



# ***Amherst Island Wind Project*** **2023 Post-Construction Bat** **Mortality Monitoring Report**

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Project No. 2121K      March 2024



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***Amherst Island Wind Project***  
**2023 Post-Construction Bat Mortality Monitoring Report**

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Report submitted on March 20, 2024



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## Executive Summary

Natural Resource Solutions Inc. was retained to conduct a fifth year of post-construction bat monitoring at the operational Amherst Island Wind Project, located in Loyalist Township, Lennox and Addington County, Ontario. This wind energy facility has a generating capacity of 74.3MW and consists of 26 turbines in an agricultural landscape dominated by pasture. Occasional wooded habitats, wetlands, and aquatic features are also present in the areas surrounding the project infrastructure. This report provides the detailed methods and results from the fifth year of post-construction monitoring for bat mortality conducted at the Amherst Island Wind Project in 2023.

This fifth year of monitoring for bat mortalities was conducted as a result of the facility exceeding the provincial threshold of 10 bats/turbine/year in the 2020 monitoring year (10.15 bats/turbine/year). This monitoring year (2023) represents the third, and final, year of the three (3)-year (2021-2023) effectiveness monitoring program, after implementation of operational mitigation. Bird and raptor mortality data are not presented herein, as three (3) years of required baseline monitoring for bird and raptor mortality have already been completed (2019-2021), and any subsequent requirements are being addressed under separate cover.

During twice-weekly searches from May 1 to October 31, 2023, a total of nine (9) bat mortalities were documented within the search areas around the subset of 10 turbines. Bat mortalities of both migratory and resident species were documented, including Hoary Bat (*Lasiurus cinereus*), Silver-haired Bat (*Lasionycteris noctivagans*), Eastern Red Bat (*Lasiurus borealis*), and Big Brown Bat (*Eptesicus fuscus*). The first three (3) species above are considered long-distance migratory species which over-winter outside of Ontario, and accounted for 89% of the total bat mortality observations at the Amherst Island Wind Project in 2023. Using correction factors for searcher efficiency, scavenger removal, and proportion of area searched, an estimated bat mortality rate of 2.50 bats/turbine/year (0.87 bats/MW/year) was determined for the Amherst Island Wind Project. This is below the provincial threshold of 10 bats/turbine/year.

With the completion of a full three (3)-years of bat effectiveness monitoring without exceeding the provincial threshold, the Project has met the requirements of condition K6 of the Renewable Energy Approval (No. 7123-9W9NH2), and no further monitoring of bat mortality is required.

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## 1.0 Introduction

Natural Resource Solutions Inc. (NRSI) was retained to conduct a fifth year of post-construction bat monitoring at the operational Amherst Island Wind Project (Amherst Island WP), which is located within Loyalist Township in Lennox and Addington County, Ontario. The Amherst Island WP consists of 26 wind energy generating turbines with a total nameplate capacity of 74.3MW. The project area and turbine locations can be seen on Map 1.

Post-construction mortality monitoring at the Amherst Island WP in 2023 included bat mortality monitoring, searcher efficiency trials, scavenger removal trials, and visibility class mapping of substrates searched. These surveys were conducted in accordance with provincial guidelines and project approval conditions to assess the potential impacts of this wind energy generating facility on local and migratory bat species.

The purpose of this report is to provide the detailed methods and results from the fifth year of post-construction mortality monitoring conducted at the Amherst Island WP. It also reflects the third year of the three (3)-year (2021-2023) effectiveness monitoring program, specific to bats, as a result of the Amherst Island WP exceeding the provincial threshold of 10 bats/turbine/year in 2020, and implementing operational mitigation beginning during the 2021 monitoring year. Bird and raptor mortality data is not presented herein, as three (3) years of required baseline monitoring for birds and raptors has already been completed (2019-2021), and any subsequent requirements are being addressed under separate cover.

For the purposes of this report, NRSI will frequently use the terms 'mortality' and 'carcass'. The term 'mortality' will refer to dead bats that were found in the vicinity of turbines at the Amherst Island WP. The term 'carcass' will refer to dead birds and bats that have been placed beneath wind turbines by NRSI staff for the purposes of searcher efficiency and/or scavenger removal trials.

## 2.0 Mortality Monitoring Methodology

### 2.1 Mortality Monitoring

#### 2.1.1 Sample Locations

Since the Amherst Island WP consists of more than 10 turbines, a subset of at least 30% of turbines (minimum 10 turbines) is required to be monitored (OMNR 2011). In accordance with these requirements, a subset of 10 turbines (38.5%) was selected by Stantec Consulting Ltd. in consultation with the Ministry of Natural Resources and Forestry (MNRF; Stantec 2013). NRSI conducted mortality monitoring at the subset of 10 turbines in 2023, following the monitoring period and search frequency described below. The subset of turbines that were monitored at the Amherst Island WP in 2023 is shown on Map 1.

#### 2.1.2 Monitoring Period and Search Frequency

NRSI conducted twice-weekly (i.e. three (3) and four (4) day intervals) mortality monitoring for bats at the subset of 10 turbines during the entire monitoring period of May 1 to October 31, 2023. For the purposes of this monitoring program, searches in May and June are considered to have been completed in Spring, July and August in Summer, and September and October in Fall.

As a result of inclement weather, access issues, and turbine maintenance, some turbines could not be searched on certain monitoring dates. These relatively minor adjustments to the monitoring protocol are not expected to impact the overall results or the conclusions presented in this report. The dates when turbines were not able to be searched are listed in Table 1.

**Table 1. Summary of Regular Search Days When Turbines Could Not Be Searched (2023)**

Date (2023)	Date Turbine Next Searched (2023) <sup>1</sup>	Turbine(s)	Rationale
July 13	July 14	S02, S07, S14, S18, S28, S36	Inclement weather (Thunderstorms)
August 10	August 14	S18, S28	Inclement weather (Thunderstorms)
August 24	August 25	S36	Turbine inaccessible
September 21	September 25	S18	Turbine maintenance

<sup>1</sup> Due to a variety of factors which may include weather conditions, the location of the project, and/or staff availability, some turbines could not be searched again until the next regularly scheduled search day.

### 2.1.3 Sample Area and Survey Duration

NRSI conducted mortality searches within a 50m radius of each turbine. Mortality searches were conducted using linear transects, spaced approximately 5m apart. Any mortality that was incidentally observed beyond the formal search parameters was still documented, photographed, and collected, but is not included in formal calculations of estimated mortality rates and is not discussed further in this report. In order to maintain a consistent search effort, mortality searches followed a consistent search time of 30 minutes per turbine throughout the entirety of the monitoring period.

### 2.1.4 Data Collection

During each visit to conduct mortality searches, all appropriate information was documented, including weather conditions, date, time, and observer. The mortality monitoring data collection sheet has been provided in Appendix I.

In addition to general information collected on each visit, a variety of specific information was recorded upon encountering any mortality. This detailed information collected for each mortality, as shown on the data sheet provided in Appendix I, included species (if identifiable), sex of the individual (if identifiable), condition, estimated time since death, any apparent injuries, direction and distance from the turbine, substrate type and visibility class, and a unique mortality identification number for future reference. Specific UTM coordinates and photographs were also taken for each specimen to allow for further analysis, if necessary.

## 2.2 Scavenger Removal Trials

Scavenger removal trials were conducted in each of the Spring, Summer, and Fall seasons of mortality monitoring. A minimum of 10 carcasses were placed in each monitoring season. No more than five (5) carcasses were placed at one time and no more than one (1) carcass was placed at any single turbine during each placement event. These measures were taken to minimize potential bias that might result from saturation of carcasses and the resulting attraction of scavengers. Carcasses were placed throughout the range of habitats and substrate types being searched during each season. Species, UTM coordinates, direction and distance from the turbine, substrate, and visibility class were all noted on a data sheet during the placement of each specimen. The scavenger removal data sheet has been provided in Appendix I.

Carcasses placed included both bird and bat specimens, with each trial consisting of at least one-third representation of each of bird and bat carcasses. Bird carcasses included species commonly encountered in this region of the province and ranged in size from very small to moderate-sized carcasses. Migratory bat carcasses were used in each seasonal scavenger removal trial and included Hoary Bat (*Lasiurus cinereus*), Eastern Red Bat (*Lasiurus borealis*), and Silver-haired Bat (*Lasionycteris noctivagans*). Carcasses used in scavenger removal trials were obtained from the Royal Ontario Museum and/or were collected from operational wind energy facilities within Ontario. A list of the bird and bat species used during scavenger removal trials has been provided in Appendix II.

During each scavenger removal trial, the bird and bat carcasses were left for up to 14 days and were checked at the same frequency as mortality searches, approximately twice per week, to note any scavenging or signs of scavenger presence. Following completion of the scavenger removal trials after 14 days, all remaining test carcasses were retrieved and disposed of appropriately.

### 2.3 Searcher Efficiency Trials

In conjunction with mortality searches, NRSI conducted searcher efficiency trials on staff that conducted mortality searches at the Amherst Island WP. Similar to scavenger removal trials, searcher efficiency trials must be conducted at least once per season (Spring, Summer, and Fall), and must be conducted for each searcher and in each visibility class that was searched by that searcher during that season. During each trial, searchers were tested without their knowledge through the placement of a minimum of 10 test carcasses per visibility class searched (class 1 and 2), with no more than three (3) carcasses placed on any one date. Carcasses were placed randomly within the search radius throughout the subset of 10 turbines at the Amherst Island WP. Distance and direction from the turbine, visibility class and substrate type, and UTM coordinates were recorded for each test carcass placed. Each found specimen was later compared to the total number of carcasses placed within the project area and the locations of their placement. The data sheet used for searcher efficiency trials has been provided in Appendix I.

In order to meet the understood intent of the MNRF guidelines (OMNR 2011) to limit searcher bias, NRSI has not physically marked carcasses at this project, as it could influence the results of the trial and alert the searcher to an ongoing searcher efficiency trial. Instead, NRSI biologists collect detailed location information of the trial carcass with date placed, UTM coordinates, distance and direction from the turbine, and mapped location of the carcass. All collected carcasses are compared to these detailed date, location and species information to distinguish between trial carcasses and actual turbine mortalities. These steps have been taken to ensure that the location of the carcass, along with species information, is well-documented for future reference if there is uncertainty about whether or not an observed carcass is a turbine-related fatality or a trial carcass.

Searcher efficiency carcasses included both bird and bat specimens, with each trial consisting of at least one-third representation of each of bird and bat carcasses. Bird carcasses used in the searcher efficiency trials included species commonly encountered in this region of the province and varied in size from very small to moderate-sized carcasses. Bat carcasses used during searcher efficiency trials consisted of the three (3) migratory species known to occur within Ontario, including Hoary Bat, Eastern Red Bat, and Silver-haired Bat. Carcasses used in searcher efficiency trials were obtained from the Royal Ontario Museum and/or were collected from operational wind energy facilities within Ontario. A list of the bird and bat species used during searcher efficiency trials has been provided in Appendix III.

#### 2.4 Proportion of Area Searched

Following MNRF guidelines, visibility class maps were completed by searchers at a minimum frequency of once per season (OMNR 2011). Due to the potential for changing conditions, NRSI completed visibility class maps once per month from May to October to provide additional information to increase the accuracy of the estimated mortality rates.

Visibility class mapping was completed for the 50m search radius at each turbine. This mapping categorized habitats according to visibility classes recommended by the MNRF (OMNR 2011). These include visibility classes 1 through 4, in addition to areas which may be deemed “unsearchable”, such as aquatic features, areas deemed safety

hazards, or other areas where searching was not possible. Mapping of these visibility classes within each search radius was conducted and calculated as per a repeatable methodology using a combination of these visibility class field maps, review of aerial photographs, and use of Geographic Information System (GIS) software. The data sheet used to record visibility class mapping has been provided in Appendix I.

In order to help increase the accuracy of searcher efficiency rates and minimize the influence of the proportion of area searched on the bat mortality estimate, the majority of the search radii at the subset of 10 turbines were maintained at visibility class 1 and 2 through occasional mowing, as needed, for the duration of the growing season (May through October). When small and temporary areas of other visibility classes were present, they were searched thoroughly until scheduled vegetation maintenance could occur. As a result, the majority of the 50m radius at each turbine was searched for the duration of the 2023 monitoring period. Some areas were determined to reflect visibility classes that were not searched as part of this monitoring program (e.g. visibility classes 3 and 4), such as hedgerows. In these cases, the appropriate proportion of area searched was calculated and used for final mortality estimates. Visibility class maps of each turbine in each month are provided in Appendix VI.

Maintenance of the 50m search radius was only completed when necessary to maintain appropriate visibility and it also followed a strict schedule developed by NRSI that ensured the maintenance activities were completed in a manner to minimize or eliminate any potential negative influence on the mortality monitoring, searcher efficiency trials and scavenger removal trials. The maintenance of the search areas is expected to increase the accuracy of the final estimated mortality rates at the Amherst Island WP.

### 3.0 Scavenger Removal Trial Results

Scavenging activity at the Amherst Island WP was generally moderate during the Spring and Summer monitoring seasons, and high during the Fall monitoring season. Table 2 shows the results from the seasonal scavenger removal trials conducted at the Amherst Island WP. Details on the date placed, species, distance and direction from turbine, visibility class, dates checked and by whom, UTM coordinates, and whether the carcass was scavenged have been provided in Appendix II.

**Table 2. Number of Carcasses Remaining During Scavenger Removal Trials at the Amherst Island WP (2023)**

Number of Carcasses Remaining					
Spring Trial (May/June)					
Turbine	Visit 0	Visit 1	Visit 2	Visit 3	Visit 4
S01	1	0	0	0	0
S02	1	0	0	0	0
S03	1	1	0	0	0
S05	1	0	0	0	0
S07	1	0	0	0	0
S14	1	1	1	1	1
S18	1	1	1	1	1
S22	1	0	0	0	0
S28	1	0	0	0	0
S36	1	0	0	0	0
<b>Total</b>	<b>10</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>
Summer Trial (July/August)					
Turbine	Visit 0	Visit 1	Visit 2	Visit 3	Visit 4
S01	1	1	1	1	0
S02	1	1	1	1	1
S03	1	0	0	0	0
S05	1	1	1	1	1
S07	1	1	0	0	0
S14	1	1	1	1	1
S18	1	0	0	0	0
S22	1	0	0	0	0
S28	1	0	0	0	0
S36	1	1	1	1	1
<b>Total</b>	<b>10</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>4</b>
Fall Trial (September/October)					
Turbine	Visit 0	Visit 1	Visit 2	Visit 3	Visit 4
S01	1	0	0	0	0
S02	1	0	0	0	0



Number of Carcasses Remaining					
S03	1	0	0	0	0
S05	1	0	0	0	0
S07	1	0	0	0	0
S14	1	0	0	0	0
S18	1	0	0	0	0
S22	1	1	1	1	1
S28	1	0	0	0	0
S36	1	0	0	0	0
<b>Total</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

To address the scavenger removal rates for each of the specific monitoring periods, NRSI has used the following equation recommended by the MNRF:

$$Sc = \frac{n_{visit1} + n_{visit2} + n_{visit3...}}{n_{visit0} + n_{visit1} + n_{visit2...}}$$

Sc: proportion of carcasses not removed by scavengers

$n_{visit0}$ : total number of carcasses placed

$n_{visit1} - n_{visit3...}$ : numbers of carcasses remaining on visits 1 through 3 etc.

Using the scavenger removal results presented in Table 2, and the equation provided by the MNRF, the seasonal scavenger removal rates have been determined as follows:

$$\begin{aligned} SC_{Spring} &= (3 + 2 + 2 + 2) / (10 + 3 + 2 + 2) \\ &= 9 / 17 \\ &= \mathbf{0.53} \end{aligned}$$

$$\begin{aligned} SC_{Summer} &= (6 + 5 + 5 + 4) / (10 + 6 + 5 + 5) \\ &= 20 / 26 \\ &= \mathbf{0.77} \end{aligned}$$

$$\begin{aligned} SC_{Fall} &= (1 + 1 + 1 + 1) / (10 + 1 + 1 + 1) \\ &= 4 / 13 \\ &= \mathbf{0.31} \end{aligned}$$

The above scavenger removal rates represent the proportion of carcasses still remaining from one visit to the next. These values generally represent moderate scavenging activity during the Spring and Summer monitoring seasons, and high scavenging activity during the Fall monitoring season. The above scavenger removal rates will be used to calculate the estimated bat mortality rate in Section 6.0.

#### 4.0 Searcher Efficiency Trial Results

Searcher efficiency rates at the Amherst Island WP during the 2023 monitoring season were generally high in each of the Spring, Summer, and Fall. Results of the seasonal searcher efficiency trials are summarized in Table 3. Details on the searcher and tester, species, distance and direction from turbine, habitat, substrate, visibility class, UTM coordinates, and whether the carcass was found or scavenged have been provided in Appendix III.

**Table 3. Results of Searcher Efficiency Trials at the Amherst Island WP (2023)**

Searcher	Carcasses Found	Carcasses Placed	Carcasses Scavenged	Searcher Efficiency	Proportion of Turbines Searched
<b>Spring 2023</b>					
Searcher A	16	23	5	0.89	1.0
<b>Summer 2023</b>					
Searcher A	13	21	6	0.87	1.0
<b>Fall 2023</b>					
Searcher A	14	21	5	0.88	1.0

Based on the information collected during detailed searcher efficiency trials and the equations recommended by the MNRFB, overall searcher efficiency (SeO) was calculated for each of the monitoring seasons as follows:

$$Se = \frac{\text{number of test carcasses found}}{\text{number of test carcasses placed} - \text{number of carcasses scavenged}}$$

$$SeO = Se_A(\text{proportion of turbines searched}) + Se_B(\text{proportion of turbines searched})...$$

$$SeO_{\text{Spring}} = 0.89 (1.0) = \mathbf{0.89}$$

$$SeO_{\text{Summer}} = 0.87 (1.0) = \mathbf{0.87}$$

$$SeO_{\text{Fall}} = 0.88 (1.0) = \mathbf{0.88}$$

These searcher efficiency values represent generally high efficiency rates, likely due to the steps taken to keep the search areas in low visibility classes (i.e., clear and more easily searched) to increase the accuracy of the estimated mortality rate. These values will be used to calculate the estimated bat mortality rate in Section 6.0.

## 5.0 Proportion of Area Searched

Visibility class mapping was completed every month from May to October within the 50m search radius of each of the 10 subset turbines in order to reflect any changes in groundcover and resulting visibility classes. All visibility class maps have been provided in Appendix VI.

Visibility class mapping was used in combination with GIS software to determine the specific area and sizes of each of the applicable visibility classes identified with the turbine search areas. During the 2023 monitoring program, NRSI searched all areas of visibility class 1 and 2, which is reflected in the proportion of area searched (Ps) calculated for all 10 turbines during each of those monitoring months, as shown in Table 4. These values will be used to calculate the estimated bat mortality rate in Section 6.0.

**Table 4. Proportion of Area Searched at the Amherst Island WP (2023)**

Month (2023)	Total Searched Area (m <sup>2</sup> )	Total Search Radius (m <sup>2</sup> )	Proportion of Area Searched (Ps)
May	78,167	78,500	1.00
June	78,167	78,500	1.00
July	78,167	78,500	1.00
August	78,167	78,500	1.00
September	78,167	78,500	1.00
October	78,167	78,500	1.00

## 6.0 Bat Mortality Results

### 6.1 Bat Mortalities

During the 2023 mortality monitoring period at the Amherst Island WP, NRSI documented nine (9) bat mortalities within the 50m search radius of the subset of 10 turbines. Bat mortalities represented four (4) different species, including the resident species Big Brown Bat (*Eptesicus fuscus*) as well as all three (3) long-distance migratory species; Hoary Bat, Eastern Red Bat, and Silver-haired Bat. The most abundant species observed were Silver-haired Bat (n=3) and Hoary Bat (n=3), followed by Eastern Red Bat (n=2), and Big Brown Bat (n=1). Observed mortalities of the three (3) migratory bat species combine to represent 89% of all documented mortalities.

A detailed examination of bat mortalities at the Amherst Island WP is included in the following sections. Detailed information regarding each bat mortality observed during carcass searches has been provided in Appendix IV.

### 6.2 Temporal Distribution of Bat Mortalities

Bat mortalities were observed throughout the majority of the monitoring period, occurring from mid-June to early October, but were most commonly observed during the month of September (n=4) which accounted for 44% of all bat mortalities. No more than two (2) bat mortalities were observed on a single search date (see Figure 1).

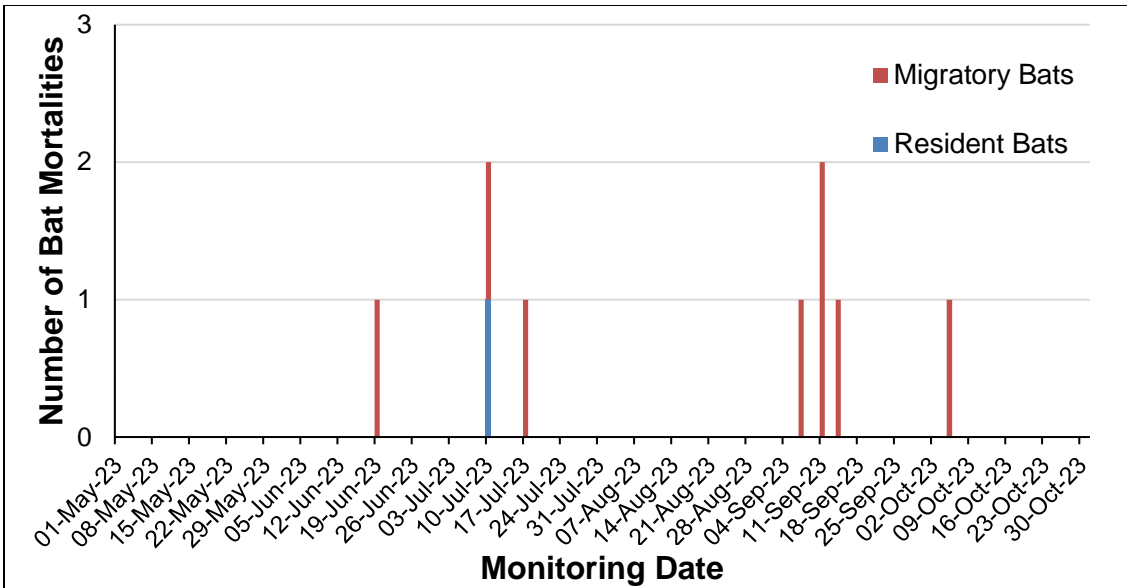


Figure 1. Bat Mortalities Observed by Date at the Amherst Island WP (2023)

### 6.3 Spatial Distribution of Bat Mortalities

Bat mortalities were observed at four (4) of the 10 subset turbines at the Amherst Island WP in 2023. The number of mortalities observed at each of the 10 turbines ranged from zero (0) mortalities at turbines S02, S05, S07, S14, S28, and S18, to four (4) mortalities at turbine S22 (Figure 2).

