turtle	SC	SNTU	1	wetland	adult basking					
	6-Jun-13	13:30	17T	526591	5076142	Reptile Survey	Blandings Turtle	THR	BLTU	4	Marsh	basking	10 - 15	3	80	none	none
	7-Jun-13	7:11	17T	528569	5676631	Reptile Survey	Five-lined skink	SC	FLSK	1	Rock barren		10-17	2	50	none	none
	7-Jun-13	9:10	17T	528297	5076644	Reptile Survey	Five-lined skink	SC	FLSK	1	Rock barren		10-17	2	50	none	none
	7-Jun-13	10:00	17T	Exact location will not be made			Restricted Species	-	-	-	-	-	10-17	2	50	none	none
	7-Jun-13	10:20	17T	527182	5080275	Reptile Survey	Massassauga Rattlesnake	THR	MASS	1	Rocky shore near wetland	base of a juniper	9 - 19	3	60-100	none	none
	7-Jun-13	13:10	17T	527775	5078847	Reptile Survey	Milksnake	SC	MISN	1	Rock outcrop	about 15 cm long	9 - 19	3	60-100	none	none
	7-Jun-13	14:21	17T	529514	5078211		Blandings Turtle	THR	BLTU		roadside ditch beckanon road	adult					
	8-Jun-13	13:50	17T	530524	5078771	Reptile Survey	Blandings Turtle	THR	BLTU		man-made wet area (pond) along Bekman Road	large but not fully grown	8 - 18	1-2	90-100	none	none
	8-Jun-13		17T	528565	5079450	Reptile Survey	Massassauga Rattlesnake	THR	MASS		Jack pine barren, in rock outcrop	about 45-50cm with a large rattle	8 - 18	1-2	90-100	none	none
	15-Jun-13	7:37	17T	526691	5073341		Massassauga Rattlesnake	THR	MASS		forested wetland	adult, rattled, didn't strike					
	17-Jun-13	11:56	17T	529478	5077343		Massassauga Rattlesnake	THR	MASS		mixed woods	hid under log, tapped on log, no rattle heard					
	18-Jun-13	11:35	17T	532449	5078909		Snapping Turtle	SC	SNTU			7-10 predated nests, both painted and snapping					
	20-Jun-13	10:50	17T	527379	5080387	Reptile Survey	Massassauga Rattlesnake	THR	MASS		N of Joes Cabin, base of Juniper along rock outcrop	photos taken, large rattle (8 or 9) did not rattle; MC added UTM based on last known location during BB survey (B8 at 10:15am)	8-18	1-3	30-Oct	none	none
	22-Jun-13	16:20	17T	531043	5078720		Snapping Turtle	SC	SNTU		Beckanon Road	Possibly nesting at road edge					
	24-Jun-13	7:40	17T	528062	5077029	Breeding Birds	Blandings Turtle	THR	BLTU	2		mating pair	20	3	10	None	Showers
	25-Jun-13	9:30		526179	5074681	Breeding Birds	Massassauga Rattlesnake	THR	MASS	1		about 2 ft long	17-23	0	60	None	None
	25-Jun-13	15:10		525666	5075046	Breeding Birds	Snapping Turtle	SC	SNTU	2			17-23	0	60	None	None
	26-Jun-13	14:00	17T	522218	5077102	Reptile Survey	Fox snake	THR	FOSN		off shore island (chain of islands) in rock crevice about 1m from water	about 3 ft long	19-27	3	10	none	none
	26-Jun-13		17T	526734	5073715	Reptile Survey	Five-lined skink	SC	FLSK		rock barrens	juvenile	19-27	3	10	none	none
	26-Jun-13		17T	524537	5076645	Reptile Survey	Milksnake	SC	MISN		near shore half under rock	pretending to be a rattle snake	19-27	3	10	none	none
	27-Jun-13	10:02	17T	527497	5075963	Reptile Survey	Five-lined skink	SC	FLSK		rock barrens near beaverpond	juvenile about 14cm	17-25	0-3	90-100	none	none
	27-Jun-13		17T	526679	5076227	Reptile Survey	Blandings Turtle	THR	BLTU		Large beaverpond (small lake in core of BBS route)	GPS lost; UTM estimated by MC based on description in field notes	17-25	0-3	90-100	none	none
	5-Aug-13		17T				Blandings Turtle	THR	BLTU			predated nest, size and number suggest blandings	23	3	10	None	None
	5-Aug-13		17T	564188	5055210		Five-lined skink	SC	FLSK		open to under cover	pale colouration, but still blue on tail	23	3	10	None	None
	5-Aug-13		17T	564143	5055355		Five-lined skink	SC	FLSK		bare rocks	juvenile	23	3	10	None	None
	8-Aug-13		17T	566290	5051148		Milksnake	SC	MISN			probable milksnake, skin found, ~36 inches	23	0	50	None	Rain
	9-Aug-13		17T	577310	5030573		Snapping Turtle	SC	SNTU		road puddle	about 30cm diameter carapace	23	0	0	None	None
	23-Aug-13		17T	526791	5073049	Fall Passerine	Blandings Turtle	THR	BLTU		Sandy Bay passerine transect		23-25	2	30	None	None
	6-Sep-13	9:03	17T	523879	5081036		Massassauga Rattlesnake	THR	MASS				9-20	4	100	None	None
	6-Sep-13	11:28	17T	527117	5081654		Massassauga Rattlesnake	THR	MASS				9-20	4	100	None	None
	6-Sep-13			527117	5081654	Fall Passerine	Massassauga Rattlesnake	THR	MASS				18	4	80-100	None	None
	12-Sep-13		17T	526090	5077019		Blandings Turtle	THR	BLTU			predated					
	23-Sep-13	10:59	17T	523667	5081298		Massassauga Rattlesnake	THR	MASS			shed snake skin					
	6-Aug-03		17T	562389	5058507		Five-lined skink	SC	FLSK			Juvenil, 5-6cm long					
	6-Sep-03			523879	5081036	Fall Passerine	Massassauga Rattlesnake	THR	MASS				1	3	75	None	None



Location/Utm					Type of Survey	Observation		# of individuals	Habitat	Other Notes	SARA Status	4-letter Code
Date	Time	Zone	Easting	Northing								
9-Jul	N/A	17T	529555	5078479	Breeding birds	Pine Imperial Moth	Eacles imperialis pini	1		found dead on road near truck	S3?	PIMO