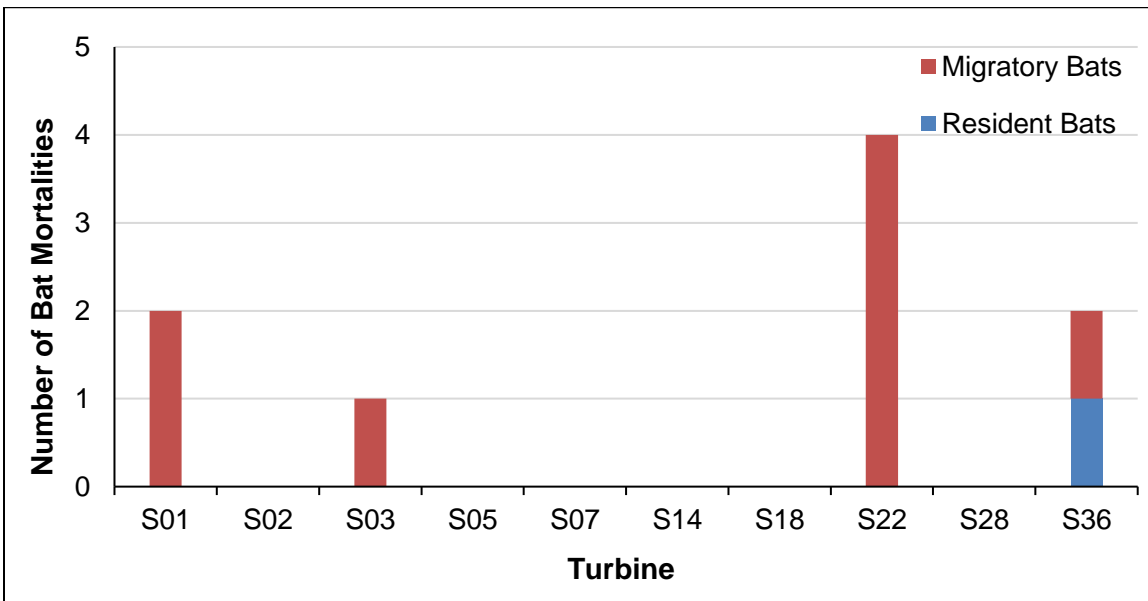
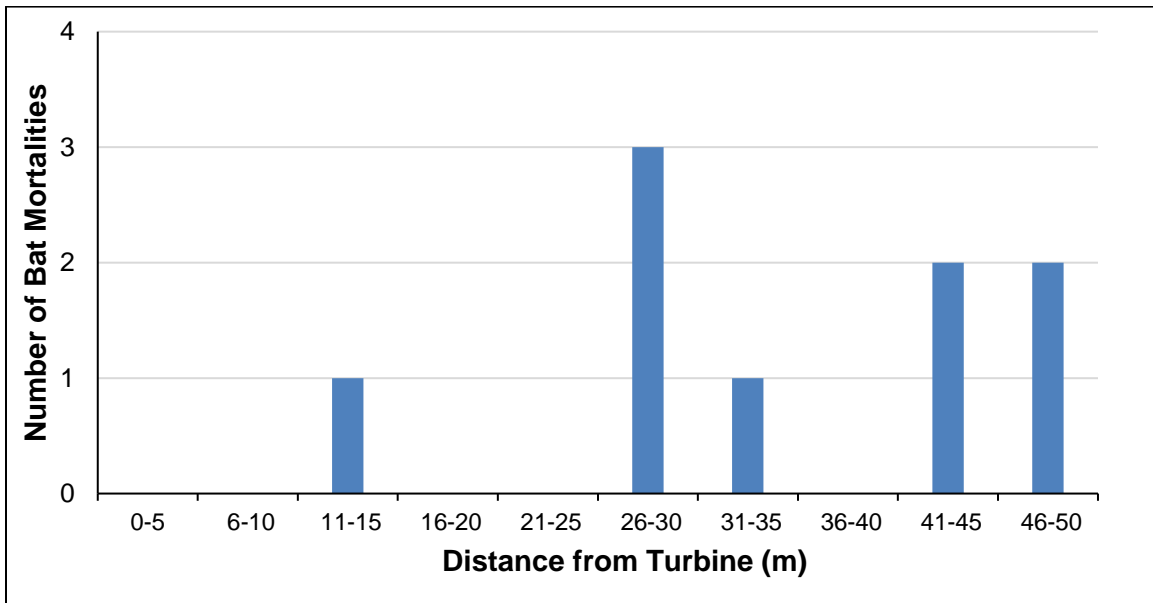


Figure 2. Bat Mortalities Observed by Turbine at the Amherst Island WP (2023)

Distance and direction of bat mortalities from each of the turbines were also documented for each observed mortality. Bat mortalities were found throughout the area searched by NRSI biologists, ranging in distance from 14m to 48m from the turbine, and averaging approximately 35m from the turbine. The overall distribution of mortalities by distance class can be seen in Figure 3. Maps identifying the locations of each observed mortality by turbine are included in Appendix V.



**Figure 3. Bat Mortalities Observed by Distance from Turbine at the Amherst Island WP (2023)**

#### 6.4 Corrected (Estimated) Bat Mortality

Based on the field observations at the Amherst Island WP, NRSI biologists have compiled the appropriate searcher efficiency trials, scavenger removal trials, proportion of area searched, and direct mortality values in an equation that will be used to estimate the total bat mortality at the Amherst Island WP in 2023. The equation recommended by the MNRF is found below:

$$C = c / (Se * Sc * Ps)$$

- C: Corrected (Estimated) Mortality Rate
- c: actual observed mortalities
- Se: overall searcher efficiency
- Sc: proportion of remaining carcasses
- Ps: proportion of area searched

Using the equation and variables described above, the estimated bat mortality rates by month have been presented below:

$$C_{\text{May}} = 0 / (0.89 * 0.53 * 1.00) = 0 / 0.4717 = \mathbf{0.00 \text{ bats}}$$

$$= \mathbf{0.00 \text{ bats/turbine}} \text{ (0.00 bats/MW)}$$

$$C_{\text{June}} = 1 / (0.89 * 0.53 * 1.00) = 1 / 0.4717 = \mathbf{2.12 \text{ bats}}$$

$$= \mathbf{0.21 \text{ bats/turbine}} \text{ (0.07 bats/MW)}$$

$$C_{\text{July}} = 3 / (0.87 * 0.77 * 1.00) = 3 / 0.6699 = \mathbf{4.48 \text{ bats}}$$

$$= \mathbf{0.45 \text{ bats/turbine}} \text{ (0.16 bats/MW)}$$

$$C_{\text{August}} = 0 / (0.87 * 0.77 * 1.00) = 0 / 0.6699 = \mathbf{0.00 \text{ bats}}$$

$$= \mathbf{0.00 \text{ bats/turbine}} \text{ (0.00 bats/MW)}$$

$$C_{\text{September}} = 4 / (0.88 * 0.31 * 1.00) = 4 / 0.2728 = \mathbf{14.66 \text{ bats}}$$

$$= \mathbf{1.47 \text{ bats/turbine}} \text{ (0.51 bats/MW)}$$

$$C_{\text{October}} = 1 / (0.88 * 0.31 * 1.00) = 1 / 0.2728 = \mathbf{3.67 \text{ bats}}$$

$$= \mathbf{0.37 \text{ bats/turbine}} \text{ (0.13 bats/MW)}$$

$$\mathbf{\text{Total}} = \mathbf{2.50 \text{ bats/turbine}} \text{ (0.87 bats/MW)}$$

Using the appropriate variables and recommended equations provided by the MNRF, NRSI has determined the corrected (estimated) bat mortality of the Amherst Island WP in 2023. Each of the corrected monthly rates and the corrected annual mortality rate for the Amherst Island WP can be seen in Table 5.

**Table 5. Corrected Bat Mortality Rates Based on Mortality Monitoring at the Amherst Island WP (2023)**

Month (2023)	Observed Bat Mortalities	Corrected Mortality (bats/turbine)	Corrected Mortality (bats/MW)
May	0	0.00	0.00
June	1	0.21	0.07
July	3	0.45	0.16
August	0	0.00	0.00
September	4	1.47	0.51
October	1	0.37	0.13
<b>TOTAL</b>	<b>9</b>	<b>2.50</b>	<b>0.87</b>

Based on the information collected during the 2023 post-construction monitoring period, the anticipated impact of this facility on bats is characterized by a corrected mortality rate of **2.50 bats/turbine/year** (0.87 bats/MW/year).

## 7.0 Comparative Annual Results

Mortality monitoring conducted by NRSI in 2023 represents the fifth year of post-construction monitoring conducted at the Amherst Island WP, and the third, and final, year of the three (3)-year (2021-2023) effectiveness monitoring program, after the implementation of operational mitigation measures prior to the 2021 monitoring season. In each of the three (3) years of effectiveness monitoring, the estimated bat mortality rate has remained below the provincial threshold of 10 bats/turbine/year. The following section provides a comparison of the 2019-2023 post-construction mortality monitoring results.

Table 6 below provides an abbreviated summary of total bat mortalities, monitoring periods, and corrected (estimated) mortality rates for each of the five (5) years of mortality monitoring conducted to-date at the Amherst Island WP. Further details of the 2023 bat mortality results can be found in Section 6.0 of this report.

**Table 6. Comparative Results of Bat Mortality Monitoring Seasons (2019-2023)**

Year	Total Mortalities	Monitoring Period	Estimated Mortality Rates	
			Bats/Turbine/Year	Bats/MW/Year
2019	35	May 1 – October 31	5.36	1.88
2020	45	May 1 – October 31	10.15	3.59
2021 <sup>1</sup>	66	May 1 – October 31	9.77	3.41
2022 <sup>1</sup>	44	May 1 – October 31	8.98	3.13
2023 <sup>1</sup>	9	May 1 – October 31	2.50	0.87

<sup>1</sup> Following exceedance of the bat threshold in 2020, operational mitigation was implemented according to Project approval conditions and provincial guidelines in subsequent monitoring years.

Although a general comparison between the five (5) years of post-construction monitoring data is possible, the differences in searcher efficiency rates, scavenger removal rates, and proportion area searched over these five (5) monitoring years may limit the value of any direct comparative analysis of observed mortalities. Local bat abundance and behaviour will also change annually based on other variables, such as weather conditions, adjacent land uses, food availability, or general variations in local abundance or behaviour patterns, further adding to the challenges of making direct comparisons between monitoring years. In addition, the approach to turbine operation has changed throughout the monitoring years (2019-2023). Beginning in 2021, operational mitigation was implemented, which included feathering all turbine blades below wind speeds of 5.5 m/s from sunset to sunrise during the period of July 15 to



September 30, in accordance with project approval conditions and MNRF guidelines (OMNR 2011). Consideration of operational mitigation further adds to the challenges of making direct comparisons between monitoring years.

Despite these comparative challenges, general comparisons between the monitoring years show that following a corrected bat mortality rate of 10.15 bats/turbine/year during the 2020 monitoring year, the corrected rate has since decreased in each subsequent monitoring year, with 2023 representing the lowest number of bat mortalities and the lowest corrected bat mortality rate observed at the project to-date. This decrease is expected, at least in part, to correspond to the implementation of operational mitigation, which began in 2021, and appears to have successfully maintained bat mortality levels below the provincial threshold of 10 bats/turbine/year during the three (3)-year effectiveness monitoring period. Operational mitigation will continue to be implemented throughout the life of the Project.

## 8.0 Mortality Thresholds and Notifications

In accordance with the appropriate MNRF guidelines, project approval conditions, and other commitments made as part of the monitoring program, there are mortality thresholds and notification requirements for the Amherst Island WP, which may warrant regulatory notification based on the observed results. The status of each threshold and confirmation of notifications, where applicable, have been described in the following sections.

### 8.1 Annual Bat Mortality

The annual bat mortality threshold for the Amherst Island WP is 10 bats/turbine/year. Based on an estimated rate of **2.50 bats/turbine/year**, the Amherst Island WP remains below this threshold. Since the results are below the established threshold, no notification is required, and no further mortality monitoring for bats is required at the Project.

### 8.2 Species at Risk Mortality Event

Any Species at Risk (SAR; MECP 2023) mortality documented during post-construction mortality monitoring at the Amherst Island WP requires formal notification to the MNRF and MECP within 24 hours (or next business day) of a confirmed species identification. In accordance with this requirement, notifications were sent to the MNRF and MECP within 24 hours (or next business day) following a confirmed identification of any SAR mortality at the Amherst Island WP, as applicable. Any SAR mortalities that are discovered at the Project in subsequent years, whether incidentally or as a result of standardized monitoring, will follow the notification protocols indicated above.

## 9.0 Summary and Conclusions

NRSI was retained to conduct the fifth year of post-construction bat monitoring at the operational Amherst Island WP. The Amherst Island WP consists of 26 wind energy generating turbines, with a total nameplate capacity of 74.3MW.

Post-construction monitoring at the Amherst Island WP in 2023 included bat mortality monitoring and the corresponding searcher efficiency trials, scavenger removal trials, and visibility class mapping required to calculate estimated mortality rates. These surveys were conducted to assess the potential impacts of this wind energy generating facility on local and migratory bats. Monitoring in 2023 also represents the third, and final, year of the three (3)-year (2021-2023) effectiveness monitoring program, specific to bats, which is required as a result of exceeding the provincial threshold in 2020.

A total of nine (9) bat mortalities were documented during the 2023 mortality monitoring period at the Amherst Island WP. Migratory bat species were the most commonly observed mortalities at the project. Based on the number of observed bat mortalities, searcher efficiency rates, scavenger removal rates, proportion of area searched, and equations recommended by the MNRF, a corrected (estimated) bat mortality rate of **2.50 bats/turbine/year** (0.87 bats/MW/year) has been determined for the Amherst Island WP. This estimated bat mortality rate is below the provincial threshold level of 10 bats/turbine/year established by the MNRF guidelines.

This report summarizes the results of the third year of effectiveness monitoring for bat mortality at the Amherst Island WP, which occurred in 2023. All three (3) years of effectiveness monitoring (2021, 2022, and 2023) resulted in estimated mortality rates for bats that were below the associated provincial threshold. Based on the requirements of the MNRF guidelines (OMNR 2011), and the project's Renewable Energy Approval (No. 7123-9W9NH2), post-construction commitments related to bat mortality have been fulfilled, and no further monitoring associated with bats is required, per the Project's approval conditions and associated regulatory guidelines.

## 10.0 References

Ontario Ministry of Natural Resources (OMNR). 2011. Bats and Bat Habitats: Guidelines for Wind Power Projects. First Edition. July 2011.

Ministry of Environment, Conservation and Parks (MECP). 2023. Species at Risk in Ontario. Available at: <https://www.ontario.ca/page/species-risk-ontario>.

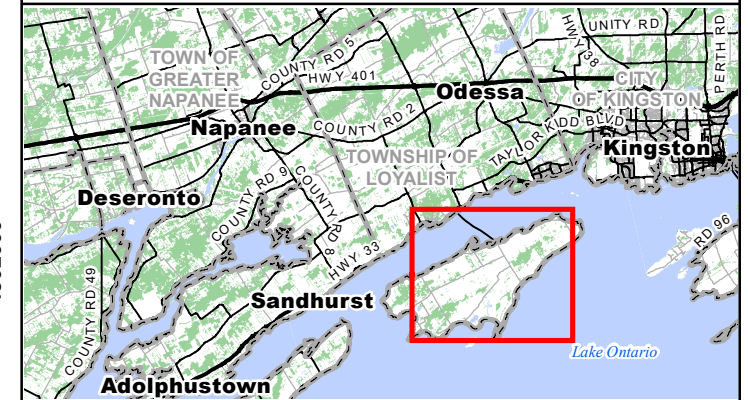
Stantec Consulting Ltd. (Stantec). 2013. Amherst Island Wind Energy Project Design and Operations Report, Appendix D Environmental Effects Monitoring Plan (EEMP) for Wildlife. April 2013.

**Maps**

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# Amherst Island WP

## Mortality Monitoring Turbines



### Legend

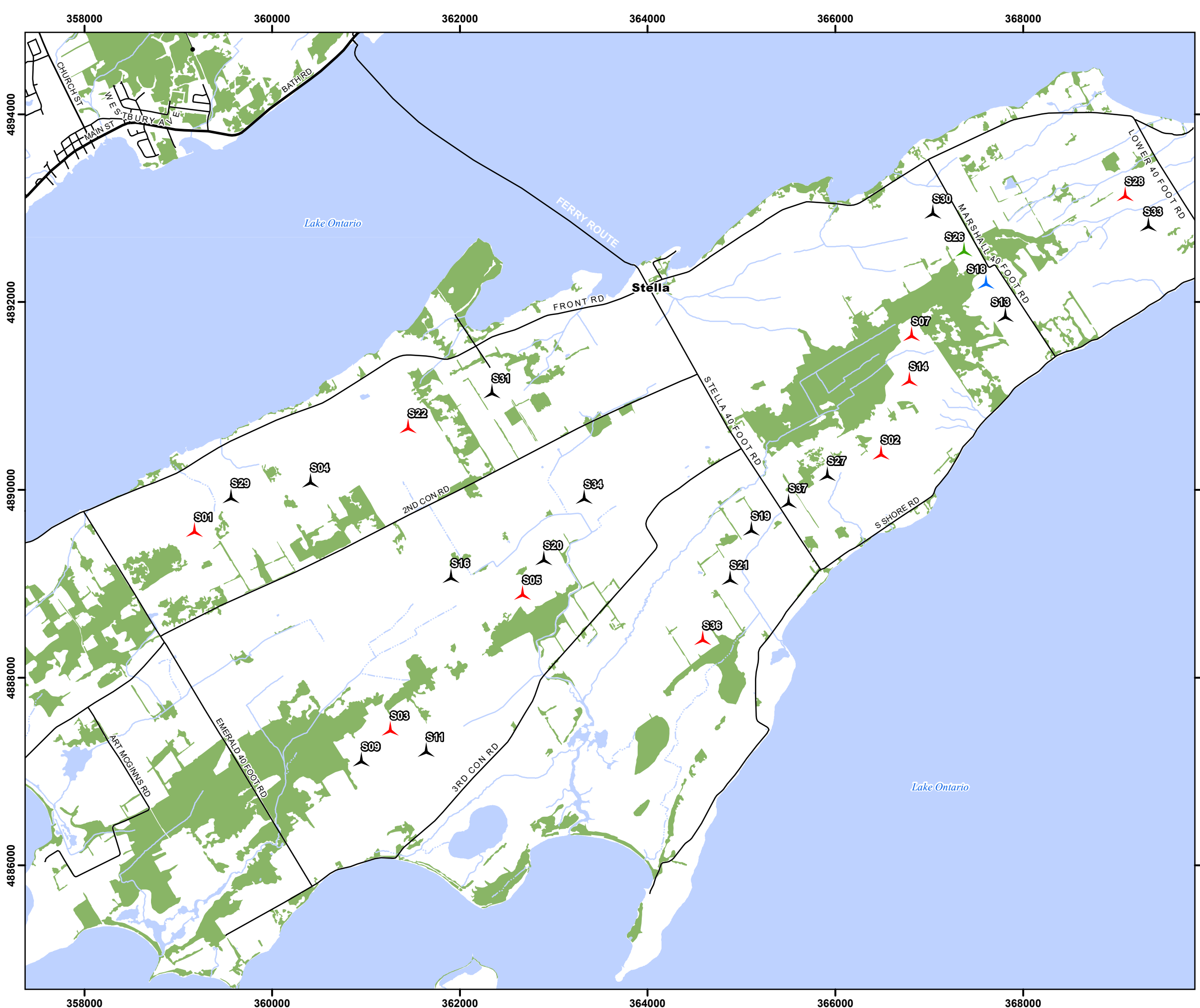
- Non-subset Turbine (2019-2023)
- Subset Turbine (2019-2023)
- Subset Turbine (2019, 2021-2023)
- Subset Turbine (2020)
- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Water Body
- Wooded Area



Map Produced by Natural Resource Solutions Inc. This map is proprietary and confidential and must not be duplicated or distributed by any means without express written permission of NRSI. Data provided by MNRF © Copyright: King's Printer Ontario.

Project: 2121K Date: January 17, 2024	NAD83 - UTM Zone 18 Size: 11x17" 1:40,000
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0 0.5 1 1.5 2 2.5 Kilometers



**Appendix I**  
Post-construction Monitoring Data Sheets

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# Searcher Efficiency Data Form

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

Date: \_\_\_\_\_ Time: \_\_\_\_\_ hrs

Searcher: \_\_\_\_\_ Placed By: \_\_\_\_\_

Condition of Carcasses: Fresh Thawed Carcasses marked (and how)? \_\_\_\_\_

## WEATHER

Temp: \_\_\_\_\_ °C \*Wind Speed: \_\_\_\_\_ Wind Direction (from): \_\_\_\_\_ Visibility: High Medium Low

Cloud Cover (%): \_\_\_\_\_ Cloud Height: High Medium Low Precipitation: Rain Fog Snow None \_\_\_\_\_

Additional Weather or Other Comments: \_\_\_\_\_

	Time Placed (24hr)	Turbine #	Species	Distance From Turbine	Direction from Turbine	Habitat/Substrate	Visibility Class	UTM	Found By Searcher (Y/N)	Scavenged (Y/N)
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

\*Beaufort Wind Scale: 0 calm; 1 smoke drifts; 2 wind felt on face; 3 leaves in motion; 4 small branches move; 5 small trees sway; 6 large branches move; 7 whole trees in motion; 8 twigs break off and hard to walk; 9 light structural damage; 10 tree uprooted

## Placement Location Sketches (Draw access road for each sketch)

N ↑

1	2	3	4	5	6	7	8	9	10
X	X	X	X	X	X	X	X	X	X
T#__	T#__	T#__	T#__	T#__	T#__	T#__	T#__	T#__	T#__

# Visibility Class Map

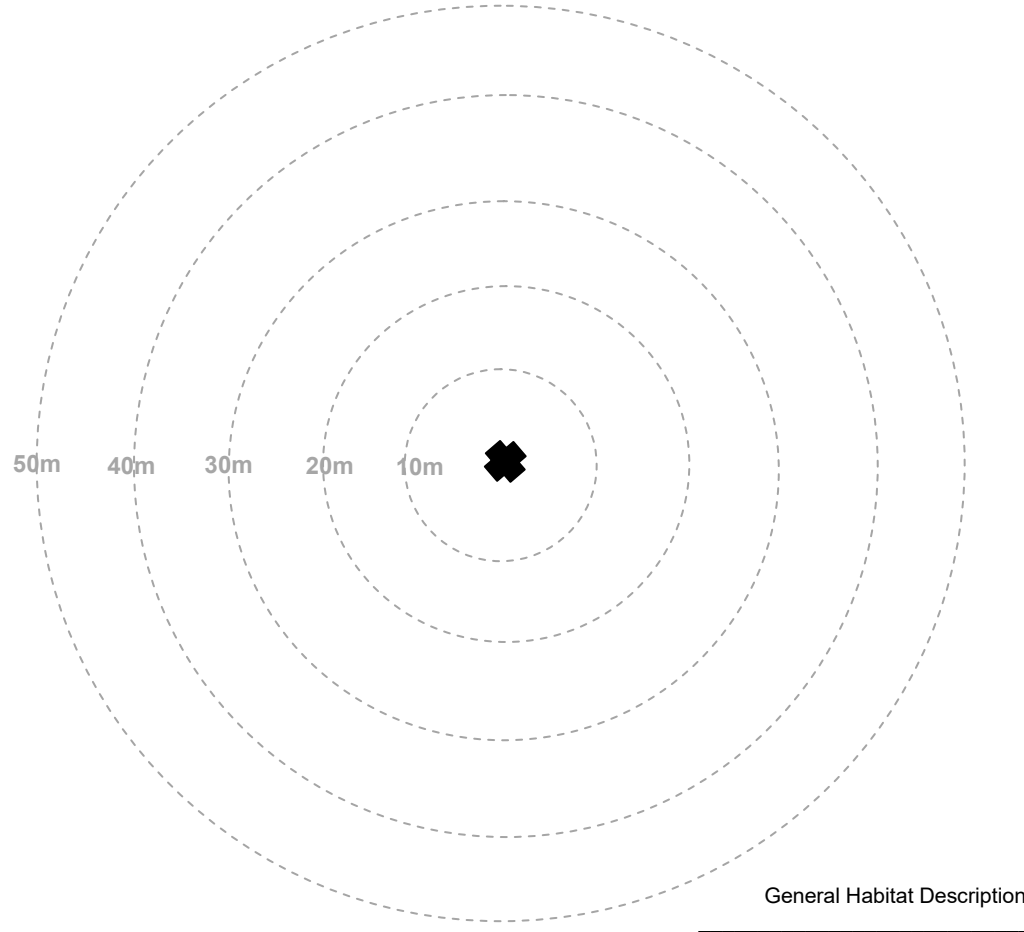
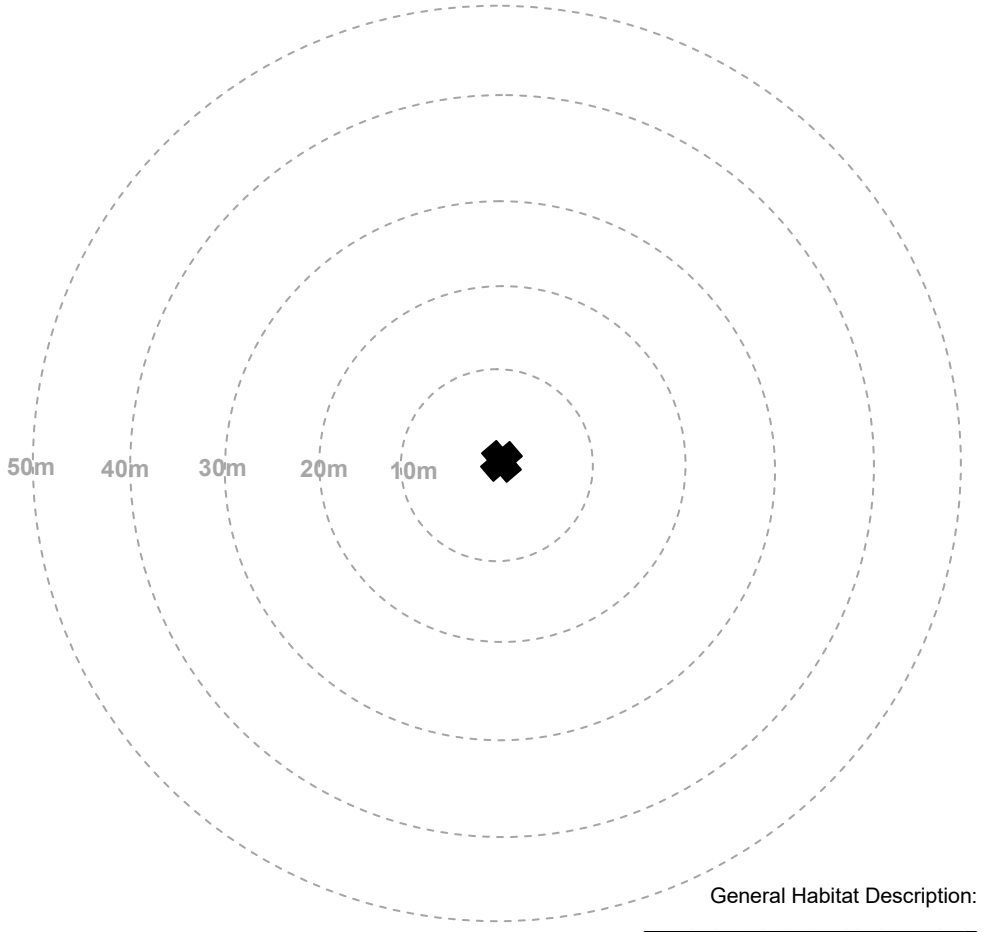
Project Name: \_\_\_\_\_ Project #: \_\_\_\_\_ Turbine #: \_\_\_\_\_ Degree of Slope \_\_\_\_\_ degrees Slope Orientation \_\_\_\_\_ (e.g. SSW)