Location/Utm				Type of Survey	Observation	# of Individuals	Habitat	Other Notes	SARA Status	4-letter Code
Date	Time	Easting	Northing							
23-May-13	9:09	541470	5063041		Blanding's Turtle	1		roadkill, photographed	THR	BLTU
23-May-13	9:10	541458	5063070		Blanding's Turtle	1		juvenile, roadkill, photographed	THR	BLTU
23-May-13	9:14	541439	5063066		Blanding's Turtle	1		roadkill, photographed	THR	BLTU
23-May-13	9:16	541460	5063023		Blanding's Turtle	1		roadkill, photographed	THR	BLTU
23-May-13	12:48	565257	5035189		Blanding's Turtle	1		female, roadkill, photographed	THR	BLTU
9-Jun-13	9:29	539962	5066371		Blanding's Turtle	1		juvenile, roadkill, photographed	THR	BLTU
10-Jun-13	13:01	540875	5064366		Blanding's Turtle	1		bones	THR	BLTU
12-Jun-13	15:39	539969	5066327		Blanding's Turtle	1		juvenile, roadkill, photographed	THR	BLTU
13-Jun-13	15:51	533589	5081140		Blanding's Turtle	1		female, roadkill, photographed	THR	BLTU
18-Jun-13	16:22	533687	5081580		Blanding's Turtle	1		female with eggs, roadkill, photographed, likely purposely hit	THR	BLTU
30-Jun-13	13:08	540281	5065697		Blanding's Turtle	1		roadkill, photographed	THR	BLTU
1-Jul-13	14:38	541453	5063087		Blanding's Turtle	1		roadkill, photographed	THR	BLTU
3-Jul-13	13:15	571691	5031142		Blanding's Turtle	1		female, roadkill, photographed	THR	BLTU
23-Jul-13	9:34	532600	5090302		Blanding's Turtle	1		juvenile, roadkill, photographed	THR	BLTU
24-Jul-13	15:41	541474	5062984		Blanding's Turtle	1		juvenile, roadkill, photographed	THR	BLTU
4-Jul-13	17:20	540599	5065047		Five- lined skink	1		adult	SC	FLSK
2-Jul-13	13:46	559561	5040797		Massasauga Rattlesnake	1		healthy adult	THR	MASS
23-May-13	6:21	Exact location will not be made public due to threat of poaching			Restricted Species	-	-	-	SC	SNTU
23-May-13	6:34	547166	5053320		Snapping Turtle	1		roadkill, photographed	SC	SNTU
23-May-13	12:44	Exact location will not be made public due to threat of poaching			Restricted Species	-	-	-	SC	SNTU
23-May-13	12:50	565253	5035193		Snapping Turtle	1		baby, photographed	SC	SNTU
23-May-13	12:56	565249	5035222		Snapping Turtle	1		roadkill, photographed	SC	SNTU
23-May-13	12:58	Exact location will not be made public due to threat of poaching			Restricted Species	-	-	-	SC	SNTU
23-May-13	13:15	Exact location will not be made public due to threat of poaching			Restricted Species	-	-	-	SC	SNTU
23-May-13	16:11	555962	5044211		Snapping Turtle	1		juvenile, roadkill, photographed	SC	SNTU
23-May-13	16:55	554428	5045162		Snapping Turtle	1		roadkill, photographed	SC	SNTU
24-May-13	8:33	566913	5033341		Snapping Turtle	1		roadkill, photographed	SC	SNTU
9-Jun-13	8:37	563350	5037120		Snapping Turtle	1		juvenile, roadkill, photographed	SC	SNTU
9-Jun-13	8:49	554605	5045088		Snapping Turtle	1		roadkill, photographed	SC	SNTU
9-Jun-13	8:57	552204	5046325		Snapping Turtle	1		juvenile, roadkill, photographed	SC	SNTU
9-Jun-13	9:03	548781	5049515		Snapping Turtle	1		roadkill, photographed	SC	SNTU
9-Jun-13	9:17	541713	5062471		Snapping Turtle	1		juvenile, roadkill, photographed	SC	SNTU
10-Jun-13	10:40	538815	5069576		Snapping Turtle	1		nesting on road shoulder, photographed	SC	SNTU
10-Jun-13	13:17	541415	5063130		Snapping Turtle	1		juvenile, roadkill, photographed	SC	SNTU
10-Jun-13	15:15	538407	5069771		Snapping Turtle	1		juvenile, roadkill, photographed	SC	SNTU
13-Jun-13	14:39	556296	5043978		Snapping Turtle	1		roadkill, photographed	SC	SNTU
13-Jun-13	16:06	532604	5090178		Snapping Turtle	1		roadkill, photographed	SC	SNTU
14-Jun-13	8:59	550426	5047310		Snapping Turtle	1		juvenile, roadkill, photographed	SC	SNTU
14-Jun-13	16:53	551654	5046565		Snapping Turtle	1		baby, roadkill, photographed	SC	SNTU
30-Jun-13	14:19	533603	5082505		Snapping Turtle	1		juvenile, roadkill, photographed	SC	SNTU
30-Jun-13	14:32	533420	5093083		Snapping Turtle	1		roadkill, photographed	SC	SNTU
3-Jul-13	16:08	533088	5091677		Snapping Turtle	1		juvenile, roadkill, photographed	SC	SNTU
23-Jul-13	9:38	532600	5090293		Snapping Turtle	1		roadkill, photographed	SC	SNTU
23-Jul-13	9:46	532605	5090219		Snapping Turtle	1		roadkill, photographed	SC	SNTU
24-Jul-13	10:23	563139	5037291		Snapping Turtle	1		juvenile, roadkill, photographed	SC	SNTU
12-Jun-13	15:42	Exact location will not be made public due to threat of poaching			Restricted Species	-	-		END	-
14-Jun-13	10:27	Exact location will not be made public due to threat of poaching			Restricted Species	-	-		END	-
23-May-13	7:01	546938	5054154		turtle nest			predated turtle nests, SNTU and others	SC	SNTU
23-May-13	8:58	541947	5061927		turtle nest			predated turtle nests, SNTU and others	SC	SNTU
30-Jun-13	11:04	534765	5075263		turtle nest	1		predated turtle nests, SNTU and others	SC	SNTU



## Appendix B

Stantec's Terrestrial Survey Work Program (Stantec, 2013)



**2013 TERRESTRIAL SURVEY  
WORK PROGRAM**

File No. 160960770  
March 2013

Prepared for:

**Nigig Power Corp.**  
Henvey Inlet Wind Project

Prepared by:

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Figure 1: Study Area for the proposed Nigig Power Corp. Henvey Inlet Wind Project and Transmission Corridor

## 1.0 Terrestrial Field Program

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Stantec Consulting Ltd. ("Stantec") is providing this work plan to Environment Canada for the terrestrial field investigations for the 300 MW, Feed-In Tariff ("FIT") Contracted, Henvey Inlet Wind Project (the "Project"). The key Project elements include:

- i) *On-Reserve Facilities:* up to 120 wind turbines, a transformer station, operations and maintenance building, access roads, collector lines, and ancillary facilities on Henvey Inlet First Nation Lands (Reserve No. 2); and
- ii) *Off-Reserve Facilities:* approximately 90 km of 230 kV, double circuit overhead transmission line from Reserve No. 2 to the Town of Parry Sound, Ontario where the project will interconnect with the provincial electricity grid at Hydro One Networks Inc.'s ("Hydro One") existing Parry Sound Transformer Station. The transmission line, as presently proposed, would be located within the current and future rights-of-way held by the Ontario Ministry of Transportation for King's Highway 69/400.

Save the Project's transmission line and interconnection works at the Parry Sound Transformer Station, all Project infrastructure will be located on Henvey Inlet First Nation Reserve Lands (Reserve No. 2). Preliminary siting of the wind turbines, collector lines, operations and maintenance building, transformer station, and access roads are in progress and are taking into account important cultural and environmental features as they are identified through field surveys, traditional ecological knowledge studies, and engagement efforts with the Henvey Inlet First Nation community.

For the transmission line, as proposed to be located within the current and future rights-of-way held by the Ontario Ministry of Transportation for King's Highway 69/400, the natural heritage field investigations for the majority of the transmission corridor fall under the requirements of Ontario Regulation 116/01 of Ontario's *Environmental Assessment Act* and will therefore be subject to review and approval by the Ministry of the Environment. However, portions of the highway corridor traverses roughly 35 ha of the Magnetewan First Nation Reserve (No. 1) and about 11 ha of the Shawanaga First Nation Reserve (No. 17), lands which are under federal jurisdiction.

Throughout this document, the wind project component on the Reserve Lands will be referred to as the Project Location and the transmission line corridor will be referred to as the Transmission Line. Collectively, these areas will be referred to as the Study Area for the purpose of the terrestrial survey work program.



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The Project Location and Transmission Line alignment are shown on **Figure 1**. The purpose of the natural environment field program is to collect data relevant to vegetation communities (ecosites), wetlands, wildlife habitat, and Species at Risk. The objective of this work plan is to seek Environment Canada's agreement with the study methodologies and protocols set out herein for terrestrial investigations of the Project during the late winter, spring, summer and fall of 2013.

## **2.0 Field Program Overview**

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The Project Location is within the Henvey Inlet First Nation Reserve along the eastern shore of Georgian Bay, south of French River Provincial Park and directly north of North Georgian Bay Shoreline and Islands Conservation Reserve. Generally, the Project Location has shallow soils, with many rocky outcrops forming longitudinal ridges running on a northwest to southeast axis, and is divided roughly in half by Henvey Inlet. Numerous wetland pockets are located between the ridges and across the Project Location, with upland areas supporting forested areas of poplar and jack pine.

The characteristics of terrestrial habitat and areas of potential significance or sensitivity will first be identified as part of the early-on consultation with Henvey Inlet First Nations and relevant agencies, as well as a review of the available natural heritage information. Information gained through the consultation process and desktop review will be supplemented by general aerial and ground-level (by foot or boat) surveys of the Study Area to fine-tune the field program and assist in siting monitoring stations. Wildlife and vegetation surveys will begin in March, when raptors begin their spring migration and will continue into November, when the final fall migratory waterfowl are expected to move through the Study Area.

### **2.1 ECOSITE CLASSIFICATION AND WETLANDS**

Ecosite classification forms the backbone of wildlife habitat assessment. For the Project, the Ecosites of Ontario classification system (Banton *et al.*, 2009) will be used as it includes forest and non-forest communities as well as wetlands.

A wetland is land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation and various kinds of biological activity which are adapted to a wet environment (The Federal Policy on Wetland Conservation ("FPWC"), Environment Canada, 1991). The protection and conservation of wetlands on federal lands is mandated by the FPWC. Mitigation of adverse environmental effects on wetlands is guided by the FPWC goal of achieving 'no net loss of wetland functions'. The no net loss principal can be achieved by using a hierarchical sequence of mitigation alternatives: avoidance, minimization, and compensation. Wetlands on federal lands can be described using The Canadian Wetland Classification System (National Wetlands Working Group, Second Edition, 1997).

Provincially, the Ontario Wetland Evaluation System (Ministry of Natural Resources, 2002), is used to map and score wetlands based on biological productivity and diversity, human use, hydrologic functions, and unique characteristics such as geographical rarity. It is anticipated that no wetlands have been evaluated using the OWES on the Henvey Inlet First Nation Reserve Lands.