Photo Numbers (from turbine base)  
 Facing North: \_\_\_\_\_  
 Facing East: \_\_\_\_\_  
 Facing South: \_\_\_\_\_  
 Facing West: \_\_\_\_\_  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): \_\_\_/\_\_\_/\_\_\_ ↑  
 Observer: \_\_\_\_\_  
 Monthly/Seasonal  
 Linear Transect Width: \_\_\_\_\_ m **N**

Photo Numbers (from turbine base)  
 Facing North: \_\_\_\_\_  
 Facing East: \_\_\_\_\_  
 Facing South: \_\_\_\_\_  
 Facing West: \_\_\_\_\_  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): \_\_\_/\_\_\_/\_\_\_ ↑  
 Observer: \_\_\_\_\_  
 Monthly/Seasonal  
 Linear Transect Width: \_\_\_\_\_ m **N**



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

**Appendix II**  
Scavenger Removal Trial Results

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Appendix II  
 2121K Amherst Island WP  
 2023 Scavenger Removal Trial Results

Spring (May/June)

Carcass Number	Turbine	Species	Distance from Turbine (m)	Direction from Turbine (°)	UTM (Zone 18T)		Visibility Class	Test Day	Date	Carcass Present	Signs of Scavenging	Tester
					Eastings	Northing						
1	S01	Golden-crowned Kinglet	13	35	359178	4889565	1	Day 0	01-May-23	Y	Carcass placed	Searcher A
								Day 3	04-May-23	N	Carcass removed	Searcher A
								Day 7	08-May-23	N	-	Searcher A
								Day 10	11-May-23	N	-	Searcher A
								Day 14	15-May-23	N	-	Searcher A
2	S02	Hoary Bat	42	330	366466	4890411	2	Day 0	01-May-23	Y	Carcass placed	Searcher A
								Day 3	04-May-23	N	Carcass removed	Searcher A
								Day 7	08-May-23	N	-	Searcher A
								Day 10	11-May-23	N	-	Searcher A
								Day 14	15-May-23	N	-	Searcher A
3	S14	Eastern Red Bat	33	55	366815	4891185	1	Day 0	01-May-23	Y	Carcass placed	Searcher A
								Day 3	04-May-23	Y	None	Searcher A
								Day 7	08-May-23	Y	None	Searcher A
								Day 10	11-May-23	Y	None	Searcher A
								Day 14	15-May-23	Y	None	Searcher A
4	S18	European Starling	15	110	367624	4892192	1	Day 0	01-May-23	Y	Carcass placed	Searcher A
								Day 3	04-May-23	Y	None	Searcher A
								Day 7	08-May-23	Y	None	Searcher A
								Day 10	11-May-23	Y	None	Searcher A
								Day 14	15-May-23	Y	None	Searcher A
5	S22	Black-capped Chickadee	16	290	361426	4890656	2	Day 0	01-May-23	Y	Carcass placed	Searcher A
								Day 3	04-May-23	N	Carcass removed	Searcher A
								Day 7	08-May-23	N	-	Searcher A
								Day 10	11-May-23	N	-	Searcher A
								Day 14	15-May-23	N	-	Searcher A
6	S03	Eastern Red Bat	21	340	361253	4887456	1	Day 0	05-Jun-23	Y	Carcass placed	Searcher A
								Day 3	08-Jun-23	Y	None	Searcher A
								Day 7	12-Jun-23	N	Carcass removed	Searcher A
								Day 10	15-Jun-23	N	-	Searcher A
								Day 14	19-Jun-23	N	-	Searcher A
7	S05	Ovenbird	12	15	362665	4888897	1	Day 0	05-Jun-23	Y	Carcass placed	Searcher A
								Day 3	08-Jun-23	N	Carcass removed	Searcher A
								Day 7	12-Jun-23	N	-	Searcher A
								Day 10	15-Jun-23	N	-	Searcher A
								Day 14	19-Jun-23	N	-	Searcher A
8	S07	Hoary Bat	25	90	366837	4891648	2	Day 0	05-Jun-23	Y	Carcass placed	Searcher A
								Day 3	08-Jun-23	N	Carcass removed	Searcher A
								Day 7	12-Jun-23	N	-	Searcher A
								Day 10	15-Jun-23	N	-	Searcher A
								Day 14	19-Jun-23	N	-	Searcher A
9	S28	Black-throated Green Warbler	41	190	369097	4893087	2	Day 0	05-Jun-23	Y	Carcass placed	Searcher A
								Day 3	08-Jun-23	N	Carcass removed	Searcher A
								Day 7	12-Jun-23	N	-	Searcher A
								Day 10	15-Jun-23	N	-	Searcher A
								Day 14	19-Jun-23	N	-	Searcher A
10	S36	Eastern Kingbird	20	160	364600	4888380	2	Day 0	05-Jun-23	Y	Carcass placed	Searcher A
								Day 3	08-Jun-23	N	Carcass removed	Searcher A
								Day 7	12-Jun-23	N	-	Searcher A
								Day 10	15-Jun-23	N	-	Searcher A
								Day 14	19-Jun-23	N	-	Searcher A

Summer (July/August)

Carcass Number	Turbine	Species	Distance from Turbine (m)	Direction from Turbine (°)	UTM (Zone 18T)		Visibility Class	Test Day	Date	Carcass Present	Signs of Scavenging	Tester
					Eastings	Northing						
1	S01	Golden-crowned Kinglet	39	190	359184	4889514	1	Day 0	03-Jul-23	Y	Carcass placed	Searcher A
								Day 3	06-Jul-23	Y	None	Searcher A
								Day 7	10-Jul-23	Y	None	Searcher A
								Day 10	13-Jul-23	Y	None	Searcher A
								Day 14	17-Jul-23	N	Carcass removed	Searcher A
2	S02	Eastern Red Bat	10	280	366477	4890370	1	Day 0	03-Jul-23	Y	Carcass placed	Searcher A
								Day 3	06-Jul-23	Y	None	Searcher A
								Day 7	10-Jul-23	Y	None	Searcher A
								Day 10	13-Jul-23	Y	None	Searcher A
								Day 14	17-Jul-23	Y	None	Searcher A
3	S05	Hoary Bat	29	10	362660	4888913	2	Day 0	03-Jul-23	Y	Carcass placed	Searcher A
								Day 3	06-Jul-23	Y	None	Searcher A
								Day 7	10-Jul-23	Y	Scavenging of carcass by Northern Harrier observed; wing missing	Searcher A
								Day 10	13-Jul-23	Y	No further signs	Searcher A
								Day 14	17-Jul-23	Y	No further signs	Searcher A
4	S14	American Woodcock	48	40	366826	4891195	1	Day 0	03-Jul-23	Y	Carcass placed	Searcher A
								Day 3	06-Jul-23	Y	None	Searcher A
								Day 7	10-Jul-23	Y	None	Searcher A
								Day 10	13-Jul-23	Y	None	Searcher A
								Day 14	17-Jul-23	Y	None	Searcher A
5	S22	Cedar Waxwing	36	120	361481	4890641	2	Day 0	03-Jul-23	Y	Carcass placed	Searcher A
								Day 3	06-Jul-23	N	Carcass removed	Searcher A
								Day 7	10-Jul-23	N	-	Searcher A
								Day 10	13-Jul-23	N	-	Searcher A
								Day 14	17-Jul-23	N	-	Searcher A
6	S03	Hoary Bat	41	120	361297	4887419	1	Day 0	07-Aug-23	Y	Carcass placed	Searcher A
								Day 3	10-Aug-23	N	Carcass removed	Searcher A
								Day 7	14-Aug-23	N	-	Searcher A
								Day 10	17-Aug-23	N	-	Searcher A
								Day 14	21-Aug-23	N	-	Searcher A
7	S07	Eastern Red Bat	9	70	366818	4891646	2	Day 0	07-Aug-23	Y	Carcass placed	Searcher A
								Day 3	10-Aug-23	Y	Carcass partially scavenged; wing missing	Searcher A
								Day 7	14-Aug-23	N	Carcass removed	Searcher A
								Day 10	17-Aug-23	N	-	Searcher A
								Day 14	21-Aug-23	N	-	Searcher A
8	S18	Purple Martin	21	190	367604	4892168	2	Day 0	07-Aug-23	Y	Carcass placed	Searcher A
								Day 3	10-Aug-23	N	Carcass removed	Searcher A
								Day 7	14-Aug-23	N	-	Searcher A
								Day 10	17-Aug-23	N	-	Searcher A
								Day 14	21-Aug-23	N	-	Searcher A
9	S28	White-throated Sparrow	39	210	369081	4893058	2	Day 0	07-Aug-23	Y	Carcass placed	Searcher A
								Day 3	10-Aug-23	N	Carcass removed	Searcher A
								Day 7	14-Aug-23	N	-	Searcher A
								Day 10	17-Aug-23	N	-	Searcher A
								Day 14	21-Aug-23	N	-	Searcher A
10	S36	Red-eyed Vireo	18	330	364569	4888406	1	Day 0	07-Aug-23	Y	Carcass placed	Searcher A
								Day 3	10-Aug-23	Y	Carcass partially scavenged; head missing	Searcher A
								Day 7	14-Aug-23	Y	No further signs	Searcher A
								Day 10	17-Aug-23	Y	No further signs	Searcher A
								Day 14	21-Aug-23	Y	No further signs	Searcher A

Fall (September/October)

Carcass Number	Turbine	Species	Distance from Turbine (m)	Direction from Turbine (°)	UTM (Zone 18T)		Visibility Class	Test Day	Date	Carcass Present	Signs of Scavenging	Tester
					Easting	Northing						
1	S05	Hoary Bat	15	150	362676	4888868	2	Day 0	04-Sep-23	Y	Carcass placed	Searcher A
								Day 3	07-Sep-23	N	Carcass removed	Searcher A
								Day 7	11-Sep-23	N	-	Searcher A
								Day 10	14-Sep-23	N	-	Searcher A
								Day 14	18-Sep-23	N	-	Searcher A
2	S14	Red-winged Blackbird	18	110	366807	4891152	1	Day 0	04-Sep-23	Y	Carcass placed	Searcher A
								Day 3	07-Sep-23	N	Carcass removed	Searcher A
								Day 7	11-Sep-23	N	-	Searcher A
								Day 10	14-Sep-23	N	-	Searcher A
								Day 14	18-Sep-23	N	-	Searcher A
3	S18	Ruby-crowned Kinglet	45	30	367622	4892240	1	Day 0	04-Sep-23	Y	Carcass placed	Searcher A
								Day 3	07-Sep-23	N	Carcass removed	Searcher A
								Day 7	11-Sep-23	N	-	Searcher A
								Day 10	14-Sep-23	N	-	Searcher A
								Day 14	18-Sep-23	N	-	Searcher A
4	S22	Swainson's Thrush	30	50	361468	4890681	2	Day 0	04-Sep-23	Y	Carcass placed	Searcher A
								Day 3	07-Sep-23	Y	None	Searcher A
								Day 7	11-Sep-23	Y	None	Searcher A
								Day 10	14-Sep-23	Y	Carcass partially scavenged; feathers remaining	Searcher A
								Day 14	18-Sep-23	Y	No further signs	Searcher A
5	S36	Silver-haired Bat	27	340	364569	4888418	1	Day 0	04-Sep-23	Y	Carcass placed	Searcher A
								Day 3	07-Sep-23	N	Carcass removed	Searcher A
								Day 7	11-Sep-23	N	-	Searcher A
								Day 10	14-Sep-23	N	-	Searcher A
								Day 14	18-Sep-23	N	-	Searcher A
6	S01	European Starling	41	110	359213	4889542	2	Day 0	02-Oct-23	Y	Carcass placed	Searcher A
								Day 3	05-Oct-23	N	Carcass removed	Searcher A
								Day 7	09-Oct-23	N	-	Searcher A
								Day 10	12-Oct-23	N	-	Searcher A
								Day 14	16-Oct-23	N	-	Searcher A
7	S02	Tennessee Warbler	23	260	366467	4890364	1	Day 0	02-Oct-23	Y	Carcass placed	Searcher A
								Day 3	05-Oct-23	N	Carcass removed	Searcher A
								Day 7	09-Oct-23	N	-	Searcher A
								Day 10	12-Oct-23	N	-	Searcher A
								Day 14	16-Oct-23	N	-	Searcher A
8	S03	Hoary Bat	10	350	361250	4887449	2	Day 0	02-Oct-23	Y	Carcass placed	Searcher A
								Day 3	05-Oct-23	N	Carcass removed	Searcher A
								Day 7	09-Oct-23	N	-	Searcher A
								Day 10	12-Oct-23	N	-	Searcher A
								Day 14	16-Oct-23	N	-	Searcher A
9	S07	Silver-haired Bat	10	120	366819	4891631	1	Day 0	02-Oct-23	Y	Carcass placed	Searcher A
								Day 3	05-Oct-23	N	Carcass removed	Searcher A
								Day 7	09-Oct-23	N	-	Searcher A
								Day 10	12-Oct-23	N	-	Searcher A
								Day 14	16-Oct-23	N	-	Searcher A
10	S28	White-throated Sparrow	48	140	369134	4893110	2	Day 0	02-Oct-23	Y	Carcass placed	Searcher A
								Day 3	05-Oct-23	N	Carcass removed	Searcher A
								Day 7	09-Oct-23	N	-	Searcher A
								Day 10	12-Oct-23	N	-	Searcher A
								Day 14	16-Oct-23	N	-	Searcher A

**Appendix III**  
Searcher Efficiency Trial Results

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**Appendix III  
2121K Amherst Island Wind Project  
2023 Searcher Efficiency Trial Results**

**Spring 2023 Searcher Efficiency Trial**

Date	Searcher	No.	Turbine	Species	Distance from Turbine (m)	Direction from Turbine (°)	General Habitat	Visibility Class	UTM (18T)		Found (Y/N)	Scavenged (Y/N)
									Eastings	Northing		
04-May-23	Searcher A	1	S02	Blue Jay	6	300	Gravel	1	366485	4890369	Y	-
		2	S14	Golden-crowned Kinglet	30	35	Gravel	1	366813	4891180	Y	-
		3	S36	Hoary Bat	44	340	Mowed grass	2	364566	4888439	N	Y
11-May-23	Searcher A	4	S01	Magnolia Warbler	5	350	Gravel	1	359173	4889554	Y	-
		5	S03	Rock Pigeon	31	70	Gravel	1	361289	4887429	Y	-
		6	S22	Hoary Bat	28	215	Mowed grass	2	361437	4890625	N	N
18-May-23	Searcher A	7	S01	Hoary Bat	30	65	Mowed grass	2	359192	4889579	Y	-
		8	S05	Silver-haired Bat	13	100	Gravel	1	362681	4888883	Y	-
		9	S22	Black-throated Green Warbler	6	60	Gravel	1	361455	4890663	Y	-
25-May-23	Searcher A	10	S03	Eastern Red Bat	45	90	Gravel	1	361301	4887437	N	N
		11	S05	Red-winged Blackbird	41	30	Gravel	1	362695	4888910	Y	-
		12	S02	Hoary Bat	18	140	Mowed grass	2	366504	4890369	Y	-
01-Jun-23	Searcher A	13	S18	Ovenbird	15	20	Gravel	1	367611	4892205	Y	-
		14	S28	Eastern Kingbird	42	160	Gravel	1	369101	4893083	Y	-
		15	S07	Eastern Red Bat	32	185	Gravel	1	366806	489606	Y	-
08-Jun-23	Searcher A	16	S14	Mourning Dove	35	10	Mowed grass	2	366803	4891192	N	Y
		17	S28	European Starling	45	270	Mowed grass	2	369045	4893124	N	Y
		18	S02	Eastern Red Bat	10	100	Gravel	1	366498	4890368	Y	-
15-Jun-23	Searcher A	19	S07	Red-eyed Vireo	39	240	Mowed grass	2	366780	4891618	Y	-
		20	S18	Purple Martin	30	20	Mowed grass	2	367630	4892216	N	Y
		21	S05	Baltimore Oriole	45	350	Mowed grass	2	362655	4888927	Y	-
22-Jun-23	Searcher A	22	S22	American Woodcock	41	185	Mowed grass	2	361433	4890616	Y	-
		23	S36	Red-eyed Vireo	31	30	Mowed grass	2	364609	4888420	N	Y

**Summer 2023 Searcher Efficiency Trial**

Date	Searcher	No.	Turbine	Species	Distance from Turbine (m)	Direction from Turbine (°)	General Habitat	Visibility Class	UTM (18T)		Found (Y/N)	Scavenged (Y/N)
									Eastings	Northing		
06-Jul-23	Searcher A	1	S01	Baltimore Oriole	45	95	Mowed grass	2	359216	4889542	Y	-
		2	S03	Hoary Bat	39	88	Gravel	1	361297	4887428	Y	-
		3	S22	Eastern Red Bat	32	150	Gravel	1	361466	4890627	N	Y
20-Jul-23	Searcher A	4	S05	Fox Sparrow	19	85	Gravel	1	362690	4888884	Y	-
		5	S22	Swainson's Thrush	45	200	Mowed grass	2	361440	4890609	N	Y
		6	S36	Black-and-white Warbler	43	15	Gravel	1	364598	4888445	N	Y
24-Jul-23	Searcher A	7	S03	Purple Martin	22	320	Mowed grass	2	361236	4887448	Y	-
		8	S07	Eastern Red Bat	32	130	Mowed grass	2	366837	4891613	Y	-
		9	S14	Hoary Bat	14	135	Mowed grass	2	366798	4891148	Y	-
31-Jul-23	Searcher A	10	S01	Silver-haired Bat	15	28	Gravel	1	359177	4889568	Y	-
		11	S05	Red-eyed Vireo	28	25	Gravel	1	362685	4888909	Y	-
		12	S36	Golden-crowned Kinglet	22	140	Mowed grass	2	364603	4888386	N	N
10-Aug-23	Searcher A	13	S02	Fox Sparrow	8	285	Gravel	1	366482	4890369	Y	-
		14	S14	Hoary Bat	8	60	Gravel	1	366799	4891157	Y	-
		15	S36	Baltimore Oriole	41	120	Mowed grass	2	366567	4888422	Y	-
17-Aug-23	Searcher A	16	S07	Silver-haired Bat	20	310	Mowed grass	2	366792	4891640	N	N
		17	S18	Fox Sparrow	8	30	Gravel	1	367612	4892200	Y	-
		18	S28	Eastern Red Bat	46	130	Mowed grass	2	369132	4893103	N	Y
21-Aug-23	Searcher A	19	S02	Red-winged Blackbird	22	195	Gravel	1	366483	4890355	Y	-
		20	S18	Hoary Bat	35	330	Mowed grass	2	367584	4892213	N	Y
		21	S28	Fox Sparrow	46	220	Mowed grass	2	369060	4893092	N	Y

**Fall 2023 Searcher Efficiency Trial**

Date	Searcher	No.	Turbine	Species	Distance from Turbine (m)	Direction from Turbine (°)	General Habitat	Visibility Class	UTM (18T)		Found (Y/N)	Scavenged (Y/N)
									Eastings	Northing		
07-Sep-23	Searcher A	1	S01	Swainson's Thrush	13	20	Gravel	1	359176	4889564	Y	-
		2	S05	Tennessee Warbler	20	95	Gravel	1	362687	4888890	Y	-
		3	S22	White-throated Sparrow	5	270	Gravel	1	361442	4890653	Y	-
14-Sep-23	Searcher A	4	S07	Hoary Bat	41	270	Mowed grass	2	366768	4891642	Y	-
		5	S14	Black-and-white Warbler	25	345	Mowed grass	2	366791	4891185	N	Y
		6	S18	White-throated Sparrow	33	315	Mowed grass	2	367582	4892214	Y	-
21-Sep-23	Searcher A	7	S02	Black-throated Green Warbler	5	250	Gravel	1	366484	4890372	N	Y
		8	S07	White-throated Sparrow	45	340	Mowed grass	2	366799	4891684	Y	-
		9	S28	Tennessee Warbler	47	130	Gravel	1	369130	4893099	N	N
28-Sep-23	Searcher A	10	S01	Red-eyed Vireo	36	260	Mowed grass	2	359141	4889541	Y	-
		11	S03	Hoary Bat	43	95	Gravel	1	361297	4887435	Y	-
		12	S22	White-throated Sparrow	26	25	Mowed grass	2	361441	4890681	Y	-
05-Oct-23	Searcher A	13	S02	Black-throated Green Warbler	16	120	Mowed grass	2	366503	4890371	Y	-
		14	S14	Hoary Bat	38	240	Mowed grass	2	366762	4891128	Y	-
		15	S36	Eastern Red Bat	26	330	Gravel	1	364576	4888425	Y	-
12-Oct-23	Searcher A	16	S03	Silver-haired Bat	5	260	Gravel	1	361258	4887430	N	Y
		17	S28	Tennessee Warbler	17	80	Gravel	1	364109	4893129	N	Y
		18	S36	Eastern Red Bat	44	360	Mowed grass	2	364619	4888432	N	N
19-Oct-23	Searcher A	19	S14	Silver-haired Bat	36	130	Gravel	1	366829	4891164	Y	-
		20	S18	Silver-haired Bat	43	40	Gravel	1	367617	4892240	Y	-
		21	S28	Hoary Bat	19	245	Mowed grass	2	369080	4893112	N	Y

**Appendix IV**  
Bat Mortalities

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**Appendix IV**  
**2121K Amherst Island Wind Project**

Visibility Class: 1 ≥90% bare ground, vegetation ≤15cm tall  
 2 ≥25% bare ground, vegetation ≤15cm tall  
 3 ≤25% bare ground, ≤25% of vegetation is >30cm tall  
 4 little or no bare ground, ≥ 25% of vegetation is >30cm tall

Condition Code: I Injured or dying  
 F Freshly dead  
 E Early decomposition  
 M Moderate decomposition  
 A Advanced decomposition  
 C Complete decomposition  
 S Scavenged

**2023 Bat Mortalities**

Date	Turbine	Start Time	End Time	Dog Used (Y/N)	Days Since Last Search	Temp.	Cloud Cover (%)	Precipitation	Wind Speed (Beaufort Scale)	Wind Direction	Species	Sample ID	Bat FA (mm)	Sex (M/F/U)	UTM (Zone 18T)		Distance from Turbine (m)	Direction from Turbine (°)	Condition Code	Estimated Time Since Death (hrs)	Observed Injuries	Substrate/Habitat	Visibility Class
															Easting	Northing							
19-Jun-23	S22	9:50	10:20	N	4	18	10	None	1	S	Hoary Bat	2121K-190623-S22-01	53	F	361456	4890666	14	40	F	12	Broken left wing	Mowed grass	2
10-Jul-23	S01	10:40	11:10	N	4	22	100	None	1	NW	Hoary Bat	2121K-100723-S01-01	50	U	359149	4889571	30	310	F	12	Broken right wing	Mowed grass	2
10-Jul-23	S36	10:40	11:10	N	4	22	100	None	1	NW	Big Brown Bat	2121K-100723-S36-01	45	U	364608	4888421	31	30	E	36	None apparent	Mowed grass	2
17-Jul-23	S01	10:30	11:00	N	4	24	10	None	3	SW	Hoary Bat	2121K-170723-S01-01	52	U	359215	4889559	44	70	E	36	Broken neck	Mowed grass	2
7-Sep-23	S22	10:00	10:30	N	3	20	100	Rain	3	SW	Silver-haired Bat	2121K-070923-S22-01	42	U	361444	4890703	47	355	E	36	Wing missing	Mowed grass	2
11-Sep-23	S22	9:55	10:25	N	4	16	30	None	3	NE	Silver-haired Bat	2121K-110923-S22-01	40	M	361432	4890632	28	210	F	12	Laceration on left wing	Gravel	1
11-Sep-23	S36	12:00	12:30	N	4	16	30	None	3	NE	Eastern Red Bat	2121K-110923-S36-01	41	U	364579	4888425	30	340	F	12	Abdominal laceration	Mowed grass	2
14-Sep-23	S22	9:55	10:25	N	3	13	40	None	3	NW	Eastern Red Bat	2121K-140923-S22-01	41	U	361483	4890624	48	130	S/A	200	Partially scavenged; only wing and head remaining	Mowed grass	2
5-Oct-23	S03	11:15	11:45	N	3	19	80	None	3	S	Silver-haired Bat	2121K-051023-S03-01	38	U	361252	4887479	43	350	F	12	Broken neck	Mowed grass	2

**Appendix V**  
Locations of Bat Mortalities

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359125

359150

359175

359200

359225

4889600

4889600

4889575

4889575

4889550

4889550

4889525

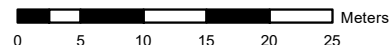
4889525

4889500

4889500



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359125


359150


359175


359200

359225

**Legend**

 Turbine

 Hoary Bat

 Search Radius

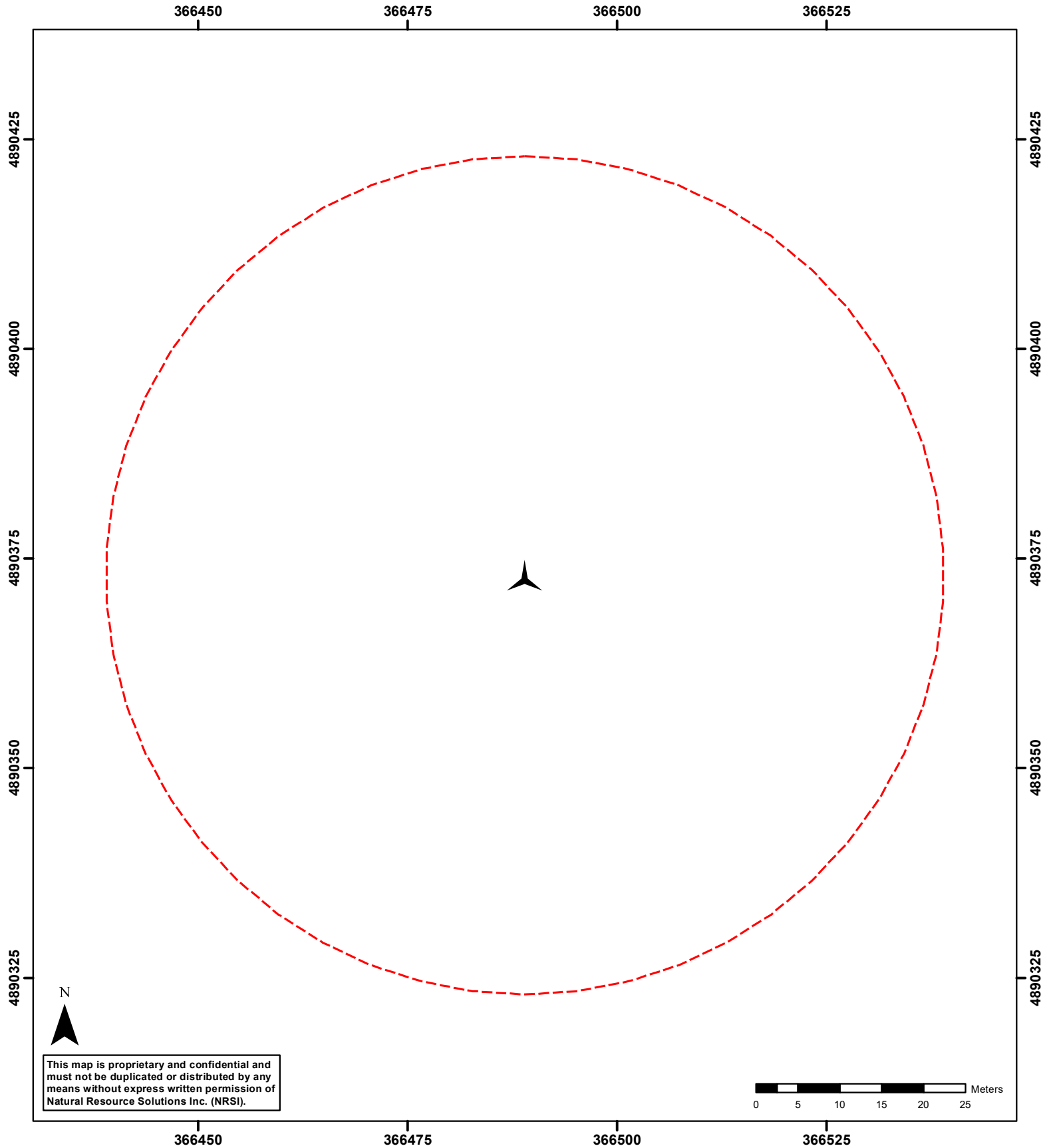
Appendix V




**Amherst Island WP**  
**Turbine S01 Mortalities 2023**

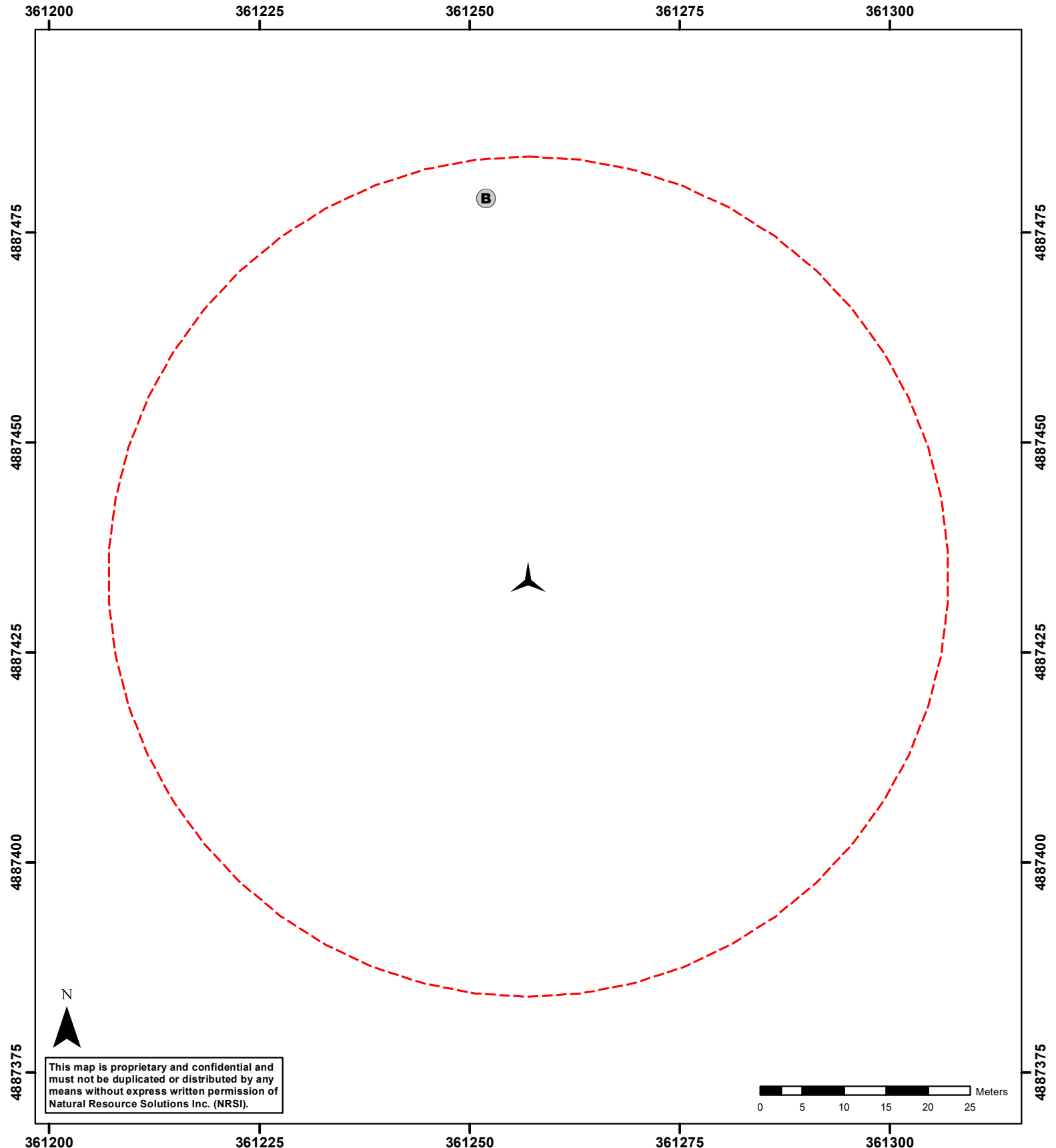
NAD83 - UTM Zone 18  
Scale: 1:600 (8.5x11")

Date: January 17, 2024  
Project: 2121K

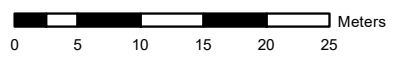







<b>Legend</b>  Turbine  Search Radius	Appendix V	
	<b>Amherst Island WP</b> <b>Turbine S02 Mortalities 2023</b>	
	NAD83 - UTM Zone 18 Scale: 1:600 (8.5x11")	Date: January 17, 2024 Project: 2121K
 <small>Aquatic, Terrestrial and Wetland Biologists</small>		



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- Legend**
-  Turbine
  -  Silver-haired Bat
  -  Search Radius

Appendix V

**Amherst Island WP**

**Turbine S03 Mortalities 2023**

NAD83 - UTM Zone 18 Scale: 1:600 (8.5x11")	Date: January 17, 2024 Project: 2121K
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362625

362650

362675

362700

362725

4888925

4888900

4888875

4888850

4888825

4888925

4888900

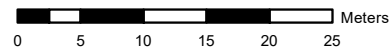
4888875

4888850



4888825



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**Legend**

-  Turbine
-  Search Radius

Appendix V

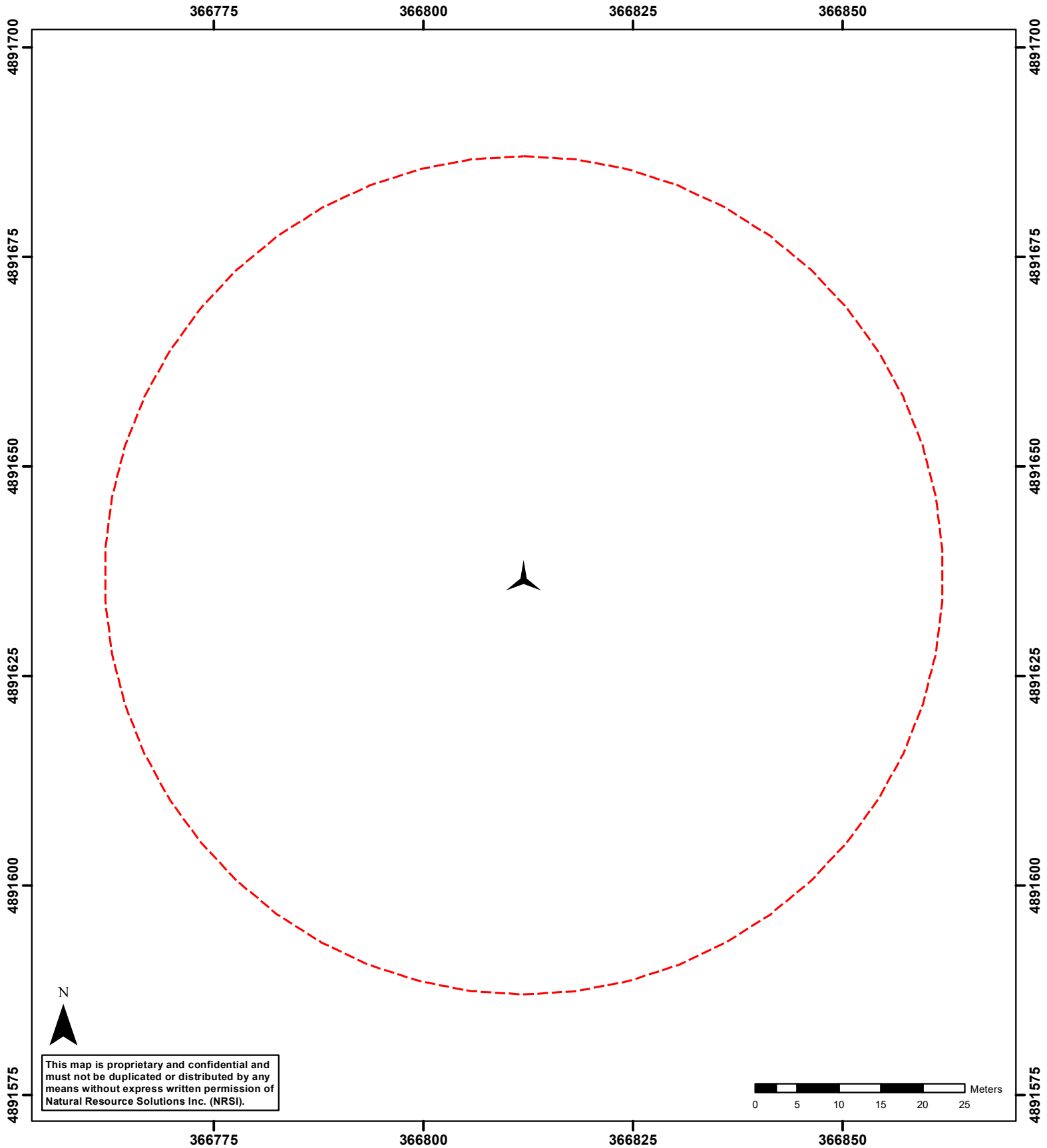
**Amherst Island WP**  
**Turbine S05 Mortalities 2023**

NAD83 - UTM Zone 18  
Scale: 1:600 (8.5x11")



Date: January 17, 2024  
Project: 2121K







**Legend**

-  Turbine
-  Search Radius

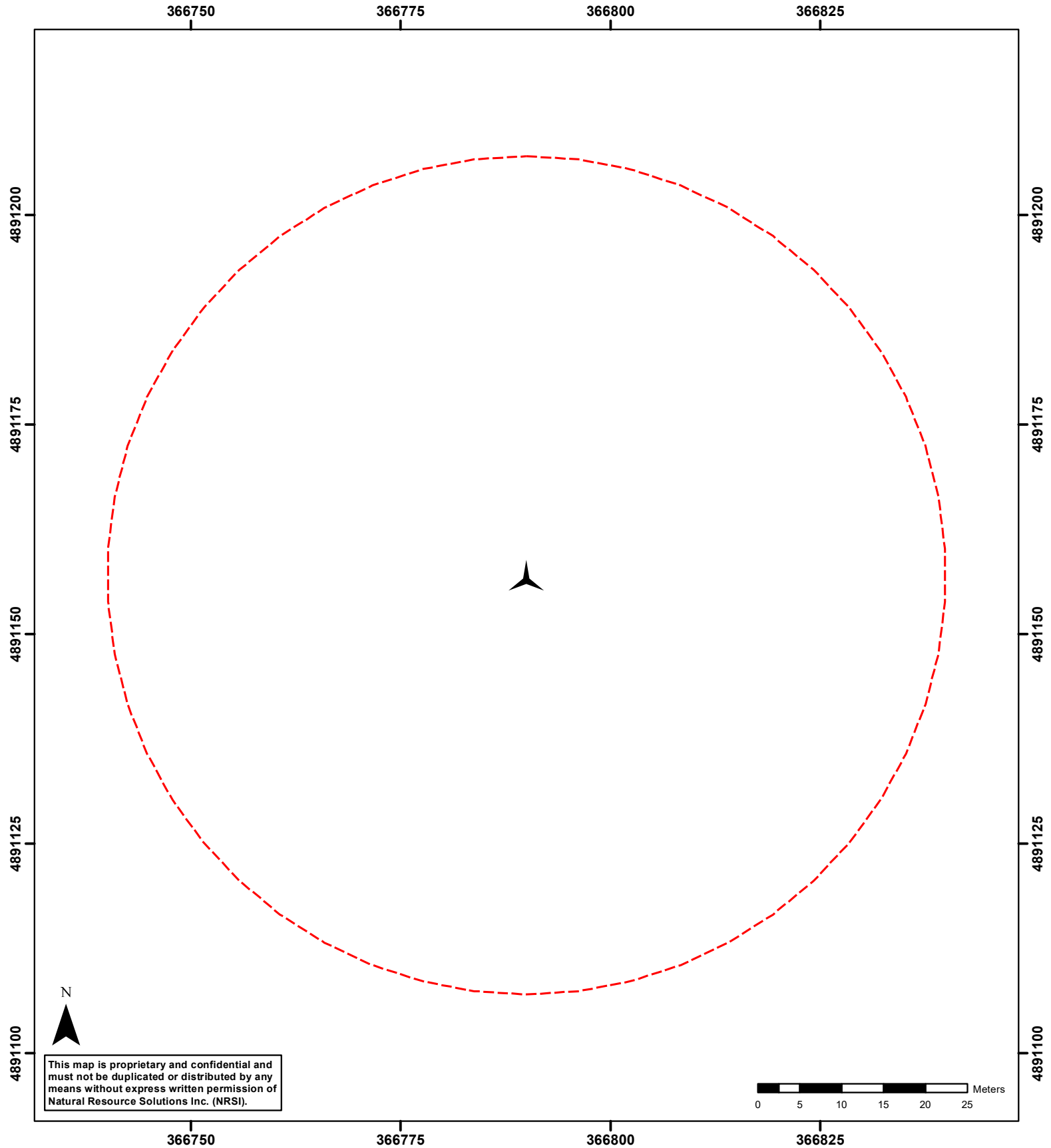
Appendix V

**Amherst Island WP**  
**Turbine S07 Mortalities 2023**

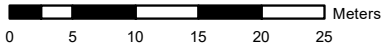
NAD83 - UTM Zone 18  
 Scale: 1:600 (8.5x11")

Date: January 17, 2024  
 Project: 2121K

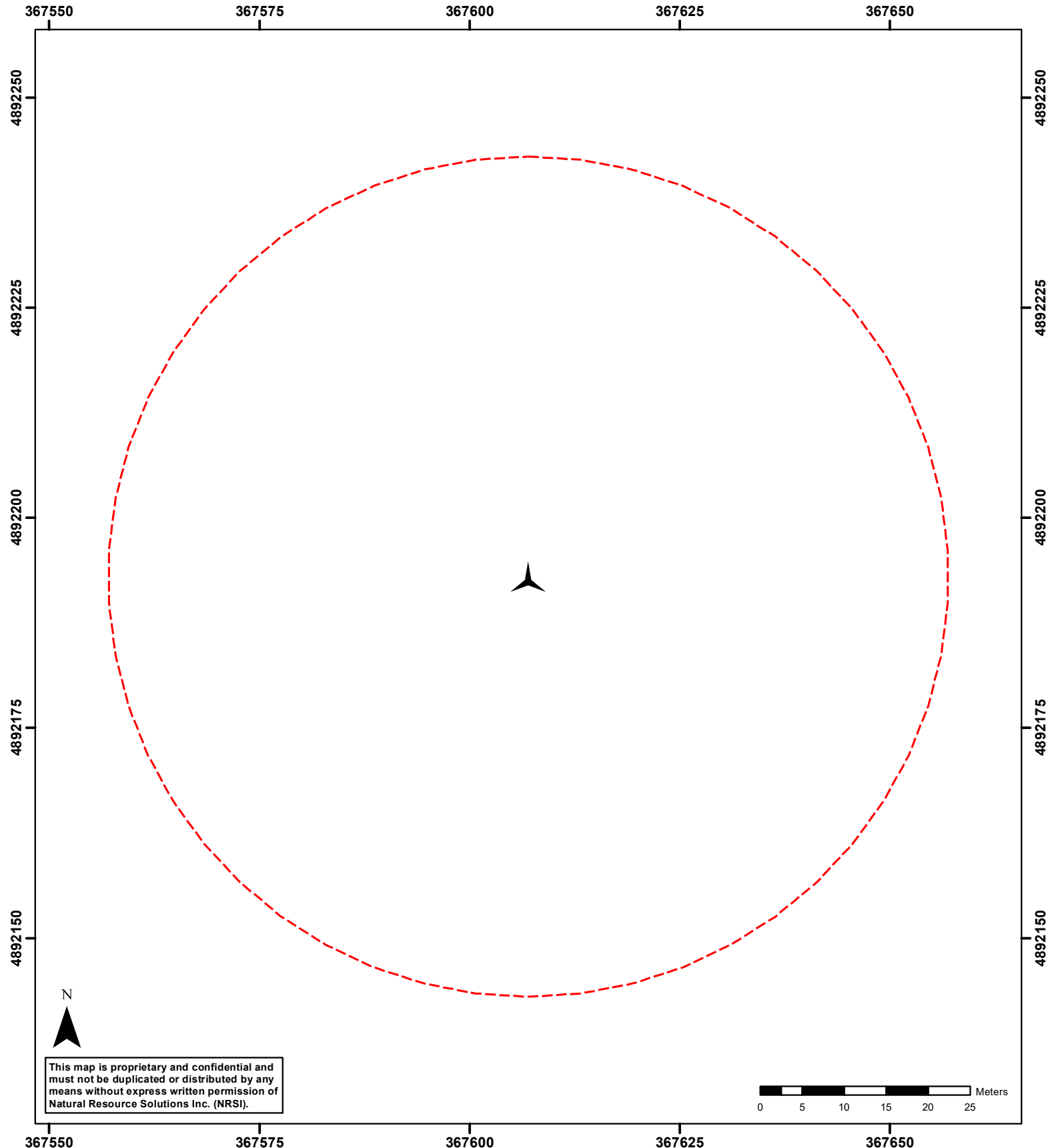




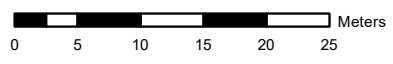
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<p><b>Legend</b></p> <ul style="list-style-type: none"> <li> Turbine</li> <li> Search Radius</li> </ul>	Appendix V	
	<p><b>Amherst Island WP</b></p> <p><b>Turbine S14 Mortalities 2023</b></p>	
	<p>NAD83 - UTM Zone 18 Scale: 1:600 (8.5x11")</p>	<p>Date: January 17, 2024 Project: 2121K</p>
 <p><b>NATURAL RESOURCE SOLUTIONS INC.</b> Aquatic, Terrestrial and Wetland Biologists</p>		



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**Legend**

-  Turbine
-  Search Radius

Appendix V  
**Amherst Island WP**  
**Turbine S18 Mortalities 2023**

NAD83 - UTM Zone 18 Scale: 1:600 (8.5x11")	Date: January 17, 2024 Project: 2121K
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361400