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## 2.2 WILDLIFE HABITAT

Wildlife habitat is defined as an area where plants, animals and other organisms live, including areas where species concentrate at a vulnerable point in their life cycle and that are important to migratory and non-migratory species. The work program has been designed to capture those wildlife species and their habitats which may occur in the Study Area and may be influenced by the Project.

## 2.3 ENDANGERED, THREATENED AND SPECIAL CONCERN SPECIES

A desktop review of the MNR Natural Heritage Information Centre (NHIC) database, as well as provincial atlases for breeding birds, mammals, reptiles and amphibians, was conducted to identify species of conservation concern in the vicinity of the Study Area. Twenty-seven terrestrial species listed as endangered, threatened or special concern at the provincial and federal level have the potential to occur within the Study Area (Table 1). Several of these species were recorded within the Project Location during previous terrestrial field investigations by LGL Limited. Site investigations in the proposed 2013 terrestrial work program will assess the presence and identify preferred habitat of these species.

**Table 1: Endangered, threatened and special concern terrestrial wildlife species potentially present within the Study Area**

Type	Common Name	Scientific Name	S - Rank	COSSARO	COSEWIC
Reptile	Stinkpot / Eastern Musk Turtle	<i>Sternotherus odoratus</i>	S3	THR	THR
Reptile	Blanding's Turtle	<i>Emydoidea blandingii</i>	S3	THR	THR
Reptile	Snapping Turtle	<i>Chelydra serpentina</i>	S3	SC	SC
Reptile	Northern Map Turtle	<i>Graptemys geographica</i>	S3	SC	SC
Reptile	Eastern Hog-nosed Snake	<i>Heterodon platirhinos</i>	S3	THR	THR
Reptile	Eastern Foxsnake (Georgian Bay)	<i>Pantherophis gloydi</i>	S3	THR	END
Reptile	Eastern Massasauga (Great Lakes/ St Lawrence)	<i>Sistrurus catenatus catenatus</i>	S3	THR	THR
Reptile	Eastern Ribbonsnake	<i>Thamnophis sauritus</i>	S3	SC	SC
Reptile	Milksnake	<i>Lampropeltis triangulum</i>	S3	SC	SC
Reptile	Five-lined Skink (Southern Shield population)	<i>Plestiodon fasciatus</i>	S3	SC	SC
Bird	Least Bittern	<i>Ixobrychus exilis</i>	S4B	THR	THR
Bird	Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	S4B	THR	THR
Bird	Chimney Swift	<i>Chaetura pelagica</i>	S4B, S4N	THR	THR
Bird	Barn Swallow	<i>Hirundo rustica</i>	S4B	THR	THR (NS)
Bird	Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	THR	THR (NS)
Bird	Eastern Meadowlark	<i>Sturnella magna</i>	S4B	THR	THR (NS)
Bird	Bald Eagle	<i>Haliaeetus leucocephalus</i>	S4B, S2N	SC	SC
Bird	Common Nighthawk	<i>Chordeiles minor</i>	S4B	SC	THR
Bird	Olive-sided Flycatcher	<i>Contopus borealis</i>	S4B	SC	THR
Bird	Eastern Wood-Pewee	<i>Contopus virens</i>	S4B	-	SC (NS)
Bird	Wood Thrush	<i>Hylocichla mustelina</i>	S4B	-	THR (NS)

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**Table 1: Endangered, threatened and special concern terrestrial wildlife species potentially present within the Study Area**

Type	Common Name	Scientific Name	S - Rank	COSSARO	COSEWIC
Bird	Golden-winged Warbler	<i>Vermivora chrysoptera</i>	S4B	SC	THR
Bird	Canada Warbler	<i>Wilsonia canadensis</i>	S4B	SC	THR
Mammal	Little Brown Myotis	<i>Myotis lucifugus</i>	S5	END	END (NS)
Mammal	Northern Myotis	<i>Myotis septentrionalis</i>	S3?	END	END (NS)
Mammal	Tri-coloured Bat	<i>Perimyotis subflavus</i>	S3?	-	END (NS)

COSSARO: Committee on the Status of Species at Risk in Ontario

COSEWIC: Committee on the Status of Endangered Species in Canada

S2 – Imperiled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.

S3: Vulnerable—Vulnerable in the province, relatively few populations (often 80 or fewer)

S4: Apparently Secure—Uncommon but not rare

S5: Secure—Common, widespread, and abundant in the province

S#B: Breeding status rank

S#N – Non-breeding status rank

S? – Rank Uncertain

NAR: Not At Risk

END: Endangered

THR: Threatened

SC: Special Concern

N/A: not applicable

NS: Not on Species at Risk Act Schedule



### **3.0 Proposed Field Work Program**

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Due to the known presence of Species at Risk, the project is considered to have “Very High” site sensitivity and would be ranked as “Category 4” by Environment Canada’s “Wind Turbines and Birds: A Guidance Document for Environmental Assessment” (2007a). Projects in this category usually require comprehensive baseline surveys; a requirement that has been considered in the development of this work program.

The survey protocols are consistent with Environment Canada’s “Recommended Protocols for Monitoring Impacts on Wind Turbines on Birds” (Environment Canada, 2007b) and on Environment Canada’s comments on LGL Limited’s 2011 workplan for the Project. Recommended protocols for species at risk are based on Stantec’s technical expertise and on experience with the Ministry of Natural Resources species-specific surveys requirements.

Detailed protocols of each survey type are outlined below. The suite of surveys proposed along the Transmission Line differs slightly than those within the Project Location, due to differences in potential environmental effects. For example, migratory bird surveys are not proposed along the Transmission Line. **Table 4** provides a summary of all proposed surveys, including a breakdown of which surveys are to be conducted within the Project Location and those to be conducted along the Transmission Line.

#### **3.1 GENERAL RECONNAISSANCE (EARLY APRIL)**

Given the limited access in and around the Project Location and the relatively rugged topography and abundance of wetlands in the Study Area, multi-purpose broad-scale surveys will be completed to obtain an overall understanding of the landscape, and to put the detailed field study locations in context.

An aerial survey by helicopter will be conducted in early April to observe the landscape without leaf cover and at a time of pronounced hydrological activity (i.e. spring melt). Leaf-off conditions will also allow a search for habitat features such as stick nests and wetland types. A reconnaissance survey of the Project Location by boat and foot will be undertaken in early April, guided by local members of the Henvey Inlet First Nations. The purpose of the reconnaissance survey will be to gain a better understanding of site access and points of interest, including locations of rare species, based in local knowledge.

#### **3.2 SPRING MIGRATORY BIRD SURVEYS**

##### **3.2.1 Spring raptor migration (Ten surveys, early March to end of April):**

Monitoring will consist of ten surveys throughout the spring migration period (March to end of April) to record presence of diurnal migrant raptors. Surveys will be comprised of six-hour point counts starting at 9:00 am, conducted by two observers stationed at two appropriate vantage

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points within the Project Location. When site access allows, surveys stations will be situated in the east and west portions of the Project Location. However, during times of year when site access is limited (i.e. late winter, early spring) alternative locations may be used with efforts to maximize spatial coverage.

All raptors observed during the surveys will be recorded and mapped. Behaviour of the raptors will be noted with emphasis on flight height and determining which individuals were actively migrating as opposed to staging (e.g. hunting, perching, etc.). For actively migrating raptors, flight paths will be mapped.

**3.2.2 Spring passerine migration (Eight surveys, early April to late May):**

Natural habitat located in close proximity to the Georgian Bay shoreline provides stopover habitat for migrating passerine birds. Eight weekly surveys are proposed in April and May. Monitoring will consist of ten, 500m long transects distributed throughout the Project Location. Transects will be placed in different habitat types (i.e. woodland, rock barren and wetland). Given the variable nature of vegetation communities within the Project Location, it is likely most 500m transects will include more than one habitat type. A description of the habitat along each of the 10 transects will be recorded.

Surveys will be conducted in the morning, between dawn and approximately 10:00 am. A tally of all species observed will be recorded on each transect. These surveys will include characterizing the abundance and diversity of passerines within the Project Location.

**3.2.3 Spring waterfowl migration (Four surveys, April to late May):**

Spring monitoring for migrating waterfowl will be focused along Henvey Inlet and will consist of four bi-weekly surveys undertaken by boat in April and May. Surveys will include waterfowl counts to record species and number of individuals observed along the inlet, as well as characteristics of the wetlands to support migrating waterfowl (e.g. size, vegetation, permanence, etc.).

The use of scattered wetlands and ponds throughout the Project Location by staging waterfowl will be assessed through the spring passerine surveys.

**3.3 BREEDING BIRD SURVEYS****3.3.1 Daytime breeding birds (Two surveys, late May to early July):**

Two rounds of breeding bird surveys will be conducted in each major habitat type with the Study Area (woodland, rock barren and wetland). Surveys will consist of ten-minute point counts, in conjunction with area searches (wandering transects) between point count locations. The area searches will allow for collection a comprehensive species list, whereas point counts will provide information on species density.



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Surveys would take place starting 30 minutes before sunrise and continue until approximately 10:00 am. As per Environment Canada guidance, a minimum of 20 point counts will be sited in each major habitat type. However, given the variability of habitat types that occur within the Study Area, it is anticipated that many point counts may cover more than one habitat type.

In marsh habitat, play-back call surveys for marsh breeding birds will be conducted following the ten-minute point count, to assist in detection of more secretive marsh bird species, specifically, the threatened Least Bittern.

Location of all species at risk observations will be geo-referenced using a hand-held GPS unit, mapped and compared to ecosite classification to develop habitat mapping for each species.

**3.3.2 Crepuscular breeding birds (Two surveys, May and June):**

Eastern Whip-poor-will surveys will be conducted in suitable open habitat within forested areas. Surveys will be conducted in May and June and will consist of six-minute point counts at stations spaced within the Project Location and Transmission Line corridor. Due to the remote location of much of the Study Area, survey locations may be selected with consideration to access and surveyor safety.

Surveys will begin approximately 30 minutes after sunset within appropriate weather conditions (not in high winds, persistent rain or an overcast sky) and will, if possible, coincide with the full moon. All individuals heard will be recorded, with an estimated direction and distance from the observer.

**3.3.3 Owls (One survey, April):**

Given the difficulty in detecting owl species, the use of playback calls to elicit a response will be used. A single survey in April is proposed, and will include various stations throughout the Project Location. Due to the remote location of much of the Study Area, survey locations may be selected based on facility of access and surveyor safety.

Surveys will begin approximately 30 minutes after dark and will consist of 10 minute point counts incorporating playback and periods of silent listening. All individual heard will be recorded, with an estimated direction and distance from the observer.

**3.3.4 Raptor and colonial nesting birds (Two surveys, April and June):**

Searches for large stick nests or “nest bowls” in trees, typically exhibiting a DBH (diameter at breast height) of >50 cm, will be conducted during the aerial reconnaissance prior to leaf-out. Searches will target trees along watercourses, with special attention afforded to large white pines, and swamps along large bodies of water, as well as other appropriate habitat within the Study Area. If present, nests will be surveyed for activity concurrent with breeding bird point counts and area searches in June.

### **3.4 AMPHIBIAN AND REPTILE SURVEYS**

#### **3.4.1 Western Chorus Frog and Salamanders (April):**

Western Chorus Frog surveys will consist of 3-minute call counts at potential breeding habitat conducted in April, during appropriate weather conditions. This species breeds in small or shallow aquatic habitats associated with moist, open terrestrial habitat (COSEWIC, 2008c). Males call from the water and are typically active when air temperatures are above 5°C, although calls have been detected at air temperatures as low as -1°C (COSEWIC, 2008c).

Unlike many anurans, Western Chorus Frogs are generally very active throughout the day. As such, daytime survey will be used to cover larger portions of the Study Area than evening call surveys would permit.

Surveys for amphibian egg masses will take place concurrent with calling surveys. These will consist of perimeter surveys of suitable breeding ponds by trained field personnel. Egg masses of different species are often characteristic based on features such as where they are laid, how many eggs are in the mass, density of the egg mass, and whether or not the eggs are encased in jelly.

### **3.5 REPTILE HABITAT AND TARGETED SURVEYS (MAY AND JUNE):**

Reptile habitat and targeted species surveys will take place in three stages.

Preliminary surveys for reptiles will also take place throughout the migratory and breeding bird survey periods. Field biologists familiar with reptile species identification will be conducting area searches and wandering transect surveys in a variety of areas providing habitat for reptiles at both the Project Location, weekly from early April until early July, and along the Transmission Line, weekly from late May until early July. Any incidental observations of turtles, snakes or lizards, including shed skins or shells, will be recorded on survey forms and used to refine the field survey program proposed for June.

Potential snake or turtle habitat within the Study Area will also be identified during Ecosite surveys, beginning in May. The habitat assessment will involve identification of potential reptile habitat features, including:

- Turtle overwintering habitat and snake/skink hibernacula;
- Nesting sites; and,
- Foraging habitats.

Targeted field surveys for reptile species at risk will occur in June. Timing of these surveys will coincide with a period of high activity for reptiles (nesting and foraging), but also when air temperatures encourage basking behavior. Surveys for snake species at risk and Five-lined Skink will consist of wandering transects through all appropriate habitat types (**Table 2**).



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Additional survey effort will be directed toward areas with previous observations of these species which may indicate high quality or limited habitat. To the extent possible, surveys will be conducted on sunny days when air temperatures are a minimum of 15°C (ideally 20°C). Surveys for turtles will consist of daytime basking surveys from land or boat in suitable wetland and open water habitat (Table 2), and evening nesting surveys in potential upland nesting sites identified during Ecosite surveys. Basking surveys will be conducted on sunny days when air temperatures are a minimum of 15°C (ideally 20°C). Nesting surveys will take place on warm evenings (daytime air temperature >20°C), ideally before or after rainfall. All surveys will record species, number, location and behaviour of observed reptiles.

The purpose of the targeted surveys is to confirm habitat used by the various reptile species at risk within the Study Area and provide information on general abundance and distribution. Survey results will be used to produce detailed mapping of reptile habitat features which will be used to guide the siting layout process and maximize avoidance of sensitive features.

Table 2: General Habitat Description and Use by Reptile Species at Risk

Common Name	General Habitat and Use*
<b>Turtles</b>	
Blanding's Turtle	Lakes, ponds and wetlands with clear shallow water and muck bottoms. Will move between habitats within active season; aerial basking; nesting in late May to early July, in open sandy soil up to 2.5km from primary wetland, but typically within 400m of water; overwinter in marsh, bog or fen with >0.5m water depth.
Stinkpot	Shallow water in rivers, lakes and ponds with slow current and soft bottom; aquatic basking, often under floating vegetation; nesting in June, in shallow soil near water, occasionally in or under leaf litter; overwinter in primary habitat with muck bottom.
Northern Map Turtle	Large rivers and lakes with soft bottom; aerial basking; nesting June and July in sandy soil; overwinter in general habitat in areas with >5m water depth.
Snapping Turtle	All aquatic habitats, but rarely in moving water, prefer large water bodies associated with marsh and/or swamp; aquatic basking
<b>Snakes and Lizard</b>	
Eastern Hog-nosed Snake	Open forest and forest edges with sandy soil in proximity to water; egg-laying in late June and July in nests excavated in sandy soil, often under cover objects; hibernation in mammal burrows.
Eastern Foxsnake	Georgian Bay populations inhabit rock barrens with sparse trees and shrubs in close proximity to shoreline; basking under or near rocks or in rock crevices; egg-laying late June to July in rock crevices or decaying vegetation; communal hibernation in rock crevices near shoreline.
Eastern Massasauga	Georgian Bay populations use rock barrens, wetlands and shorelines; viviparous, bearing young in late summer; communal gestation under rock cover; hibernation in rock crevices or animal burrows where water level is close to surface.
Eastern Ribbonsnake	Wetland edges with low vegetation and open basking areas; often seen swimming; viviparous, bearing young in late summer; hibernation in rock crevices and mammal burrows.

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**Table 2: General Habitat Description and Use by Reptile Species at Risk**

Common Name	General Habitat and Use*
Milksnake	Forest edges and open meadow; bask under cover objects; egg-laying May to July in loose soil, decomposing wood or vegetation; hibernation in rock crevices and mammal burrows, often communally and with other species.
Five-lined Skink	Open forest and rock barren; abundance of cover objects (rocks and woody debris) is important, longer/larger cover is preferred; nesting in shallow soil under cover objects.

\* Habitat description and use data obtained from COSEWIC assessment and status reports.

**3.6 BAT SURVEYS (TWO SURVEYS, JUNE):**

Bat surveys will be conducted in conjunction with Whip-poor-will surveys. A portable, hand-held broad band acoustic monitor will be used to detect bat calls. Recorded bat calls will be analysed to guild or species, where possible, following completion of the field program. The goal of the bat surveys will be to determine the presence and relative abundance of bat species at risk.

**3.7 ECOSITE, WETLAND AND VEGETATION SURVEYS****3.7.1 Ecosite Classification, including Wetlands (May to July):**

Vegetation communities within the Study Area will be delineated on aerial photographs and confirmed during field investigations. Community characterizations will be based on the Ecosites of Ontario system (Banton et al., 2009) and will be identified to the Vegetation Type unit level.

The Ecosites of Ontario classification system includes wetlands. Searches for wetlands not previously identified within the Study Area will be conducted as part of the Ecosite surveys. If encountered, previously unidentified wetlands will be recorded through field notes, photographs and geo-referenced using handheld GPS units.

**3.7.2 Rare flora (May to July):**

Searches for rare plants and habitat supporting these plants will be conducted concurrent with Ecosite surveys, where possible, but may also require spring assessments for ephemeral species or mid-summer assessments for species where identification is dependent on the flowering period of the species. If encountered, rare plants or habitat will be recorded through field notes, photographs and geo-referenced using handheld GPS units.