361425

361450

361475

361500

4890700

4890700

4890675

4890675

4890650

4890650

4890625

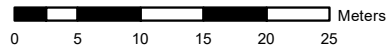
4890625

4890600

4890600



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361400

361425

361450

361475

361500

**Legend**

-  Turbine
-  Search Radius
-  Eastern Red Bat
-  Hoary Bat
-  Silver-haired Bat

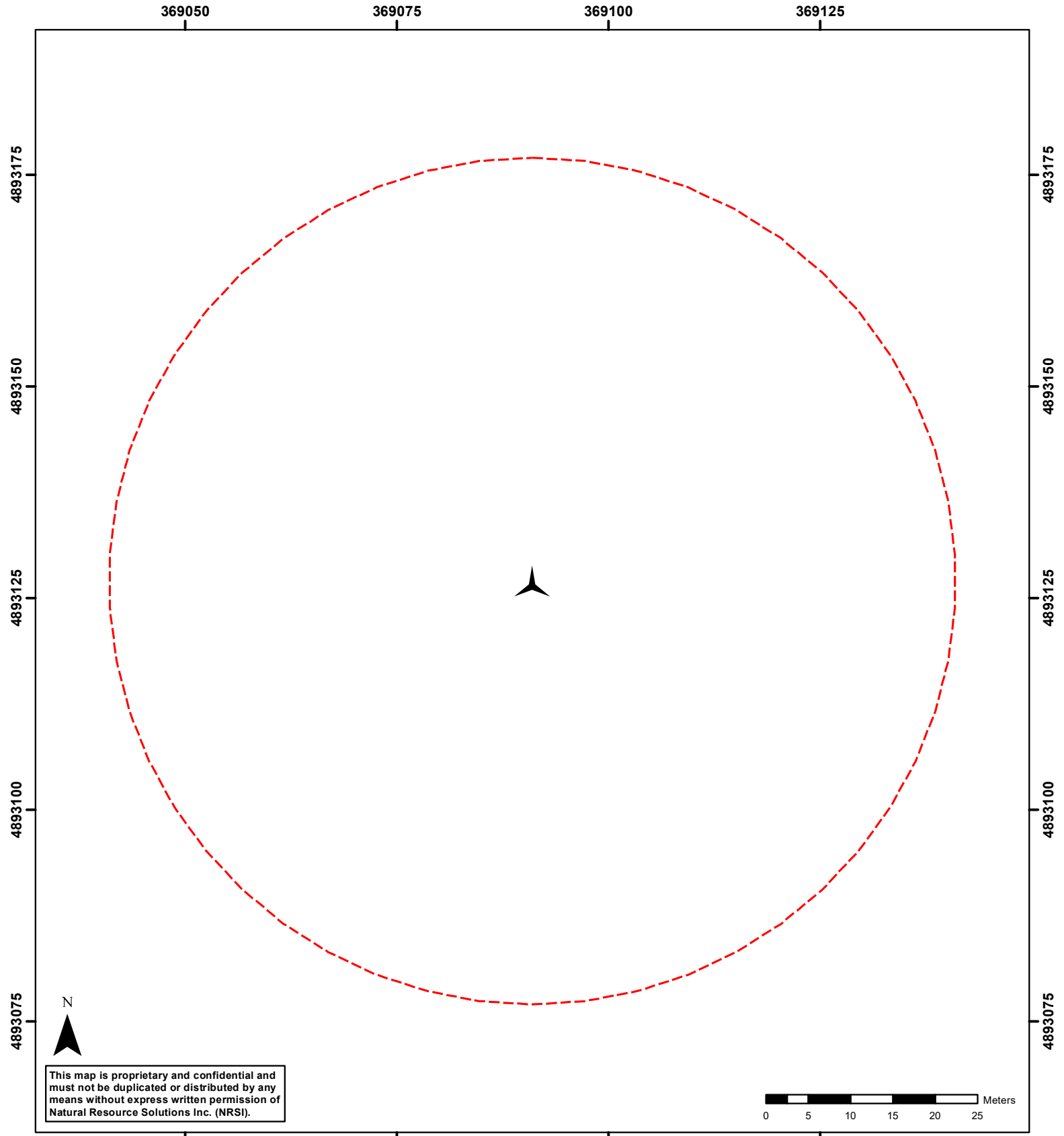
Appendix V

**Amherst Island WP  
Turbine S22 Mortalities 2023**

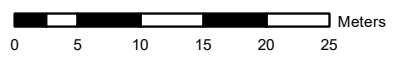
NAD83 - UTM Zone 18  
Scale: 1:600 (8.5x11")

Date: January 17, 2024  
Project: 2121K







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**Legend**

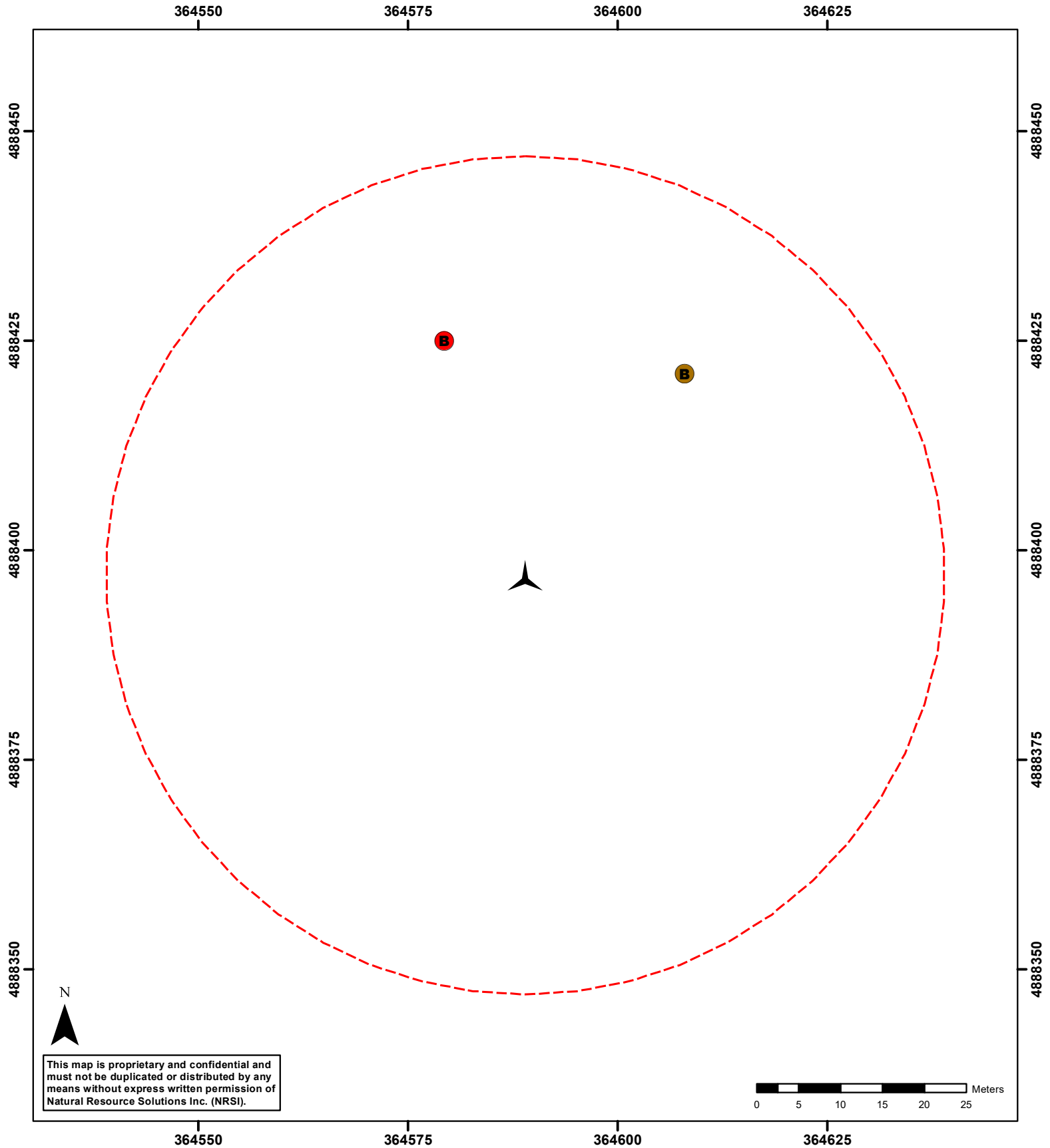
-  Turbine
-  Search Radius






Appendix V

**Amherst Island WP**  
**Turbine S28 Mortalities 2023**

NAD83 - UTM Zone 18 Scale: 1:600 (8.5x11")	Date: January 17, 2024 Project: 2121K
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<b>Legend</b>  Turbine  Search Radius  Big Brown Bat  Eastern Red Bat		Appendix V <h2 style="text-align: center;">Amherst Island WP</h2> <h3 style="text-align: center;">Turbine S36 Mortalities 2023</h3>	
NAD83 - UTM Zone 18 Scale: 1:600 (8.5x11")		Date: January 17, 2024 Project: 2121K	
 <b>NATURAL RESOURCE SOLUTIONS INC.</b> <small>Aquatic, Terrestrial and Wetland Biologists</small>			

**Appendix VI**  
Visibility Class Mapping

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# Visibility Class Map

Project Name: Amherst Island WP Project #: 2121K Turbine #: S01 Degree of Slope +0.5 degrees Slope Orientation N (e.g. SSW)

Photo Numbers (from turbine base)  
 Facing North: 09  
 Facing East: 10  
 Facing South: 11  
 Facing West: 12  
 (sketch habitat and visibility classes)

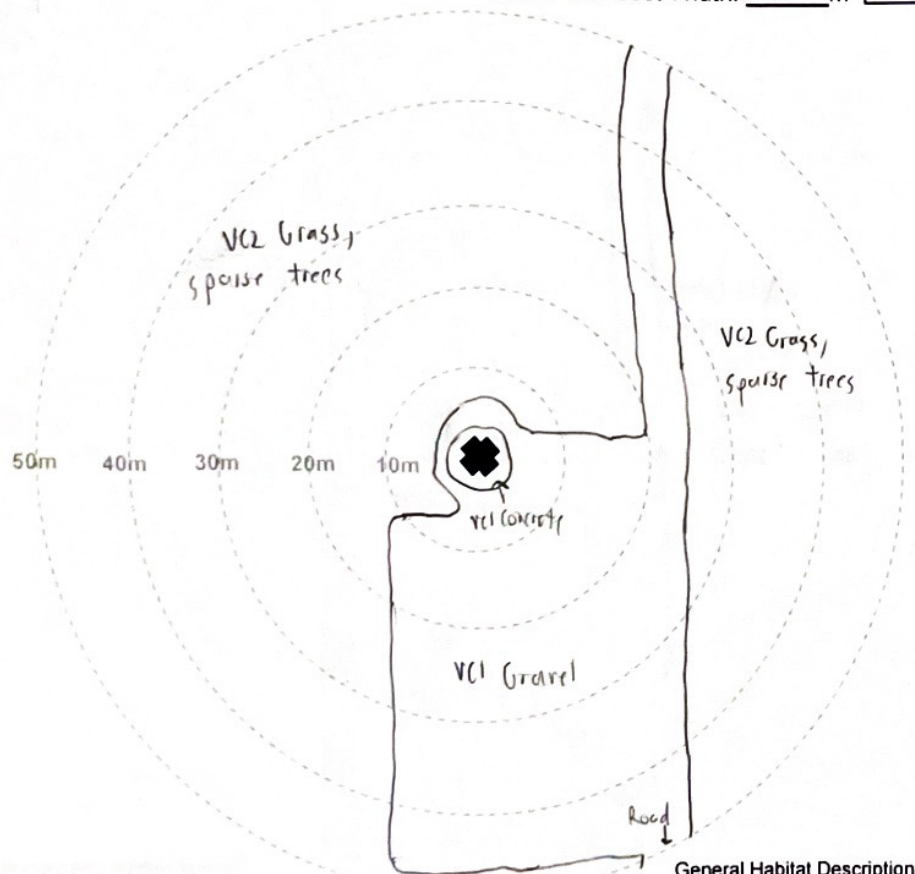
Date (DD/MM/YY): 11/05/23

Observer: MPI

Monthly/Seasonal  
 Linear Transect Width: 5 m



N



General Habitat Description:

grass lawn, gravel

Photo Numbers (from turbine base)  
 Facing North: 09  
 Facing East: 10  
 Facing South: 11  
 Facing West: 12  
 (sketch habitat and visibility classes)

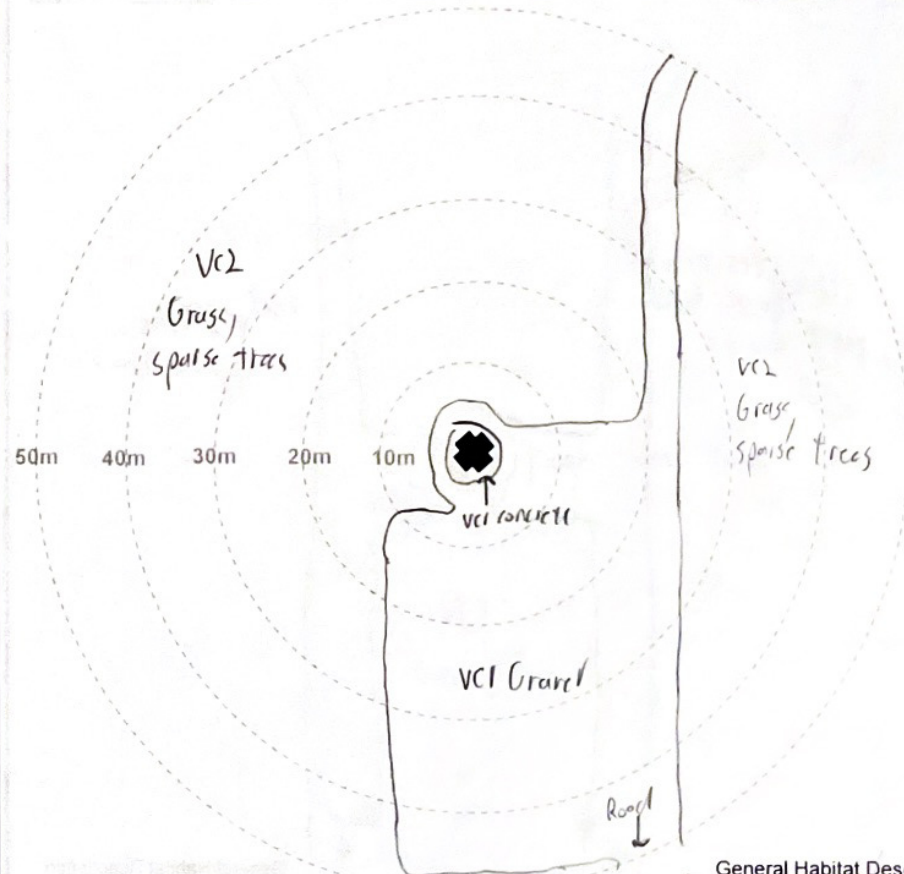
Date (DD/MM/YY): 01/06/23

Observer: MPI

Monthly/Seasonal  
 Linear Transect Width: 5 m



N



General Habitat Description:

grass lawn, gravel

## VISIBILITY CLASSES

Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

Project Name: Ambrest Island U.P Project #: 21211c Turbine #: 502

Photo Numbers (from turbine base)  
 Facing North: 13  
 Facing East: 14  
 Facing South: 15  
 Facing West: 16  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 10/07/23

Observer: MPD

Monthly/Seasonal  
 Linear Transect Width: 5 m

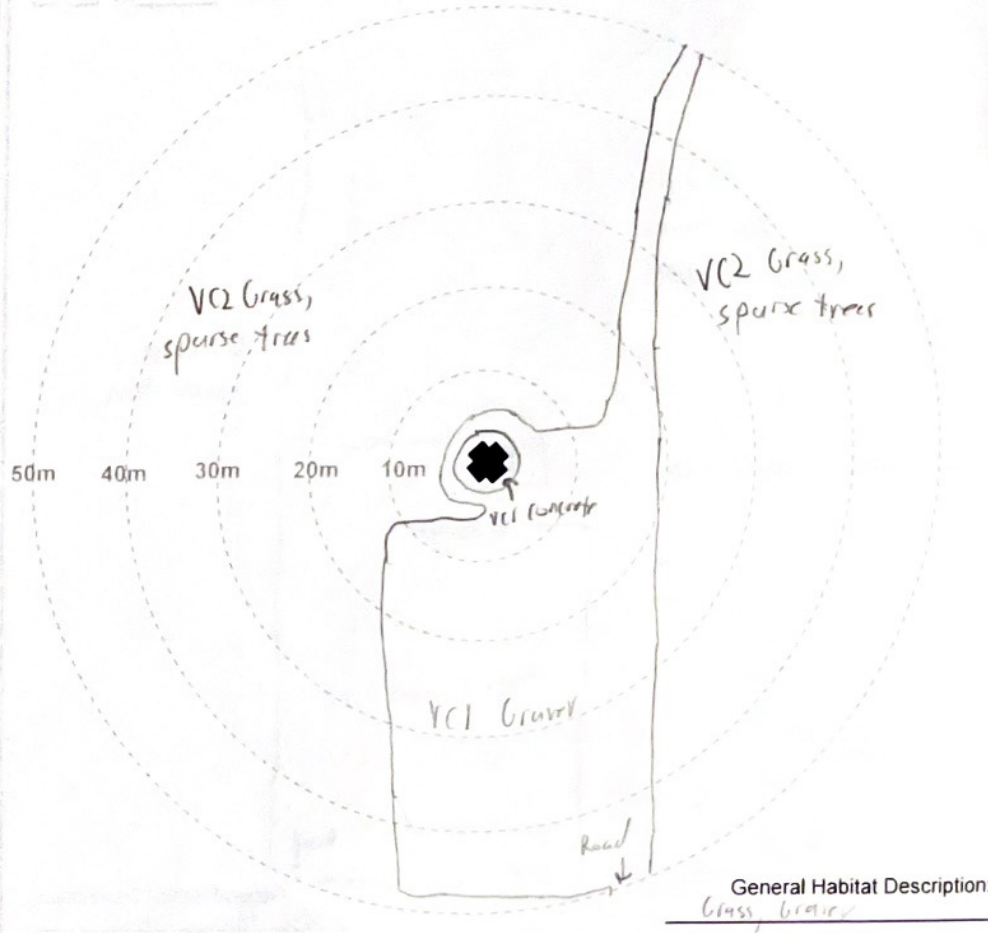
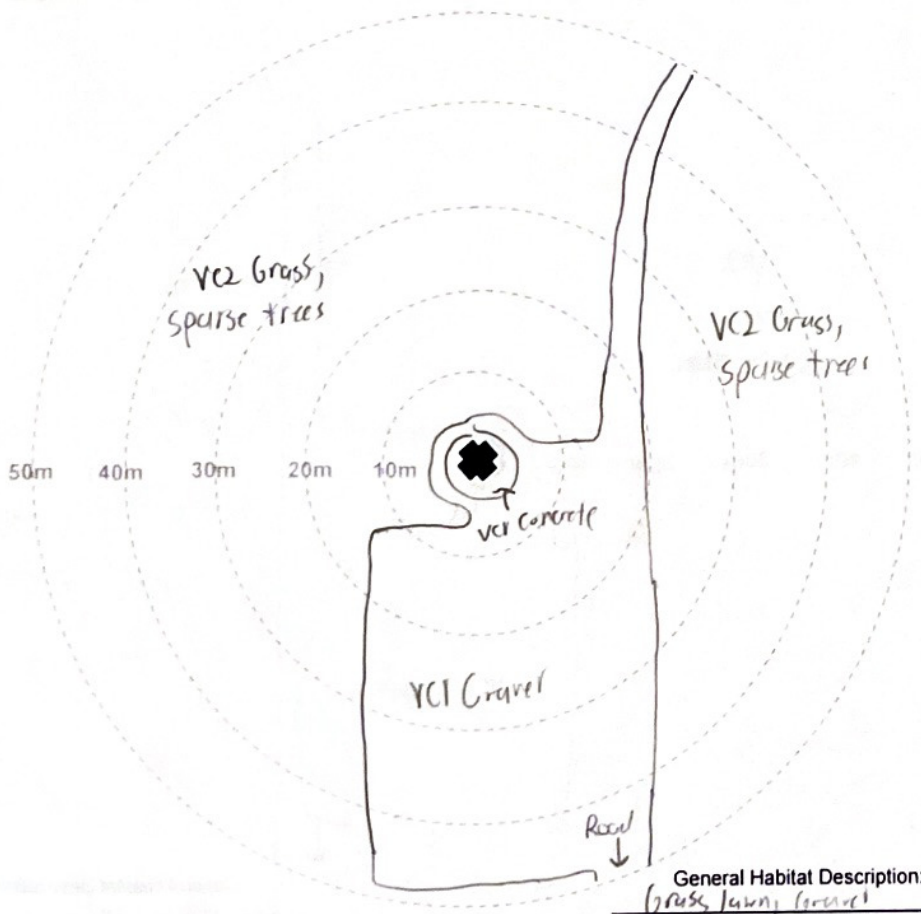


Photo Numbers (from turbine base)  
 Facing North: 13  
 Facing East: 14  
 Facing South: 15  
 Facing West: 16  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 03/08/23

Observer: MPD

Monthly/Seasonal  
 Linear Transect Width: 5 m



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island W.P Project #: 2121K Turbine #: 502

Photo Numbers (from turbine base)  
 Facing North: 15  
 Facing East: 16  
 Facing South: 17  
 Facing West: 18  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 11/09/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m