A review of the MNR Natural Heritage Information Centre (NHIC) database (NHIC, 2012) indicates that two provincially rare vegetation communities are known to occur within the Study Area:

- Atlantic Coastal Plain Shallow Marsh Type; and,
- Buttonbush Organic Thicket Swamp Type



**2013 TERRESTRIAL SURVEY****WORK PROGRAM**

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The following rare plant species (**Table 3**) may also be encountered in the Study Area:

<b>Table 3: Rare Plant Species and Flowering Period</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Flowering Period</b>
<b>Flowering Plants</b>		
St. Lawrence Grape Fern	<i>Botrychium rugulosum</i>	Mid-Spring
Thread-like Naiad	<i>Najas gracillima</i>	Summer to Fall, seeds important to ID so survey at end of period
Large Round-leaved Orchid	<i>Plantathera macrophylla</i>	June to August
Snailseed Pondweed	<i>Potamogeton bicupulatus</i>	Early Summer to Fall, seeds important to ID so survey at end of period
Alga Pondweed	<i>Potamogeton confervoides</i>	Summer, seeds important to ID so survey at end of period
Twin-stemmed Bladderwort	<i>Utricularia geminiscapa</i>	July to August
<b>Liverworts</b>		
Liverwort sp.		Unknown, best period for general identification is June-August

### **3.8 FALL MIGRATORY BIRD SURVEYS**

#### **3.8.1 Fall passerine migration (Eight surveys, end of August to mid October)**

Natural habitat located in close proximity to shorelines provides stopover habitat for migrating birds. Eight weekly surveys are proposed between the end of August and mid October. Monitoring will consist of ten, 500 m long transects distributed throughout the Project Location. The same transects will be used as in the Spring Passerine Migration surveys.

Survey will be conducted in the morning, between dawn and approximately 10:00 am. A tally of all species observed will be recorded on each transect. These surveys will include characterizing the abundance and diversity of passerines within the Project Location.

#### **3.8.2 Fall waterfowl migration (Six surveys, September to October):**

Fall monitoring for migrating waterfowl will be focused along Henvey Inlet and will consist of four bi-weekly surveys undertaken by boat in September through October. Surveys will include waterfowl counts to record species and number of individuals observed along the inlet, as well as characteristics of the wetlands to support migrating waterfowl (e.g. size, vegetation, permanence, etc.).

The use of scattered wetlands and ponds throughout the Project Location by staging waterfowl will be assessed through the Fall Passerine surveys.

**2013 TERRESTRIAL SURVEY****WORK PROGRAM**

Proposed Field Work Program

March 2013

**3.8.3 Fall raptor migration (Ten surveys, September to October):**

Monitoring will consist of ten surveys throughout the fall migration period (September to October) to record presence of diurnal migrant raptors. Surveys will be comprised of six-hour point counts starting at 9:00 am, conducted by two observers stationed at two appropriate vantage points within the Project Location. When site access allows, surveys stations will be situated in the east and west portions of the Project Location.

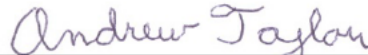
All raptors observed during the survey will be recorded and mapped. Behaviour of the raptors will be noted with emphasis on flight height and determining which individuals were actively migrating as opposed to staging (e.g. hunting, perching, etc.). For actively migrating raptors, flight paths will be mapped.

**3.9 INCIDENTAL OBSERVATIONS**

In addition to targeted wildlife surveys described above, all incidental observations of terrestrial wildlife or other significant sightings made during surveys throughout the 2013 field season will be recorded. Notes will be taken on the species, number of individuals, locations and behavior. Observations made early in the field season may be used to refine the remainder of the field program.

**STANTEC CONSULTING LTD.**

Melissa Cameron, MSc, MLA  
Ecologist / Landscape Architect



Andrew Taylor  
Terrestrial Ecologist



## 2013 TERRESTRIAL SURVEY

## WORK PROGRAM

Proposed Field Work Program

March 2013

Table 4: Summary of Natural Environment Field Program

Study	Mode	Frequency	Timing	Study Area
<b>General Reconnaissance</b>				
Aerial survey	Helicopter	Once	early April, prior to leaf-out	PL
Ground survey	Foot / boat survey with Henvey Inlet First Nations	Once	early April	PL
<b>Bird Surveys</b>				
<b>Spring Migration</b>				
Passerines	Ten, 500m long transects	Once per week, each transect (8 surveys)	Early April to late May	PL
Waterfowl Stopover and Staging	Henvey Inlet	Once every other week (4 surveys)	April to Late May	PL
Raptors	2 stations	Ten surveys	Early March to end April	PL
<b>Breeding Birds</b>				
Point Counts	Minimum of 20 stations in each major habitat type	Two rounds of surveys	Late May to early July	PL, TL
Area Searches	Wandering transect between point count stations	Two rounds of surveys	Late May to early July	PL, TL
Play-back call surveys	Stations in suitable habitat	Owls – once Marsh Birds – Two rounds of surveys	Owls – April Marsh Birds – May to July	PL, TL
Crepuscular surveys	In suitable Whip-poor-will habitat	Two round of surveys	May - June	PL, TL
Raptor and Colonial Bird Nests	Visual survey for raptor and colonial nesting bird nests	Twice – once to locate, once to confirm use	Concurrent with aerial reconnaissance, then with point counts to confirm use	PL, TL
<b>Fall Migration</b>				
Passerines	Ten, 500m long transects	Once per week, each transect (8 surveys)	End August to mid-October	PL
Waterfowl Stopover and Staging	Henvey Inlet only	Once every other week (4 surveys)	September to October	PL
Raptors	2 stations	Ten surveys	September to October	PL

**2013 TERRESTRIAL SURVEY**

**WORK PROGRAM**

Proposed Field Work Program

March 2013

**Table 4: Summary of Natural Environment Field Program**

Study	Mode	Frequency	Timing	Study Area
<b>Bat Surveys</b>				
Ultrasonic Recording Units	Handheld units	Twice	June, in conjunction with crepuscular surveys	PL, TL
<b>Reptile Surveys</b>				
General Habitat Survey	Habitat Assessment	Once	Concurrent with Ecosite and vegetation surveys	PL, TL
SAR Surveys	Targeted surveys for turtle, snake and lizard species at risk	Once	June	PL, TL
<b>Amphibian Surveys</b>				
Western Chorus Frog Call Counts	Daytime call surveys, including audio recordings	Once	April	PL, TL
Salamander Egg Mass	Daytime surveys in wetlands	Once	April, concurrent with frog call counts	PL, TL
<b>FEC / Botanical Surveys</b>				
Ecosite classification, including wetlands	Ground surveys	Once	May to July	PL, TL
Rare Plants – Spring Ephemerals	Ground surveys	Once	May and June	PL, TL
Rare Plants – Summer Botanical	Ground surveys	Once	July	PL, TL

PL – Project Location.

TL – Transmission Line.



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**2013 TERRESTRIAL SURVEY**

**WORK PROGRAM**

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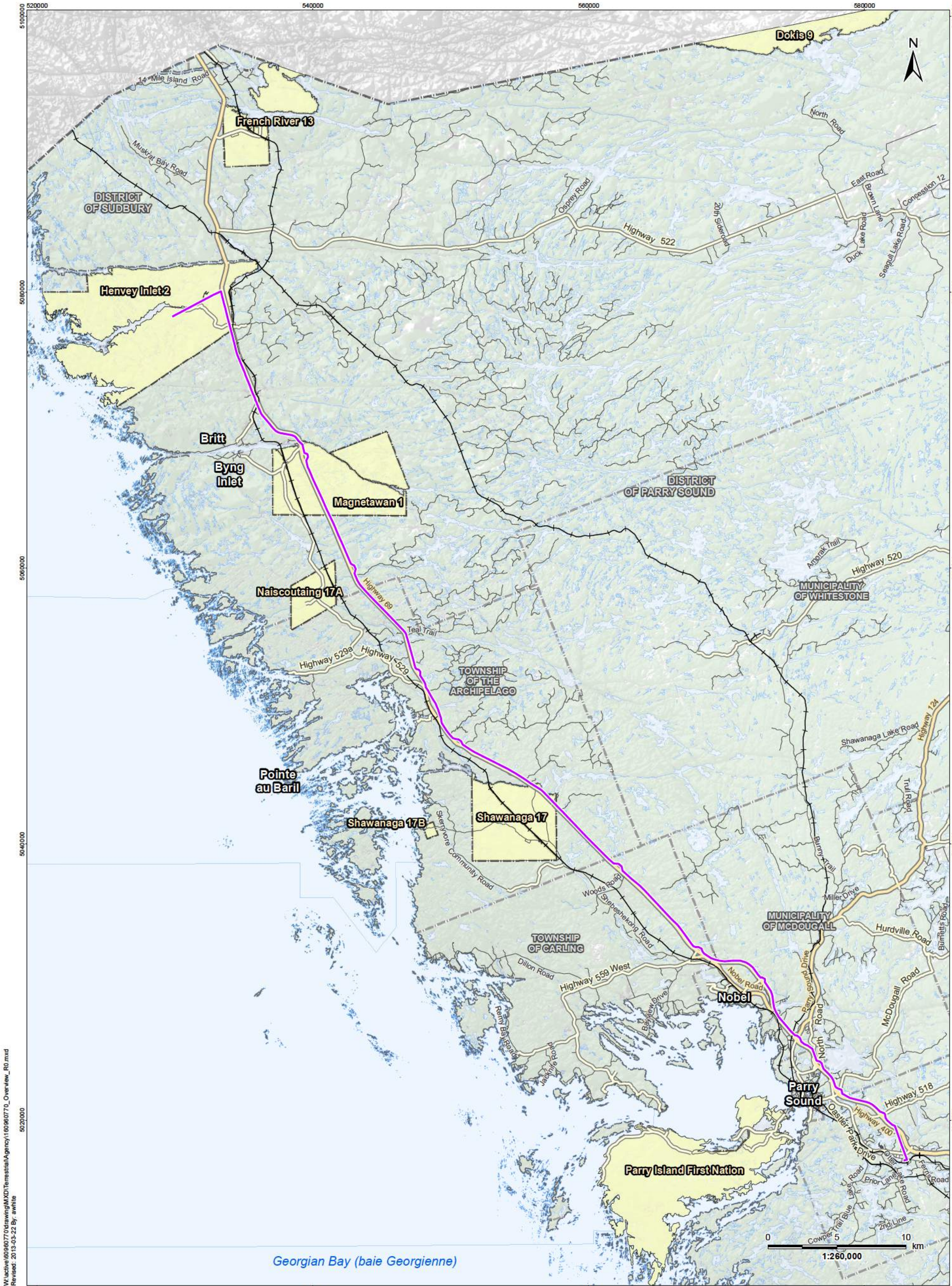
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# **Appendix A**