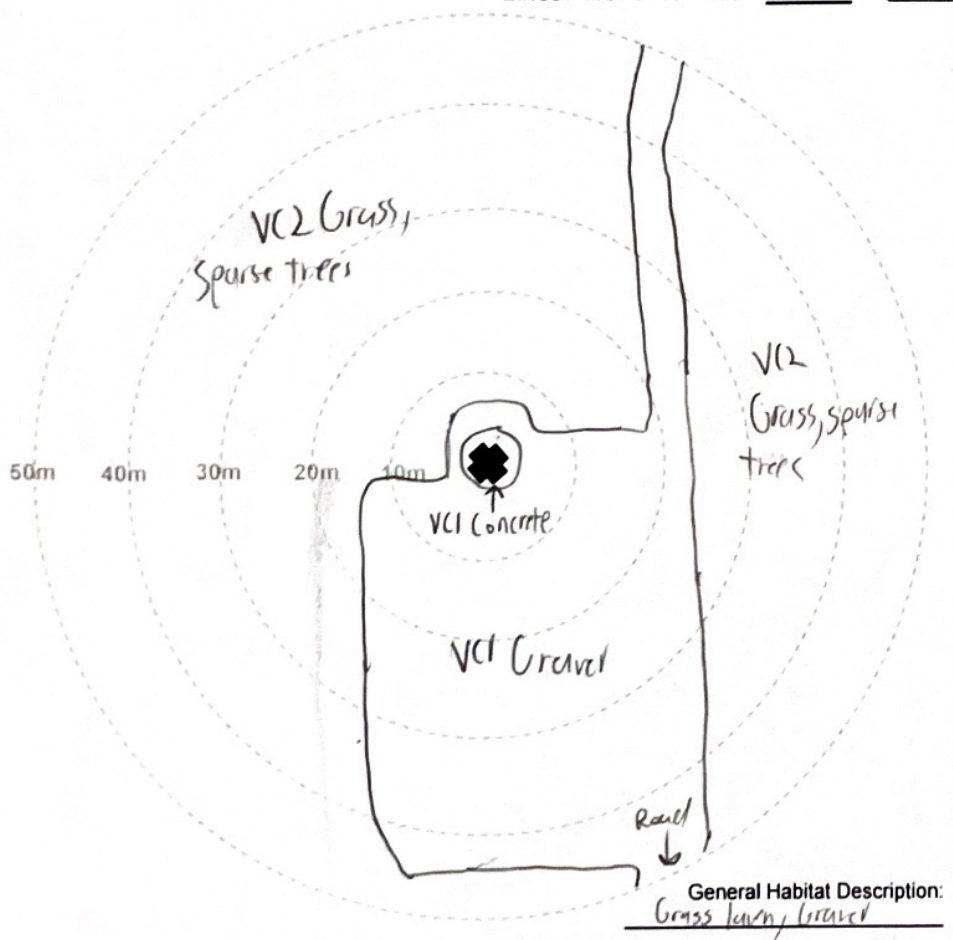
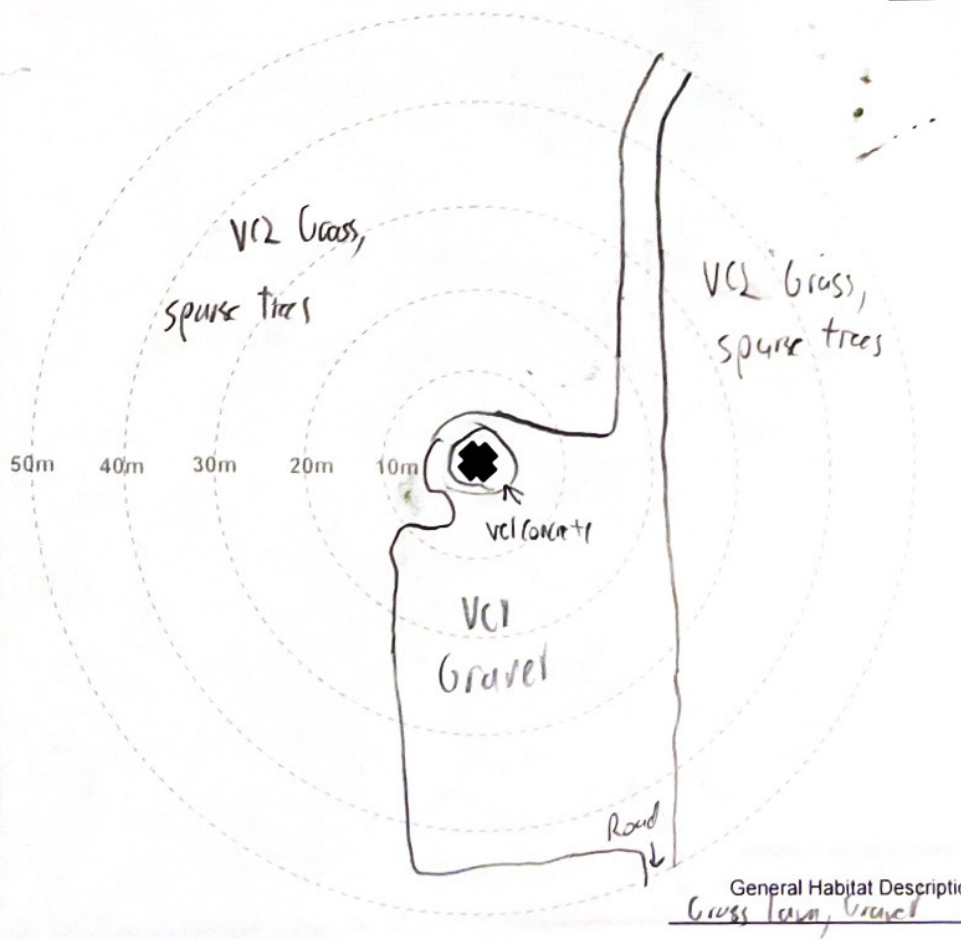


Photo Numbers (from turbine base)  
 Facing North: \_\_\_\_\_  
 Facing East: \_\_\_\_\_  
 Facing South: \_\_\_\_\_  
 Facing West: \_\_\_\_\_  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 12/10/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

Project Name: Amherst Island WP Project #: 2121K Turbine #: SD2 Degree of Slope +1.75 degrees Slope Orientation SE (e.g. SSW)

Photo Numbers (from turbine base)  
 Facing North: 01  
 Facing East: 02  
 Facing South: 03  
 Facing West: 04  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 15/05/23  
 Observer: MPI  
 Monthly/Seasonal  
 Linear Transect Width: 5 m

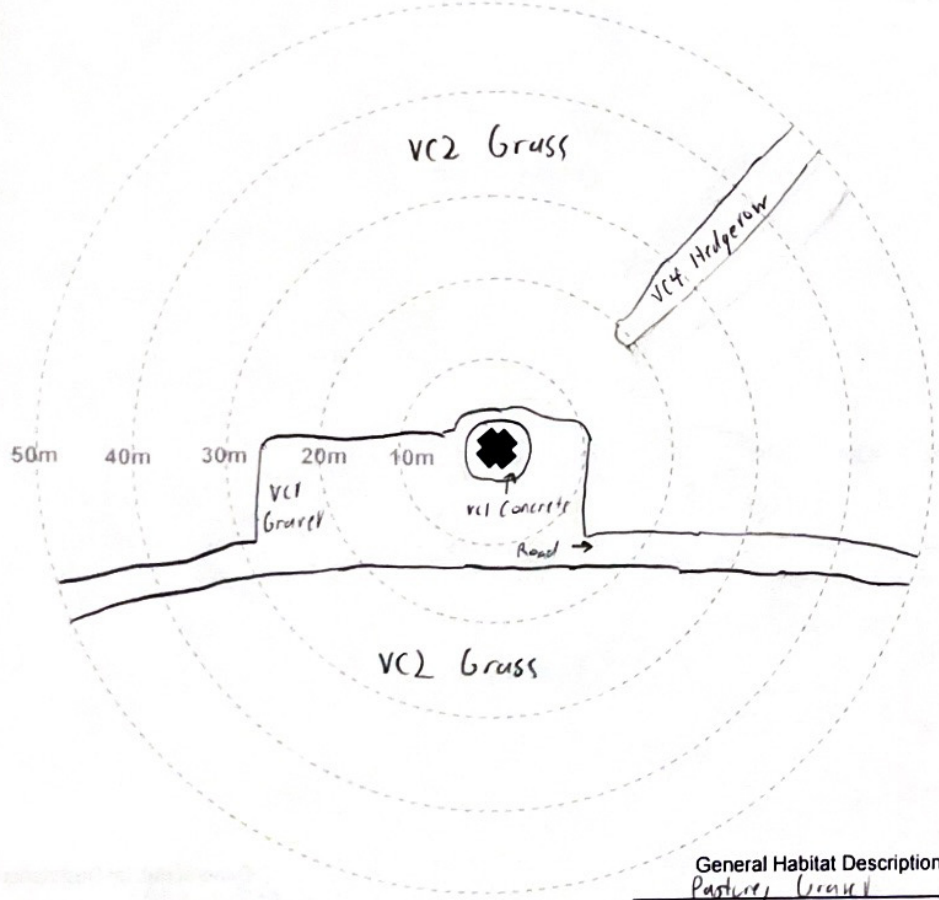
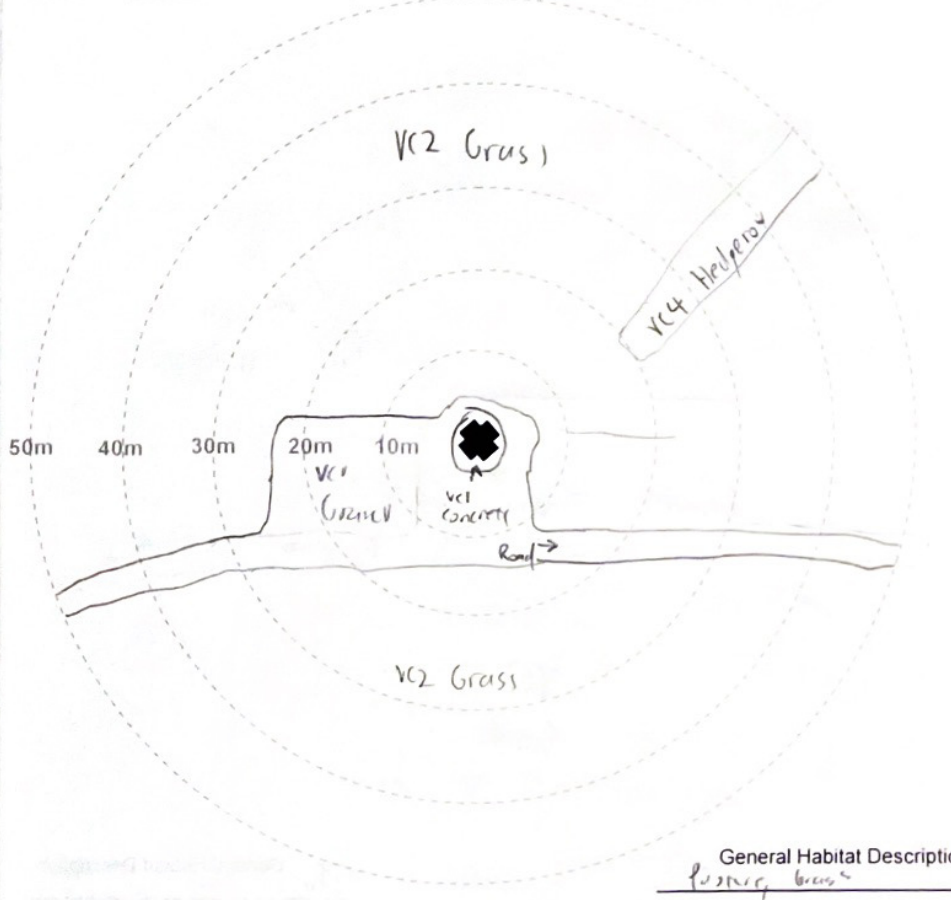


Photo Numbers (from turbine base)  
 Facing North: 07  
 Facing East: 08  
 Facing South: 09  
 Facing West: 10  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 08/06/23  
 Observer: MPI  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



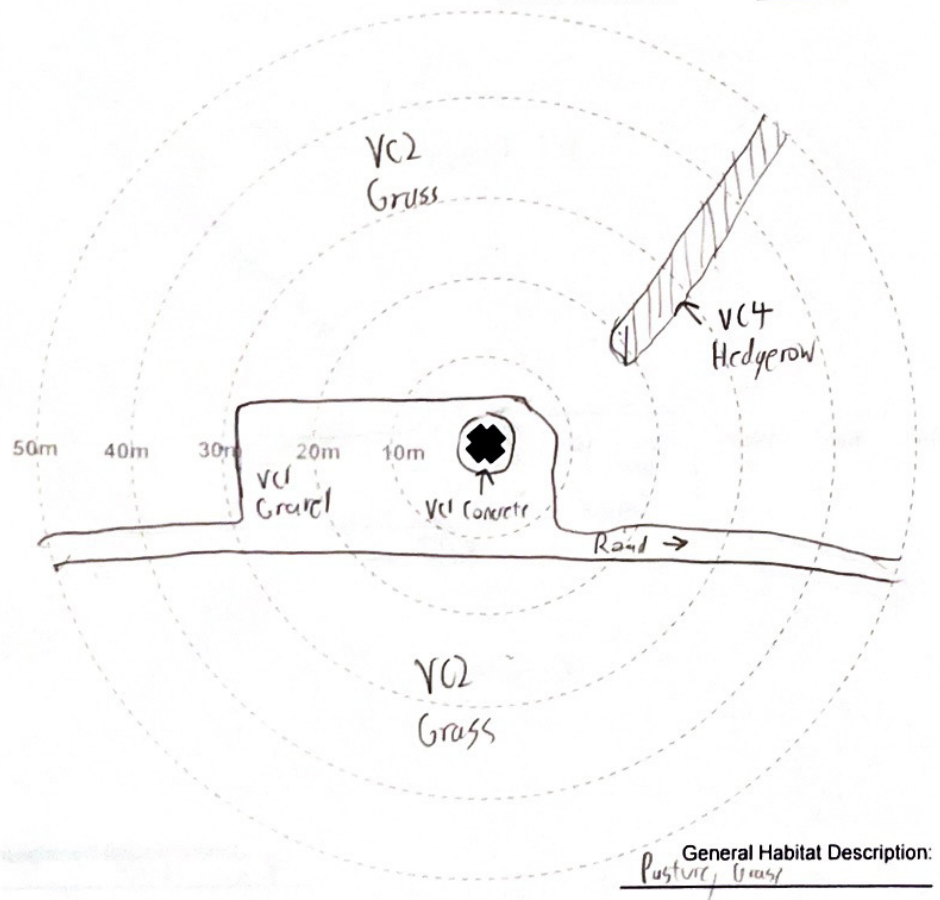
VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island W.P Project #: 2/21K Turbine #: 502

Photo Numbers (from turbine base)  
 Facing North: 01  
 Facing East: 02  
 Facing South: 03  
 Facing West: 04  
 (sketch habitat and visibility classes)

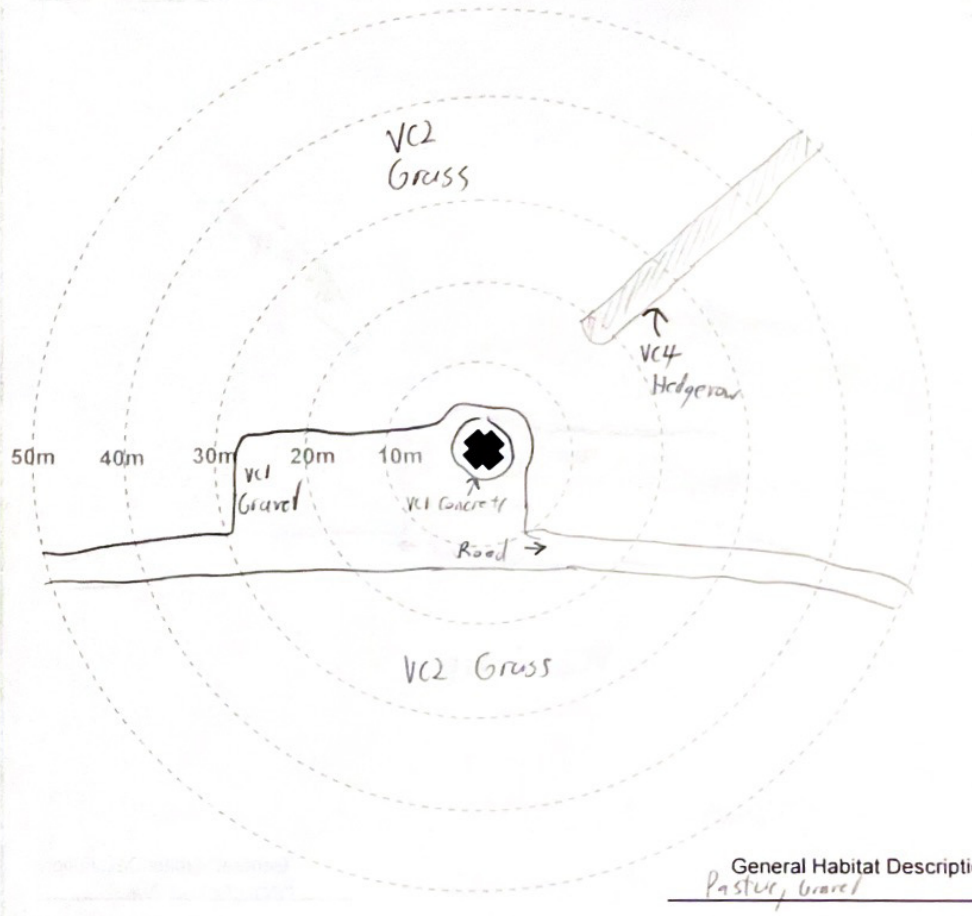
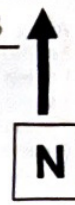
Date (DD/MM/YY): 14/07/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Pasture, Grass

Photo Numbers (from turbine base)  
 Facing North: 03  
 Facing East: 04  
 Facing South: 05  
 Facing West: 06  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 14/08/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Pasture, Gravel

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

Project Name: Amherst Island W.P Project #: 21211 Turbine #: 502

Photo Numbers (from turbine base)  
 Facing North: 07  
 Facing East: 08  
 Facing South: 09  
 Facing West: 10  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 14, 09, 23 ↑  
 Observer: 5  
 Monthly/Seasonal Linear Transect Width: 5 m **N**

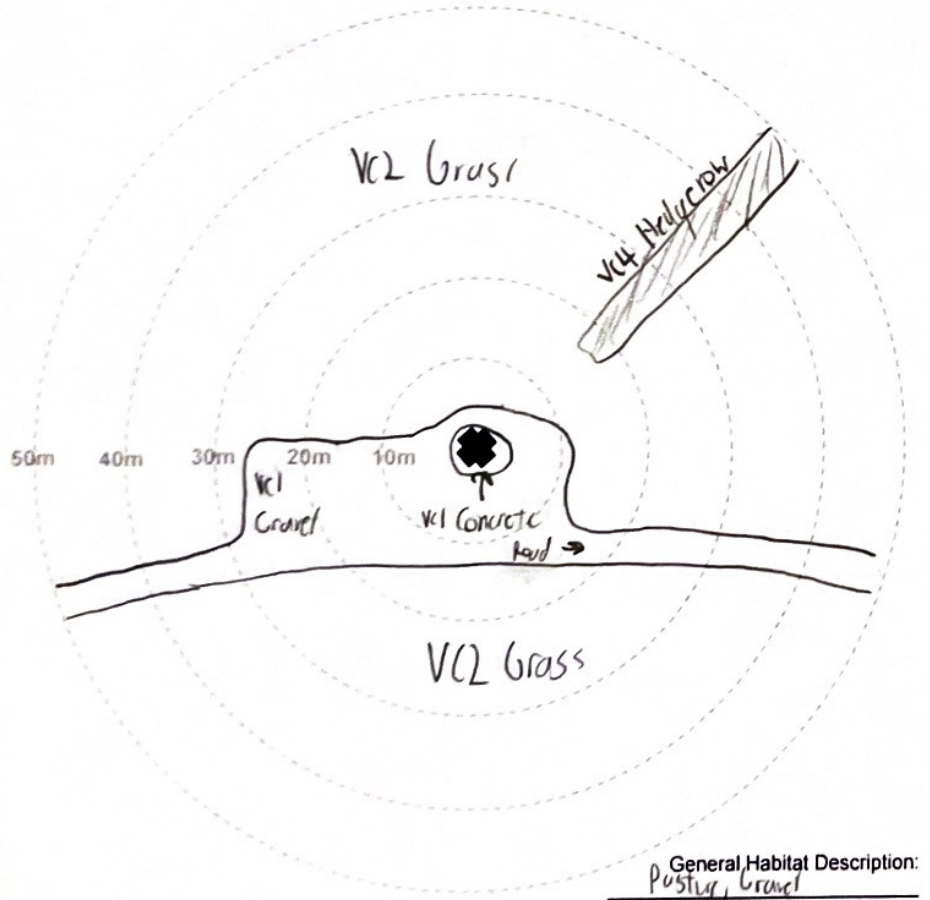
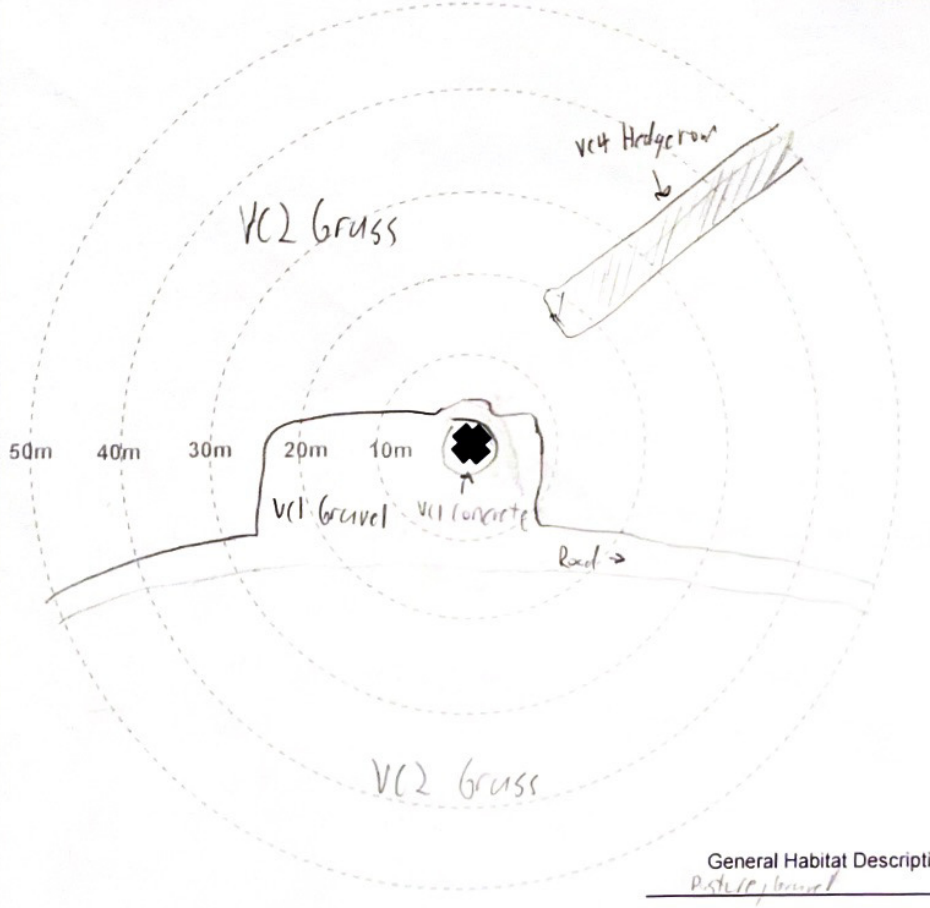


Photo Numbers (from turbine base)  
 Facing North: 01  
 Facing East: 02  
 Facing South: 03  
 Facing West: 04  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 16, 10, 23 ↑  
 Observer: MPD  
 Monthly/Seasonal Linear Transect Width: 5 m **N**



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island WP Project #: 2121K Turbine #: S03 Degree of Slope +2.0 degrees Slope Orientation SW (e.g. SSW)

Photo Numbers (from turbine base)  
 Facing North: 17  
 Facing East: 18  
 Facing South: 19  
 Facing West: 20  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 11/05/23

Observer: MPD

Monthly/Seasonal  
 Linear Transect Width: 5 m

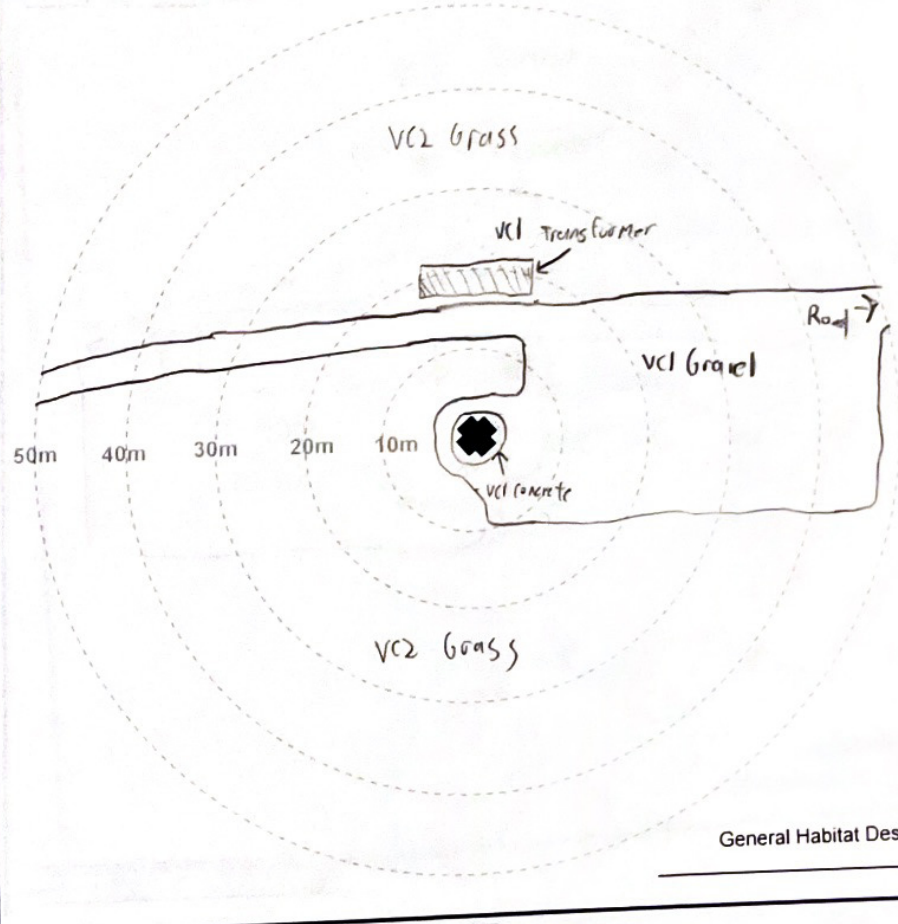
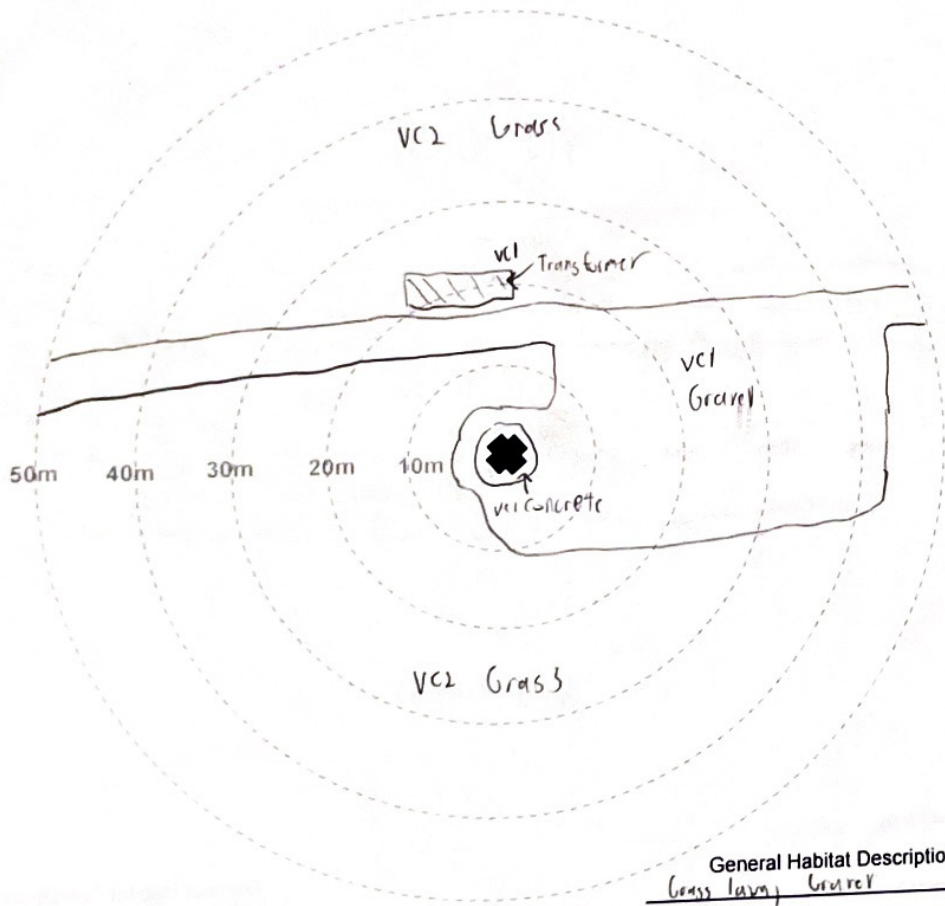