## **Figures**






W:\active\60960770\drawing\MXD\Terrestrial\Agency\160960770\_Overview\_R0.mxd  
Revised: 2013-03-22 By: awhite


March 2013  
160960770




### Legend




Proposed Transmission Line




Highway




Major Road




Local Road




Railway




Watercourse




First Nation Reserve



Upper Tier Boundary



Lower Tier Boundary



Waterbody

### Notes

- Coordinate System: NAD 1983 UTM Zone 17N
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

\*Precise location of transmission line within highway corridor to be determined

Client/Project  
NIGIG POWER CORP.  
HENVEY INLET WIND PROJECT

Figure No.  
1

Title  
**Study Area Overview**

**DRAFT**



# Appendix D

## Acoustic Monitoring Table

iform_ID	Station_ID	Program	Date_Cmpltd	Round	Action	Lat	Long
300	BAS-B-M12-390	CR/BAS	12-Jun-15	2	Moved from BAS-B-M09-13 in Round 2	45.776323	-80.49084
291	BAS-B-M19-385	CR/BAS	12-Jun-15	2	Moved from BAS-B-M20-14 in Round 2	45.719692	-80.46571
189	BAS-B-M20-14	CR/BAS	27-May-15	1	New Install	45.714878	-80.46255
288	BAS-B-M23-361	CR/BAS	12-Jun-15	2	New Install	45.691211	-80.44842
285	BAS-B-M26-43	CR/BAS	12-Jun-15	2	New Install	45.673033	-80.43152
282	BAS-B-M29-39	CR/BAS	12-Jun-15	2	New Install	45.654113	-80.40618
279	BAS-B-M31-53	CR/BAS	12-Jun-15	2	New Install	45.637392	-80.39497
276	BAS-B-M32-40	CR/BAS	12-Jun-15	2	New Install	45.630733	-80.39363
330	BAS-B-M34-46	CR/BAS	22-Jun-15	3	Moved from BAS-B-M31-53 in Round 3	45.615642	-80.38151
354	BAS-B-M40-47	CR/BAS	22-Jun-15	3	Moved from BAS-B-M32-40 in Round 3	45.579832	-80.35125
186	BAS-B-M41a-15	CR/BAS	27-May-15	1	New Install	45.568374	-80.32879
393	BAS-B-M4-37	CR	24-Jun-15	3	Moved from BAS-B-M12-390 in Round 3	45.828435	-80.54588
345	BAS-B-M49-38	CR/BAS	22-Jun-15	3	Moved from BAS-B-M54-41 in Round 3	45.53038	-80.25258
183	BAS-B-M51-16	CR/BAS	27-May-15	1	New Install	45.519456	-80.2385
315	BAS-B-M54-41	CR/BAS	12-Jun-15	2	New Install	45.50091	-80.21027
312	BAS-B-M55-42	CR/BAS	22-Jun-15	3	Moved from CR-B-M56-52 in Round 3	45.499992	-80.20034
372	BAS-B-M56-48	CR/BAS	23-Jun-15	3	Moved from BAS-B-M55-42 in Round 3	45.495655	-80.19114
309	BAS-B-M59a-102	CR/BAS	12-Jun-15	2	New Install	45.491883	-80.18581
369	BAS-B-M60-17	CR/BAS	22-Jun-15	3	Moved from BAS-B-M59a-102 in Round 3	45.48824	-80.17646
306	BAS-B-M60a-106	CR/BAS	12-Jun-15	2	New Install	45.4879	-80.16485
366	BAS-B-M60b-49	CR/BAS	22-Jun-15	3	Moved from BAS-B-M60a-106 in Round 3	45.487962	-80.15424
303	BAS-B-M61-111	CR/BAS	12-Jun-15	2	New Install	45.489293	-80.14851
363	BAS-B-M62-36	CR/BAS	22-Jun-15	3	Moved from BAS-B-M61-111 in Round 3	45.502507	-80.09117
477	BAS-B-M66-20	CR/BAS	23-Jun-15	3	Moved from CR-B-M65-59 in Round 3	45.502507	-80.09117
333	BAS-B-M68-22	CR/BAS	22-Jun-15	3	Moved from CR-B-M68a-62 in Round 3	45.50458	-80.07302
381	BAS-B-M77-35	CR/BAS	24-Jun-15	3	Moved from CR-B-M68-98 in Round 3	45.449996	-80.02174
294	BAS-B-M79-27	CR/BAS	12-Jun-15	2	New Install	45.430157	-80.01338
297	BAS-B-M80-82	CR/BAS	12-Jun-15	2	New Install	45.427789	-80.01204
384	BAS-B-M89-34	CR/BAS	24-Jun-15	3	Moved from CR-B-M65-58 in Round 3	45.356311	-79.96532
207	BAS-B-M9-13	CR/BAS	28-May-15	1	New Install	45.792014	-80.51249
396	BAS-B-M93-36	CR/BAS	23-Jun-15	3	Moved from BAS-B-M80-82 in Round 3	45.328576	-79.95073



iform_ID	Station_ID	Program	Date_Cmpltd	Round	Action	Lat	Long
204	CR-B-M56-52	CR	28-May-15	Set-up	New Install	45.49902	-80.19651
357	CR-B-M56-52	CR/BAS	22-Jun-15	3	Moved from BAS-B-M19-385 in Round 3	45.49842	-80.19615
348	CR-B-M62-54	CR	22-Jun-15	3	Moved from BAS-B-M23-361 in Round 3	45.489382	-80.14498
360	CR-B-M63-55	CR	22-Jun-15	3	Moved from BAS-B-M26-43 in Round 3	45.492679	-80.12439
228	CR-B-M64-57	CR	21-May-15	Set-up	New Install	45.496611	-80.11143
168	CR-B-M64-57	CR	21-May-15	Set-up	New Install	45.496611	-80.11143
228	CR-B-M64-57	CR/BAS	28-May-15	1	Reprogram	45.496611	-80.11143
n/a	CR-B-M64-57	Not Installed	Not Installed	3	Not Installed to BAS-B-M82-33	45.496675	-80.11136
165	CR-B-M65-58	CR	21-May-15	Set-up	New Install	45.498441	-80.1049
225	CR-B-M65-58	CR/BAS	28-May-15	1	Reprogram	45.498365	-80.10489
162	CR-B-M65-59	CR	21-May-15	Set-up	New Install	45.499916	-80.10087
222	CR-B-M65-59	CR/BAS	28-May-15	1	Reprogram	45.499932	-80.10087
84	CR-B-M68-98	CR	11-May-15	Set-up	New Install	45.5044	-80.06903
243	CR-B-M68-98	CR/BAS	1-Jun-15	1	Reprogram	45.504357	-80.06904
87	CR-B-M68a-62	CR	11-May-15	Set-up	New Install	45.509472	-80.07589
246	CR-B-M68a-62	CR/BAS	1-Jun-15	1	Reprogram	45.509444	-80.07589
90	CR-B-M68a-77	CR	11-May-15	Set-up	New Install	45.510553	-80.07165
249	CR-B-M68a-77	CR/BAS	1-Jun-15	1	Reprogram	45.510531	-80.07162
240	CR-B-M69-97	CR/BAS	1-Jun-15	1	Reprogram	45.502016	-80.06339
93	CR-B-M69-97	CR	11-May-15	Set-up	New Install	45.501987	-80.06338
156	CR-B-M72-69	CR	21-May-15	Set-up	New Install	45.481292	-80.04528
n/a	CR-B-M72-69	CR/BAS	1-Jun-15	1	Reprogram	45.481233	-80.04522
336	CR-B-M72-69	CR/BAS	22-Jun-15	3	Reprogram	45.481292	-80.04528
159	CR-B-M73-70	CR	21-May-15	Set-up	New Install	45.475943	-80.04173
n/a	CR-B-M73-70	CR/BAS	1-Jun-15	1	Reprogram	45.475945	-80.04177
339	CR-B-M73-70	CR/BAS	22-Jun-15	3	Reprogram	45.475943	-80.04173
375	CR-B-M76-76	CR/BAS	23-Jun-15	3	Moved from CR-B-M68a-77 in round 3	45.454858	-80.02592
171	CR-B-M80-78	CR	20-May-15	Set-up	New Install	45.422399	-80.00945
252	CR-B-M80-78	CR/BAS	1-Jun-15	1	Reprogram	45.422399	-80.00945
387	CR-B-M83-80	CR	24-Jun-15	3	Moved from CR-B-M69-97 in Round 3	45.398336	-79.99474
342	CR-B-M90-85	CR/BAS	22-Jun-15	3	Moved from BAS-B-M79-27 in Round 3	45.350611	-79.96314
399	CR-B-M93-88	CR	23-Jun-15	3	Moved from BAS-B-M29-39 in Round 3	45.327329	-79.95137