Photo Numbers (from turbine base)  
 Facing North: 13  
 Facing East: 14  
 Facing South: 15  
 Facing West: 16  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 12/06/23

Observer: MPD

Monthly/Seasonal  
 Linear Transect Width: 5 m



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

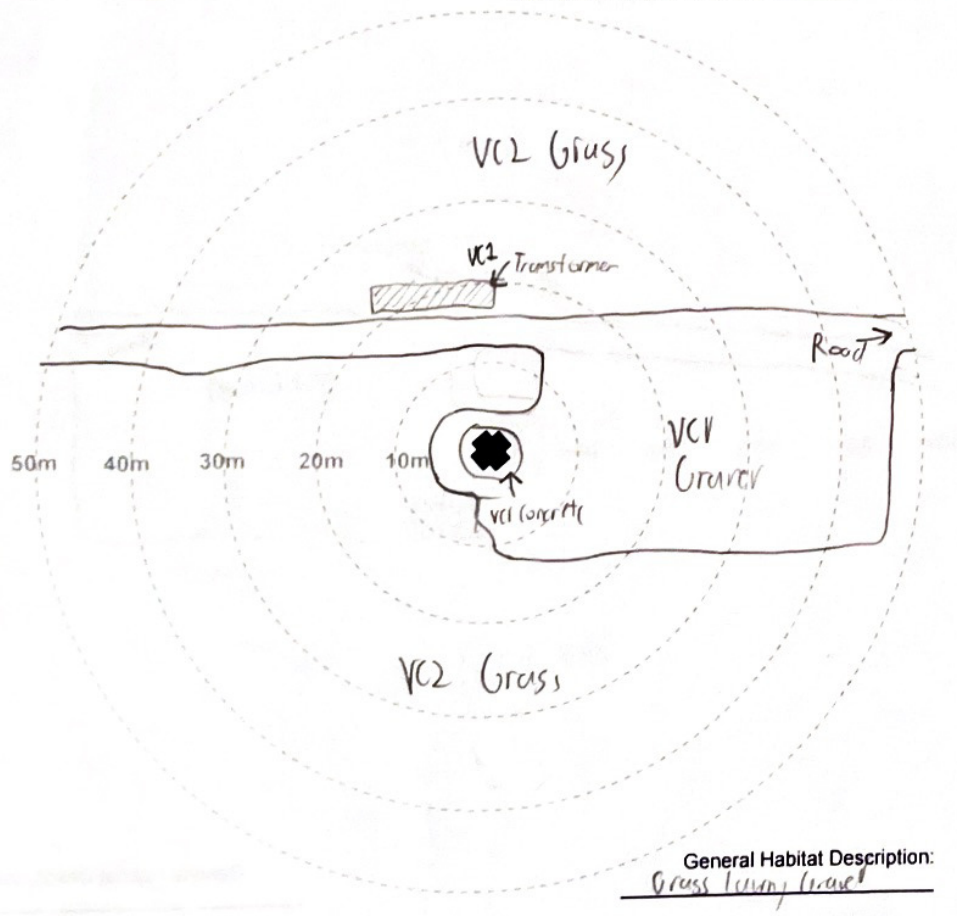
Project Name: Amherst Island W.P Project #: 212116 Turbine #: 503

Photo Numbers (from turbine base)  
 Facing North: 21  
 Facing East: 22  
 Facing South: 23  
 Facing West: 24  
 (sketch habitat and visibility classes)

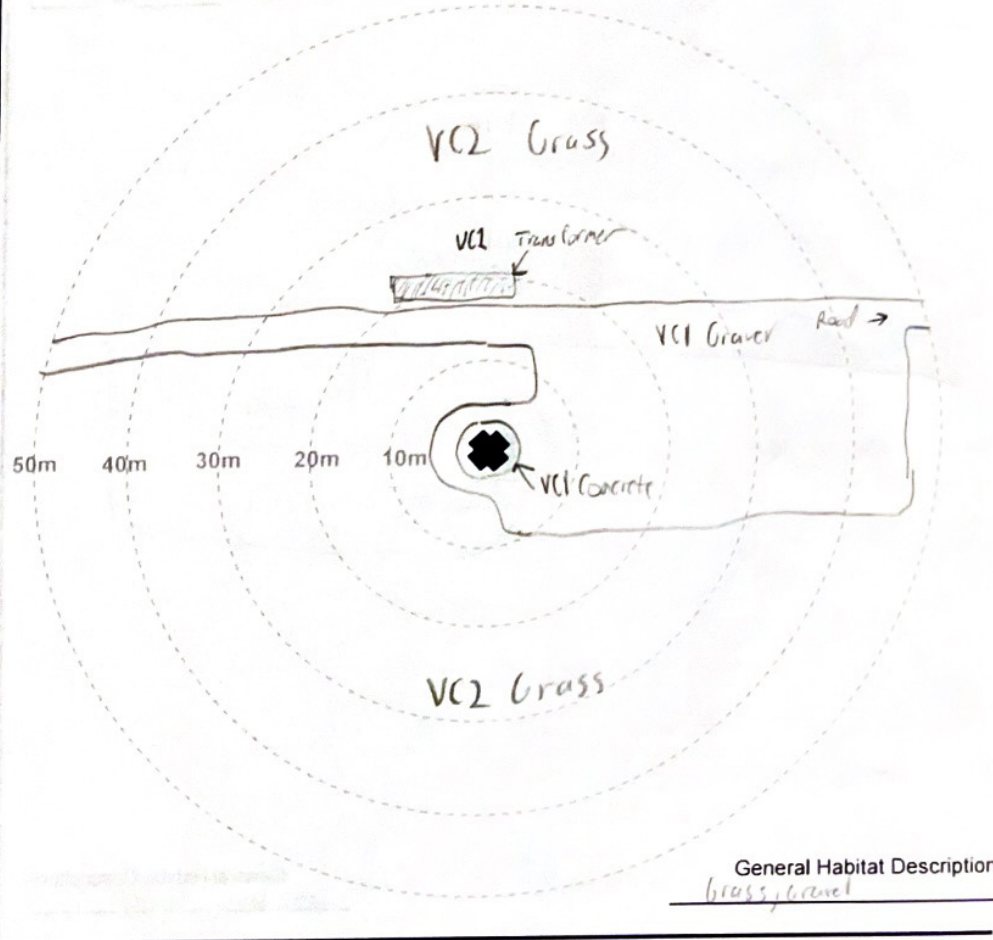
Date (DD/MM/YY): 10/07/23  
 Observer: M.P.D  
 Monthly/Seasonal Linear Transect Width: 5 m

Photo Numbers (from turbine base)  
 Facing North: 29  
 Facing East: 30  
 Facing South: 31  
 Facing West: 32  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 03/08/23  
 Observer: M.P.D  
 Monthly/Seasonal Linear Transect Width: 5 m



General Habitat Description:  
Grass, lawn, gravel



General Habitat Description:  
Grass, gravel

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island V.P Project #: 2121K Turbine #: 803

Photo Numbers (from turbine base)

Facing North: 19  
Facing East: 20  
Facing South: 21  
Facing West: 22

(sketch habitat and visibility classes)

Date (DD/MM/YY): 11/09/23

Observer: MPD

Monthly/Seasonal  
Linear Transect Width: 5 m

N

Photo Numbers (from turbine base)

Facing North: 13  
Facing East: 14  
Facing South: 15  
Facing West: 16

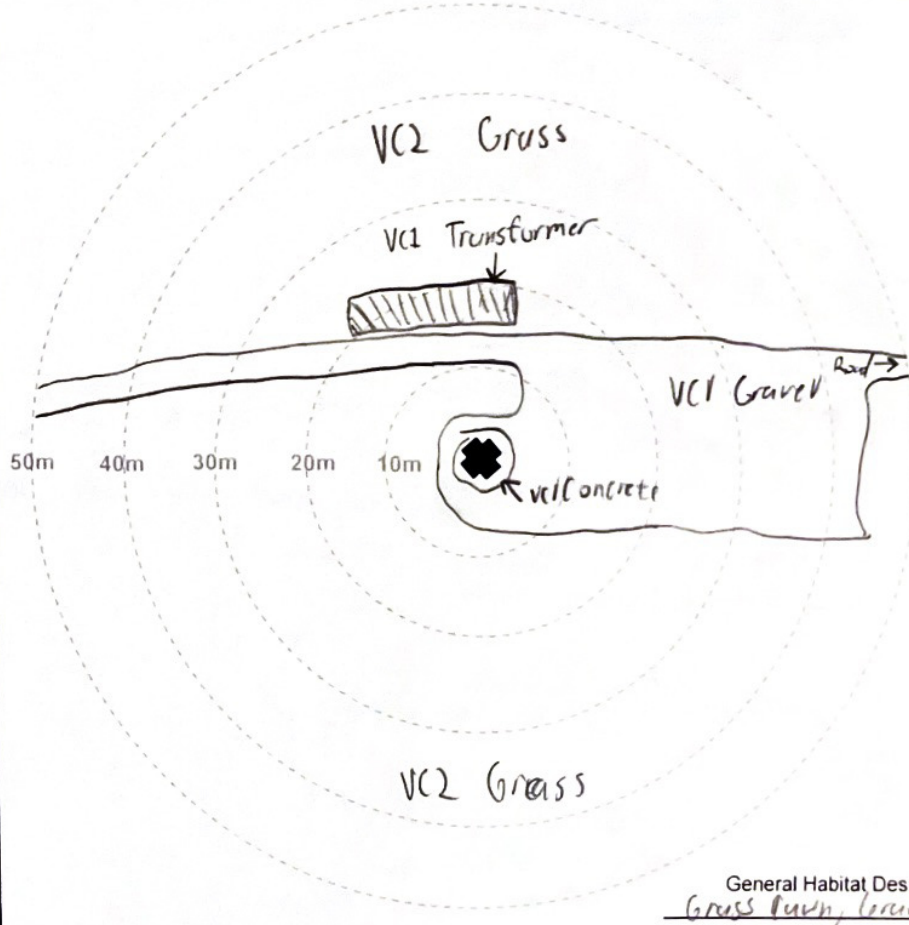
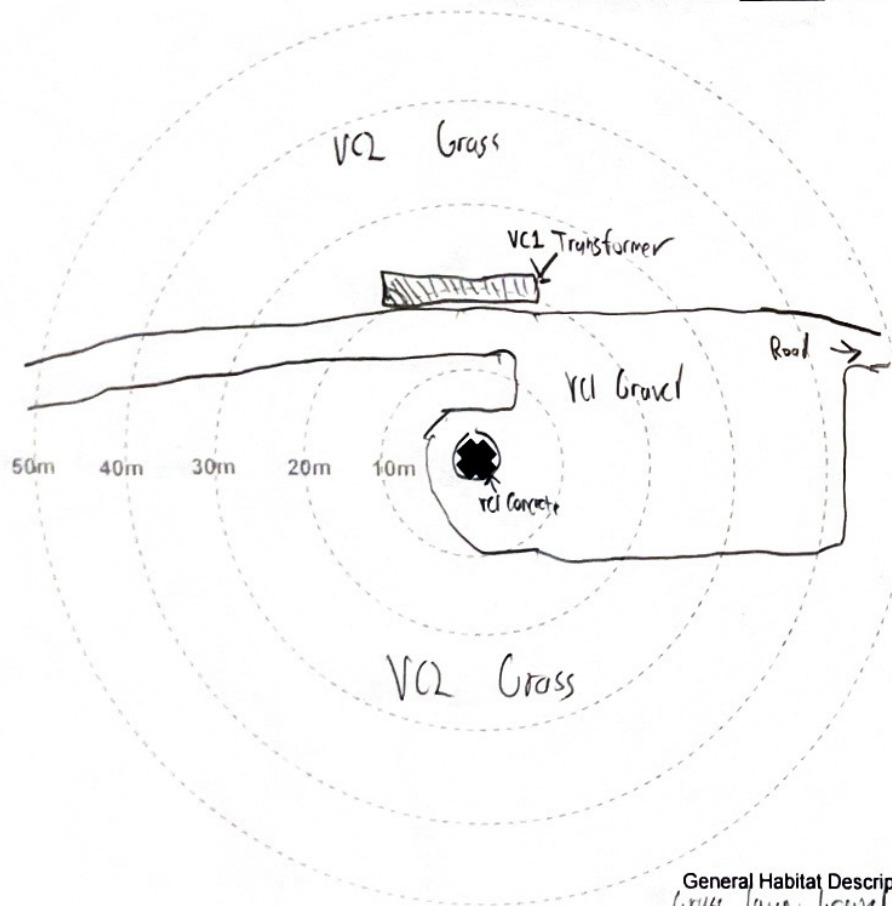
(sketch habitat and visibility classes)

Date (DD/MM/YY): 12/10/23

Observer: MPD

Monthly/Seasonal  
Linear Transect Width: 5 m

N



## VISIBILITY CLASSES

Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

Project Name: Amherst Island WP Project #: 2121K Turbine #: S05 Degree of Slope +1.5 degrees Slope Orientation S (e.g. SSW)

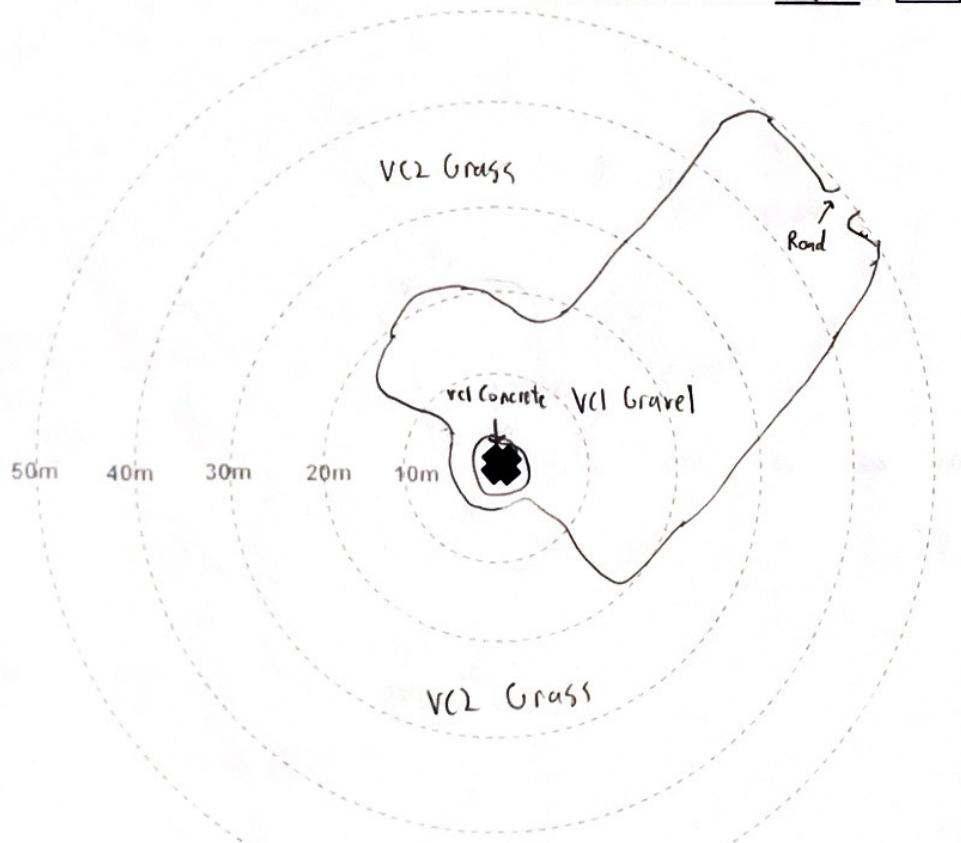
Photo Numbers (from turbine base)  
 Facing North: 01  
 Facing East: 02  
 Facing South: 03  
 Facing West: 04  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 11 / 05 / 23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m

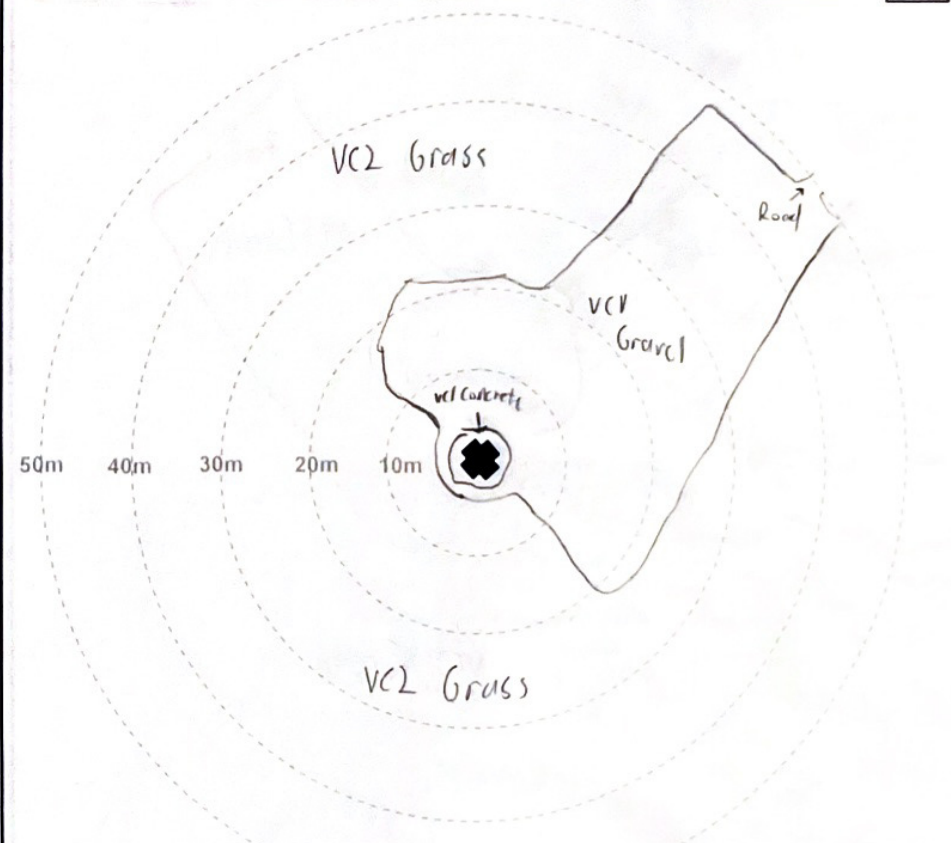


Photo Numbers (from turbine base)  
 Facing North: 01  
 Facing East: 02  
 Facing South: 03  
 Facing West: 04  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 01 / 06 / 30  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Grass Lawn, Gravel



General Habitat Description:  
Grass Lawn, Gravel

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island W.P. Project #: 2121K Turbine #: S05

Photo Numbers (from turbine base)  
 Facing North: 03  
 Facing East: 04  
 Facing South: 05  
 Facing West: 06  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 10/07/22  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m

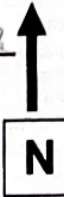
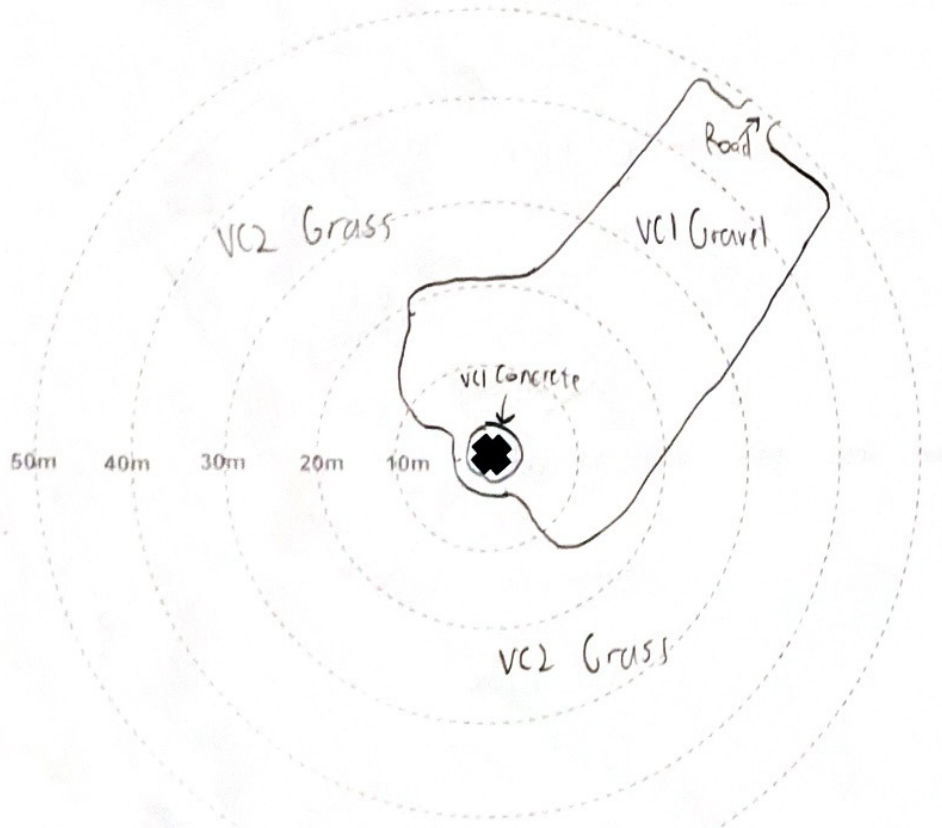
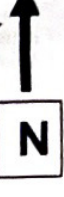
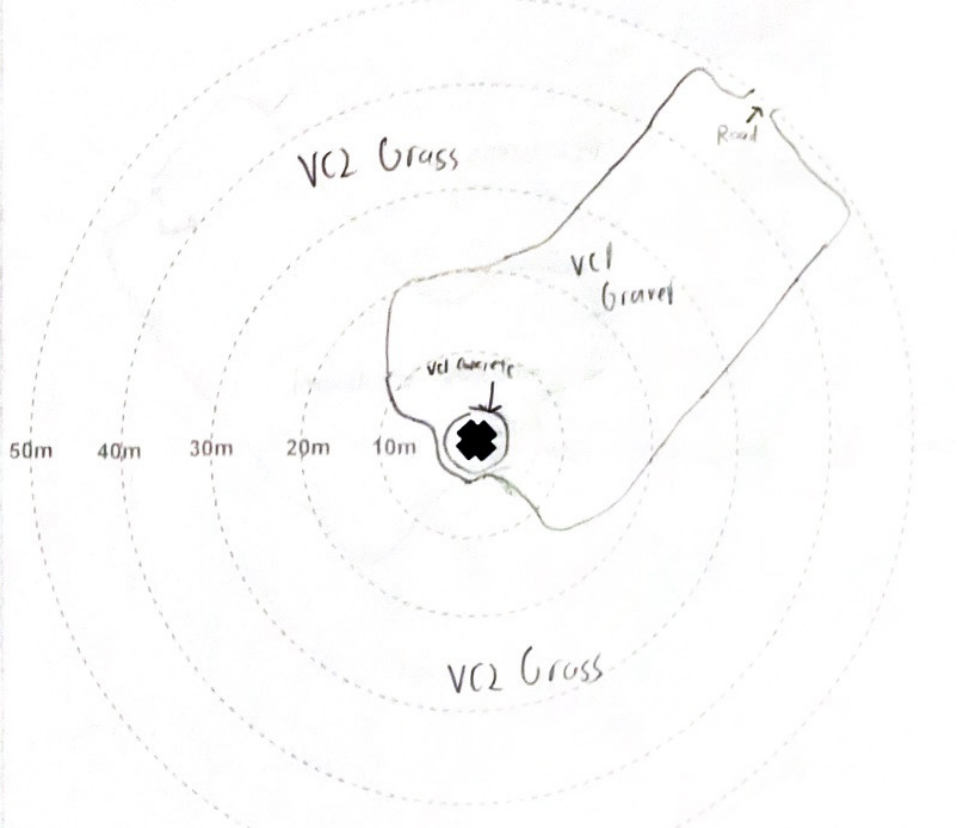