# Appendix E

## Ontario Breeding Bird Atlas Results



SPECIES	Scientific Name	ESA Status	SARA Status	COSEWIC Status	NHIC Status Ranking
Alder Flycatcher	Empidonax alnorum	0	0	0	S5
American Bittern	Botaurus lentiginosus	0	0	0	S4
American Black Duck	Anas rubripes	0	0	0	S4
American Coot	Fulica americana	0	0	0	S4
American Crow	Corvus brachyrhynchos	0	0	0	S5
American Goldfinch	Carduelis tristis	0	0	0	S5
American Kestrel	Falco sparverius	0	0	0	S4
American Redstart	Setophaga ruticilla	0	0	0	S5
American Robin	Turdus migratorius	0	0	0	S5
American Wigeon	Anas americana	0	0	0	S4
American Woodcock	Scolopax minor	0	0	0	S4
Bald Eagle	Haliaeetus leucocephalus	SC	0	0	S2
Baltimore Oriole	Icterus galbula	0	0	0	S4
Bank Swallow	Riparia riparia	THR	0	0	S4
Barn Swallow	Hirundo rustica	THR	0	THR	S4
Barred Owl	Strix varia	0	0	0	S5
Bay-breasted Warbler	Dendroica castanea	0	0	0	S5
Belted Kingfisher	Ceryle alcyon	0	0	0	S4
Black Tern	Chlidonias niger	SC	0	0	S3
Yellow-billed Cuckoo	Coccyzus americanus	0	0	0	S4
Black-and-white Warbler	Mniotilta varia	0	0	0	S5
Black-backed Woodpecker	Picoides arcticus	0	0	0	S4
Black-billed Cuckoo	Coccyzus erythrophthalmus	0	0	0	S5
Blackburnian Warbler	Dendroica fusca	0	0	0	S5
Black-capped Chickadee	Poecile atricapillus	0	0	0	S5
Black-crowned Night-Heron	Nycticorax nycticorax	0	0	0	S3
Black-throated Blue Warbler	Dendroica caerulescens	0	0	0	S5
Black-throated Green Warbler	Dendroica virens	0	0	0	S5
Blue Jay	Cyanocitta cristata	0	0	0	S5
Golden-winged Warbler	Vermivora chrysoptera	SC	RSchedule	THR	S4
Blue-headed Vireo	Vireo solitarius	0	0	0	S5
Blue-winged Teal	Anas discors	0	0	0	S4
Bobolink	Dolichonyx oryzivorus	THR	0	THR	S4
Boreal Chickadee	Poecile hudsonica	0	0	0	S5
Boreal Owl	Aegolius funereus	0	0	0	S4
Brewer's Blackbird	Euphagus cyanocephalus	0	0	0	S4
Brewster's Warbler					S4b
Broad-winged Hawk	Buteo platypterus	0	0	0	S5
Brown Creeper	Certhia americana	0	0	0	S5
Brown Thrasher	Toxostoma rufum	0	0	0	S4
Brown-headed Cowbird	Molothrus ater	0	0	0	S4
Bufflehead	Bucephala albeola	0	0	0	S4
Canada Goose	Branta canadensis	0	0	0	S5
Canada Warbler	Wilsonia canadensis	SC	RSchedule	THR	S4
Cape May Warbler	Dendroica tigrina	0	0	0	S5
Caspian Tern	Sterna caspia	0	0	0	S3
Cedar Waxwing	Bombycilla cedrorum	0	0	0	S5
Cerulean Warbler	Dendroica cerulea	THR	Schedule	END	S5
Chestnut-sided Warbler	Dendroica pensylvanica	0	0	0	S5
Chimney Swift	Chaetura pelagica	THR	RSchedule	THR	S4
Chipping Sparrow	Spizella passerina	0	0	0	S5
Clay-coloured Sparrow	Spizella pallida	0	0	0	S4
Cliff Swallow	Petrochelidon pyrrhonota	0	0	0	S4

SPECIES	Scientific Name	ESA Status	SARA Status	COSEWIC Status	NHIC Status Ranking
Common Goldeneye	Bucephala clangula	0	0	0	S5
Common Grackle	Quiscalus quiscula	0	0	0	S5
Common Loon	Gavia immer	0	0	0	S5
Common Merganser	Mergus merganser	0	0	0	S5
Common Moorhen	Gallinula chloropus	0	0	0	S4
Common Nighthawk	Chordeiles minor	SC	RSchedule	THR	S4
Common Raven	Corvus corax	0	0	0	S5
Common Snipe	Gallinago gallinago	0	0	0	S5
Common Tern	Sterna hirundo	0	0	0	S4
Common Tern	Fulica americana				S4b
Common Yellowthroat	Geothlypis trichas	0	0	0	S5
Cooper's Hawk	Accipiter cooperi	0	0	0	S4
Dark-eyed Junco	Junco hyemalis	0	0	0	S5
Double-crested Cormorant	Phalacrocorax auritus	0	0	0	S5
Downy Woodpecker	Picoides pubescens	0	0	0	S5
Eastern Bluebird	Sialia sialis	0	0	0	S5
Eastern Kingbird	Tyrannus tyrannus	0	0	0	S4
Eastern Meadowlark	Sturnella magna	THR	0	THR	S4
Eastern Phoebe	Sayornis phoebe	0	0	0	S5
Eastern Screech-Owl	Megascops asio	0	0	0	S4
Eastern Towhee	Pipilio erythrophthalmus	0	0	0	S4
Eastern Wood-Pewee	Contopus virens	SC	0	SC	S4
European Starling	Sturnus vulgaris	0	0	0	SNA
Evening Grosbeak	Coccothraustes vespertinus	0	0	0	S4
Field Sparrow	Spizella pusilla	0	0	0	S4
Gadwall	Anas strepera	0	0	0	S4
Golden-crowned Kinglet	Regulus satrapa	0	0	0	S5
Great Crested Flycatcher	Myiarchus crinitus	0	0	0	S4
Grasshopper Sparrow	Ammodramus savannarum	0	0	0	S4
Gray Catbird	Dumetella carolinensis	0	0	0	S4
Gray Jay	Perisoreus canadensis	0	0	0	S5
Great Black-backed Gull	Larus marinus	0	0	0	S2
Great Blue Heron	Ardea herodias	0	0	0	S4
Great Horned Owl	Bubo virginianus	0	0	0	S4
Green Heron	Butorides virescens	0	0	0	S4
Green-winged Teal	Anas crecca	0	0	0	S4
Hairy Woodpecker	Picoides villosus	0	0	0	S5
Hermit Thrush	Catharus guttatus	0	0	0	S5
Herring Gull	Larus argentatus	0	0	0	S5
Hooded Merganser	Lophodytes cucullatus	0	0	0	S5
Horned Lark	Eremophila alpestris	0	0	0	S5
House Finch	Carpodacus mexicanus	0	0	0	SNA
House Sparrow	Passer domesticus	0	0	0	SNA
House Wren	Troglodytes aedon	0	0	0	S5
Indigo Bunting	Passerina cyanea	0	0	0	S4
Killdeer	Charadrius vociferus	0	0	0	S5
Le Conte's Sparrow	Ammodramus leconteii	0	0	0	S4
Least Bittern	Ixobrychus exilis	THR	RSchedule	THR	S4
Least Flycatcher	Empidonax minimus	0	0	0	S4
Lincoln's Sparrow	Melospiza lincolnii	0	0	0	S5
Little Gull	Larus minutus				SNA
Long-eared Owl	Asio otus	0	0	0	S4
Louisiana Waterthrush	Seiurus motacilla	SC	Schedule	SC	S3



SPECIES	Scientific Name	ESA Status	SARA Status	COSEWIC Status	NHIC Status Ranking
Magnolia Warbler	Dendroica magnolia	0	0	0	S5
Mallard	Anas platyrhynchos	0	0	0	S5
Marsh Wren	Cistothorus palustris	0	0	0	S4
Merlin	Falco columbarius	0	0	0	S5
Mourning Dove	Zenaida macroura	0	0	0	S5
Mourning Warbler	Oporornis philadelphia	0	0	0	S4
Nashville Warbler	Vermivora ruficapilla	0	0	0	S5
Northern Rough-winged Swallow	Stelgidopteryx serripennis	0	0	0	S4
Northern Saw-whet Owl	Aegolius acadicus	0	0	0	S4
Northern Waterthrush	Seiurus noveboracensis	0	0	0	S5
Northern Cardinal	Cardinalis cardinalis	0	0	0	S5
Northern Flicker	Colaptes auratus	0	0	0	S4
Northern Goshawk	Accipiter gentilis atricapillus	0	0	0	S4
Northern Harrier	Circus cyaneus	0	0	0	S4
Northern Hawk Owl	Surnia ulula	0	0	0	S4
Northern Mockingbird	Mimus polyglottus	0	0	0	S4
Northern Parula	Parula americana	0	0	0	S4
Northern Pintail	Anas acuta	0	0	0	S5
Northern Shoveler	Anas clypeata	0	0	0	S4
Olive-sided Flycatcher	Contopus cooperi	SC	RSchedule	THR	S4
Osprey	Pandion haliaetus	0	0	0	S5
Ovenbird	Seiurus aurocapillus	0	0	0	S4
Philadelphia Vireo	Vireo philadelphicus	0	0	0	S5
Pied-billed Grebe	Podilymbus podiceps	0	0	0	S4
Pileated Woodpecker	Dryocopus pileatus	0	0	0	S5
Pine Siskin	Cardeulis pinus	0	0	0	S4
Pine Warbler	Dendroica pinus	0	0	0	S5
Prairie Warbler	Dendroica discolor	0	0	0	S3
Purple Finch	Carpodacus purpureus	0	0	0	S4
Purple Martin	Progne subis	0	0	0	S4
Red Crossbill	Loxia curvirostra	0	0	0	S4
Red-bellied Woodpecker	Melanerpes carolinus	0	0	0	S4
Red-breasted Merganser	Mergus serrator	0	0	0	S4
Red-breasted Nuthatch	Sitta canadensis	0	0	0	S5
Red-eyed Vireo	Vireo olivaceus	0	0	0	S5
Red-headed Woodpecker	Melanerpes erythrocephalus	SC	RSchedule	THR	S4
Red-shouldered Hawk	Buteo lineatus	0	Schedule	0	S4
Red-tailed Hawk	Buteo jamaicensis	0	0	0	S4
Red-winged Blackbird	Agelaius phoeniceus	0	0	0	S4
Ring-billed Gull	Larus delawarensis	0	0	0	S5
Ring-necked Duck	Aythya collaris	0	0	0	S5
Rock Dove	Columba livia				SNA
Rose-breasted Grosbeak	Pheucticus ludovicianus	0	0	0	S4
Ruby-crowned Kinglet	Regulus calendula	0	0	0	S4
Ruby-throated Hummingbird	Archilochus colubris	0	0	0	S5
Ruffed Grouse	Bonasa umbellus	0	0	0	S4
Rusty Blackbird	Euphagus carolinus	0	Schedule	SC	S4
Sandhill Crane	Grus canadensis tabida	0	0	0	S5
Savannah Sparrow	Passerculus sandwichensis	0	0	0	S4
Scarlet Tanager	Piranga olivacea	0	0	0	S4
Sedge Wren	Cistothorus platensis	0	0	0	S4
Sharp-shinned Hawk	Accipiter striatus	0	0	0	S5
Short-eared Owl	Asio flammeus	SC	Schedule	SC	S2

SPECIES	Scientific Name	ESA Status	SARA Status	COSEWIC Status	NHIC Status Ranking
Solitary Sandpiper	Tringa solitaria	0	0	0	S4
Song Sparrow	Melospiza melodia	0	0	0	S5
Sora	Porzana carolina	0	0	0	S4
Spotted Sandpiper	Actitis macularia	0	0	0	S5
Spruce Grouse	Falcipennis canadensis				S5
Swainson's Thrush	Catharus ustulatus	0	0	0	S4
Swamp Sparrow	Melospiza georgiana	0	0	0	S5
Tennessee Warbler	Vermivora peregrina	0	0	0	S5
Tree Swallow	Tachycineta bicolor	0	0	0	S4
Trumpeter Swan	Cygnus buccinator	0	0	0	S4
Turkey Vulture	Cathartes aura	0	0	0	S5
Upland Sandpiper	Bartramia longicauda	0	0	0	S4
Veery	Catharus fuscescens	0	0	0	S4
Vesper Sparrow	Pooecetes gramineus	0	0	0	S4
Virginia Rail	Rallus limicola	0	0	0	S5
Warbling Vireo	Vireo gilvus	0	0	0	S5
Whip-poor-will	Caprimulgus vociferus	THR	RSchedule	THR	S4
White-breasted Nuthatch	Sitta carolinensis	0	0	0	S5
White-throated Sparrow	Zonotrichia albicollis	0	0	0	S5
White-winged Crossbill	Loxia leucoptera	0	0	0	S5
Wild Turkey	Meleagris gallopavo	0	0	0	S5
Willow Flycatcher	Empidonax traillii	0	0	0	S5
Wilson's Phalarope	Phalaropus tricolor	0	0	0	S3
Wilson's Warbler	Wilsonia pusilla	0	0	0	S4
Winter Wren	Troglodytes troglodytes	0	0	0	S5
Wood Duck	Aix sponsa	0	0	0	S5
Wood Thrush	Hylocichla mustelina	SC	0	THR	S4
Yellow Rail	Coturnicops noveboracensis	SC	Schedule	SC	S4
Yellow Warbler	Dendroica petechia	0	0	0	S5
Yellow-bellied Flycatcher	Empidonax flaviventris	0	0	0	S5
Yellow-bellied Sapsucker	Sphyrapicus varius	0	0	0	S5
Yellow-rumped Warbler	Dendroica coronata	0	0	0	S5
Yellow-throated Vireo	Vireo flavifrons	0	0	0	S4

Count All Sp	192
<u>S1</u>	0
<u>S2</u>	3
<u>S3</u>	6
<u>S4</u>	94
<u>S5</u>	84
<u>SNA</u>	5
<u>ESA SC</u>	12
<u>ESATHR</u>	8
<u>ESAEND</u>	0
<u>SARA SC</u>	5
<u>SARA THR</u>	8
<u>SARA END</u>	0



# Appendix F

## Laydown Areas

Laydown Station	ELC Determination Method	ELC Community Code
69 LD 2	Field Verified by AECOM in 2015	CUT1-5
Tibbo Pit Rd. LD	Field Verified by AECOM in 2015	RBO3
69 LD 8	Assumed ELC Code from 2015 Field Work	RBT3-2
Harris Lake LD	Digitized by AECOM	RBO
69 Pit LD	Assumed ELC Code from 2015 Field Work	A
Pointe au Baril LD 1	Assumed ELC Code from 2015 Field Work	A
Pointe au Baril LD 2	Assumed ELC Code from 2015 Field Work	A
69 LD 6	Assumed ELC Code from 2015 Field Work	A
69 LD 5	Assumed ELC Code from 2015 Field Work	A
69 LD 4	Digitized by AECOM	RBO
Tower Yard LD	Assumed ELC Code from 2015 Field Work	A
Dumont Rd. LD	Assumed ELC Code from 2015 Field Work	A
Shawanaga LD	Assumed ELC Code from 2015 Field Work	FOM5-2
69 LD 1	Assumed ELC Code from 2015 Field Work	RBT3-2
69 LD 3	Digitized by AECOM	RBT
Ba Sa Gim Rd. LD	Assumed ELC Code from 2015 Field Work	FOM2
Marsh Lake LD	Digitized by AECOM - Access Road	FOD
Woods Rd. LD	Air Photo Interpreted by AECOM - 20150818	A
Gordon Lake LD	Air Photo Interpreted by AECOM - 20150818	CUT
69 LD 7	Assumed ELC Code from 2015 Field Work	RBT
69 LD 9	Air Photo Interpreted by AECOM - 20150818	A
69 LD 10	Air Photo Interpreted by AECOM - 20150818	RBO
Britt LD	Air Photo Interpreted by AECOM - 20150818	A
Still River LD	Digitized by AECOM - Access Road	A