Photo Numbers (from turbine base)  
 Facing North: 05  
 Facing East: 06  
 Facing South: 07  
 Facing West: 08  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 03/08/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Grass, gravel, concrete



General Habitat Description:  
Grass, gravel, concrete

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

Project Name: Amherst Island W.P Project #: 212116 Turbine #: 505

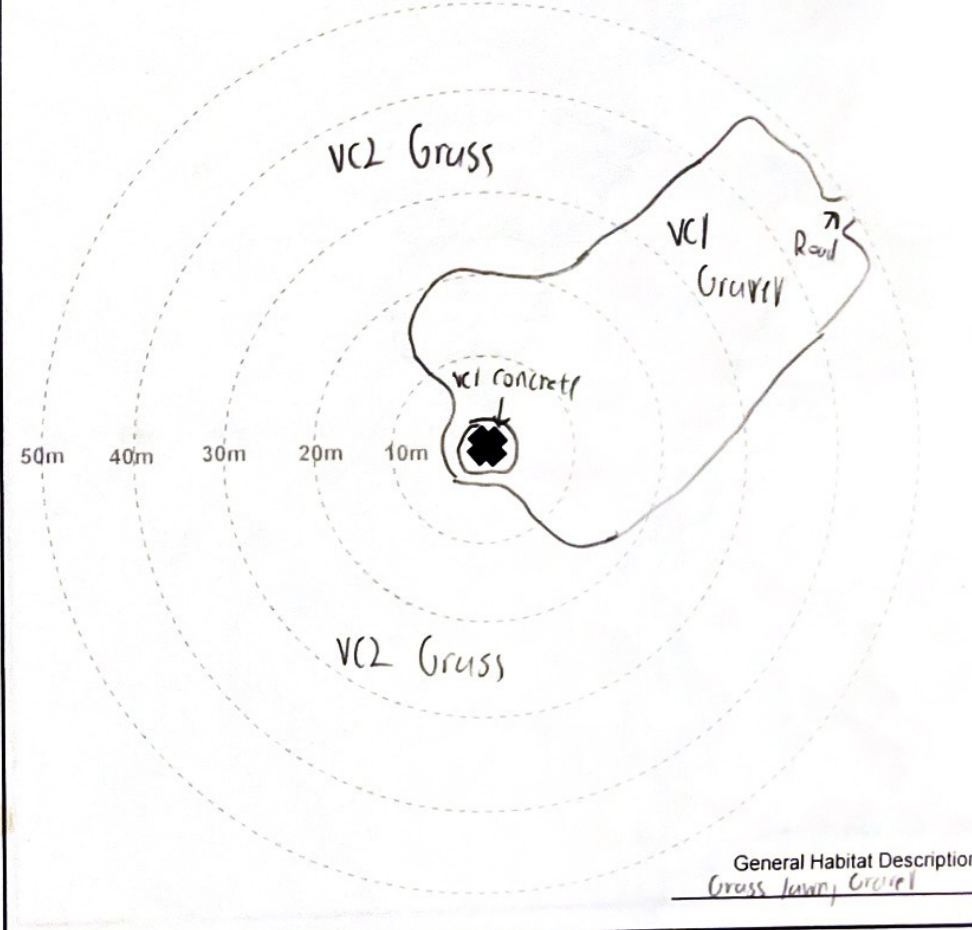
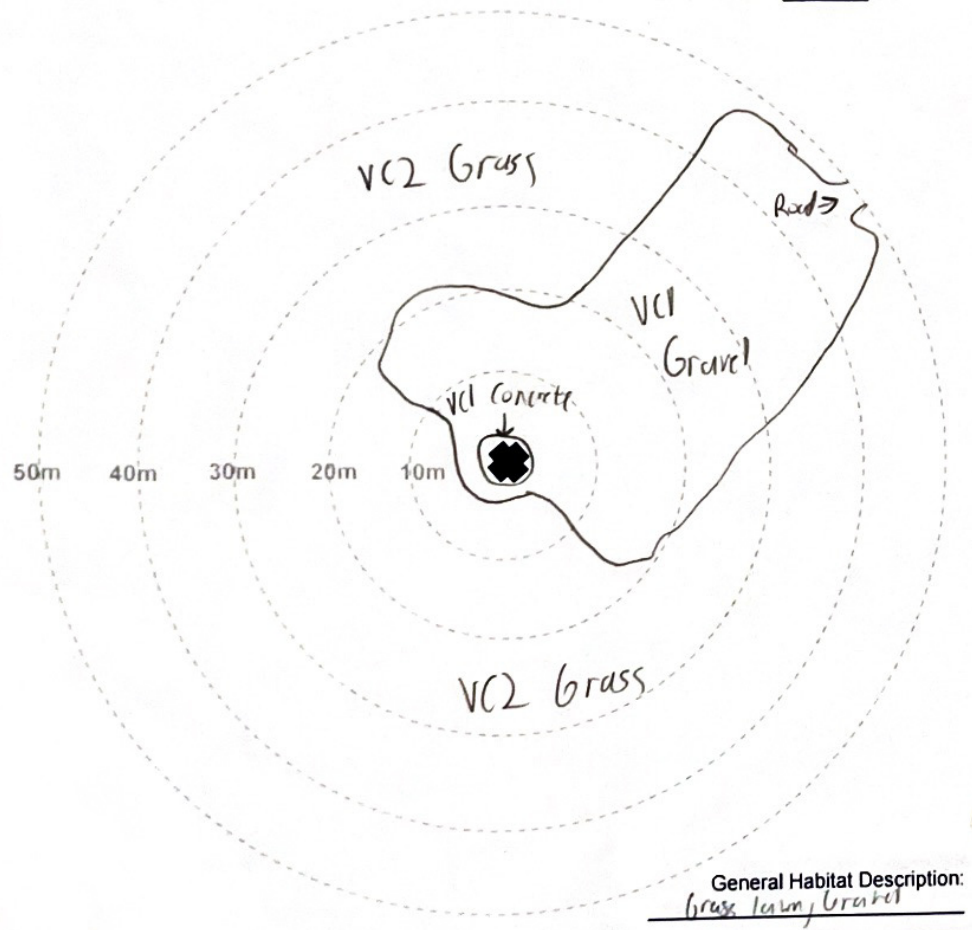
Photo Numbers (from turbine base)  
 Facing North: 01  
 Facing East: 02  
 Facing South: 03  
 Facing West: 04  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 01/09/23  
 Observer: M PD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



Photo Numbers (from turbine base)  
 Facing North: 01  
 Facing East: 02  
 Facing South: 03  
 Facing West: 04  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 12/10/23  
 Observer: M PD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# visibility Class Map

Project Name: Amherst Island WP Project #: 2121K Turbine #: S07 Degree of Slope +2.0 degrees Slope Orientation NE (e.g. SSW)

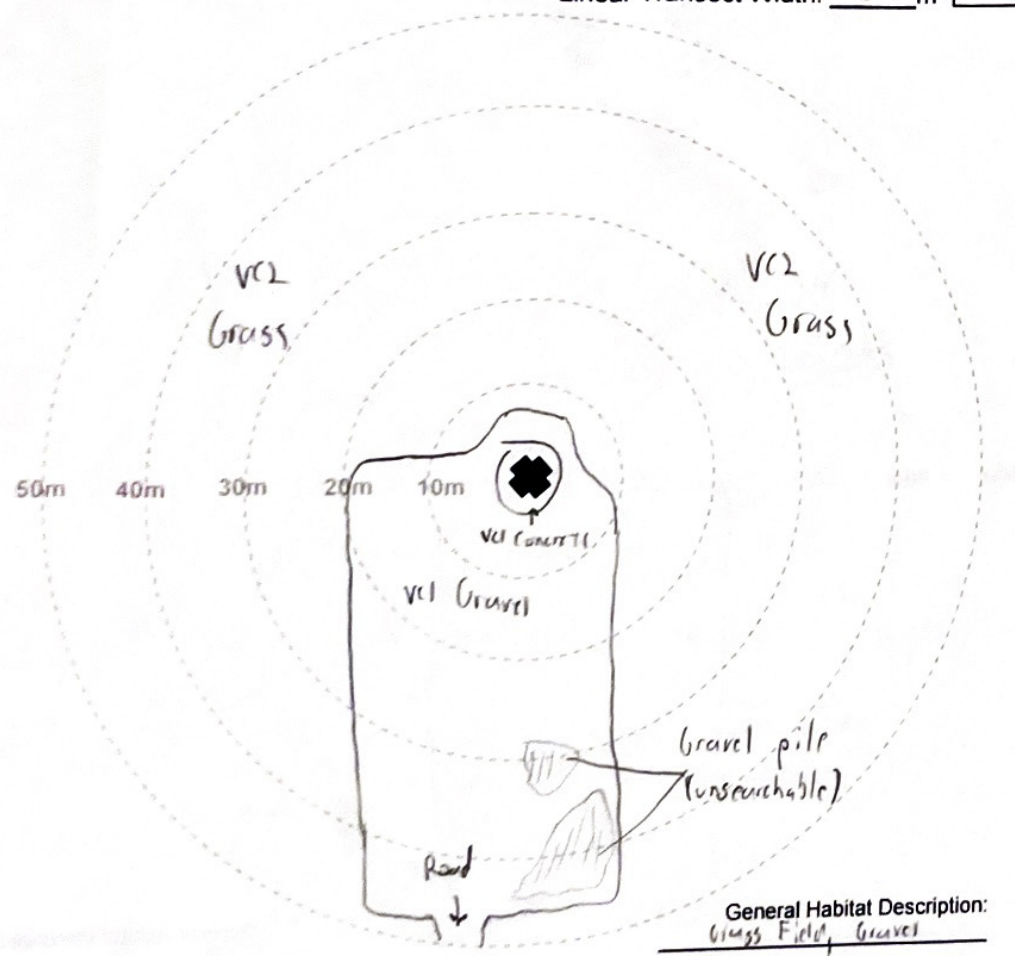
Photo Numbers (from turbine base)  
 Facing North: 21  
 Facing East: 22  
 Facing South: 23  
 Facing West: 24  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 15/05/23  
 Observer: MPII  
 Monthly/Seasonal  
 Linear Transect Width: 5 m

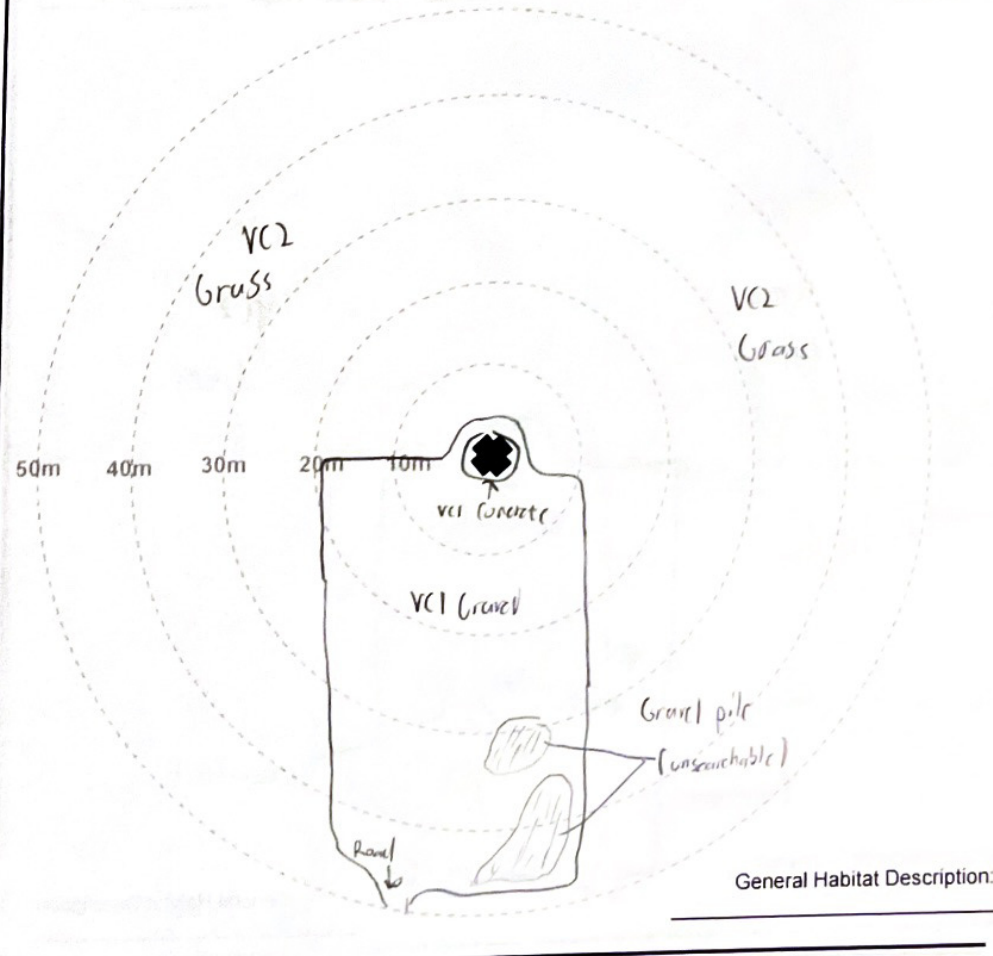


Photo Numbers (from turbine base)  
 Facing North: 17  
 Facing East: 18  
 Facing South: 19  
 Facing West: 20  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 08/06/22  
 Observer: MPII  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Grass Field, Gravel



General Habitat Description:

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

Project Name: Amherst Island W.P. Project #: 2121K Turbine #: 507

Photo Numbers (from turbine base)  
 Facing North: 09  
 Facing East: 10  
 Facing South: 11  
 Facing West: 12  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 14/07/23

Observer: MPI

Monthly/Seasonal  
 Linear Transect Width: 5 m



N

Photo Numbers (from turbine base)  
 Facing North: 13  
 Facing East: 14  
 Facing South: 15  
 Facing West: 16  
 (sketch habitat and visibility classes)

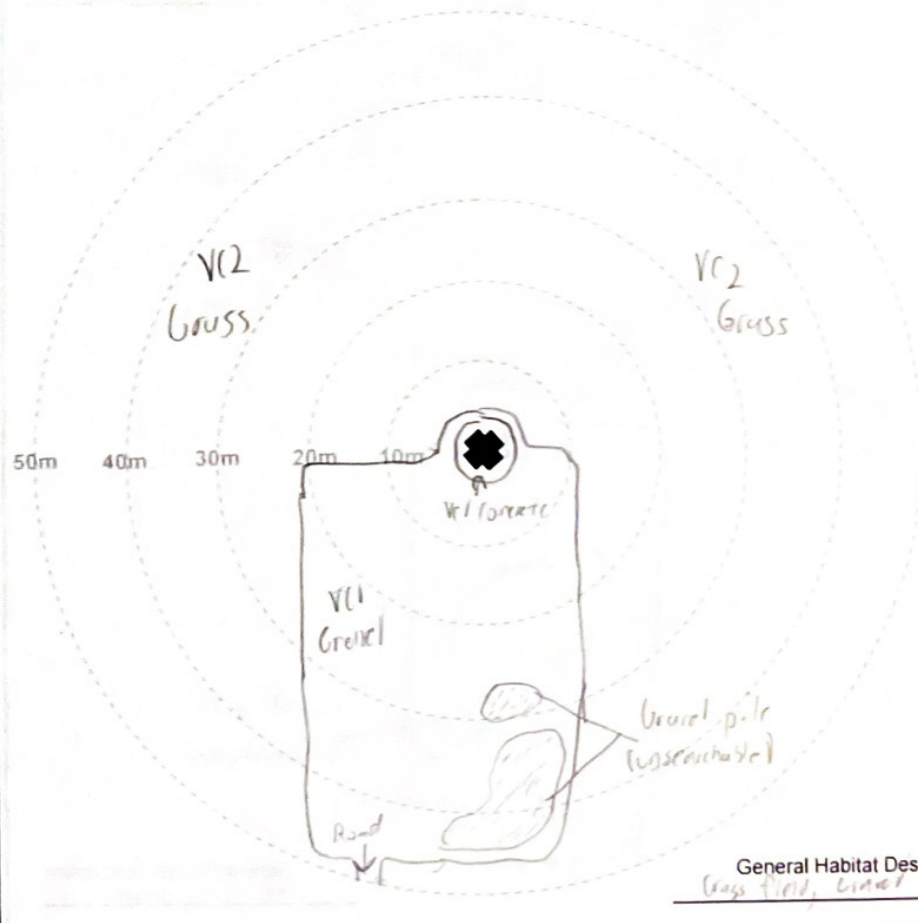
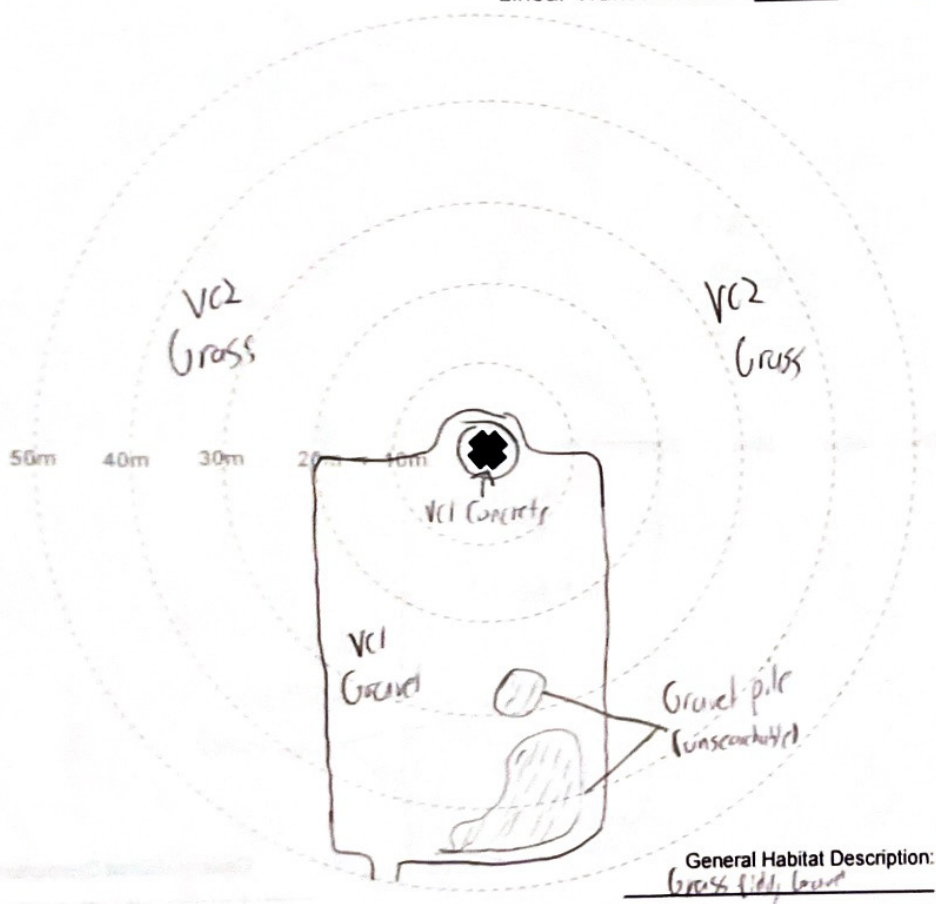
Date (DD/MM/YY): 14/08/23

Observer: MPI

Monthly/Seasonal  
 Linear Transect Width: 5 m



N



## VISIBILITY CLASSES

Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island W.P Project #: 2121K Turbine #: 507

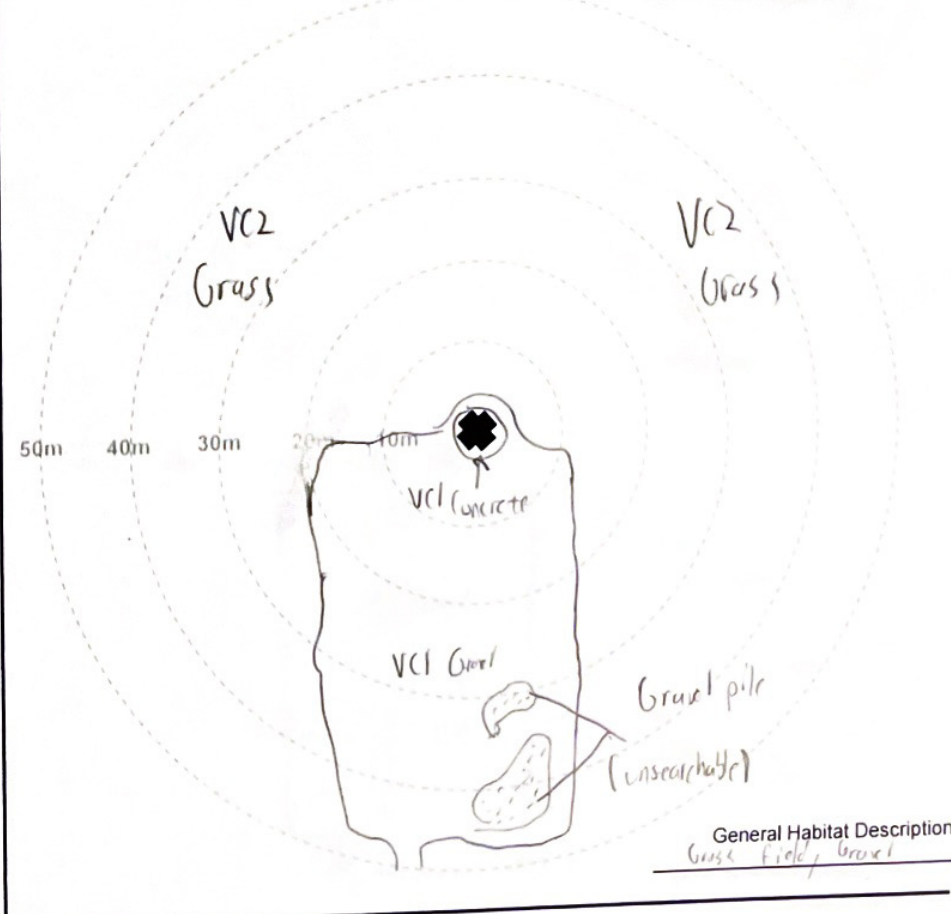
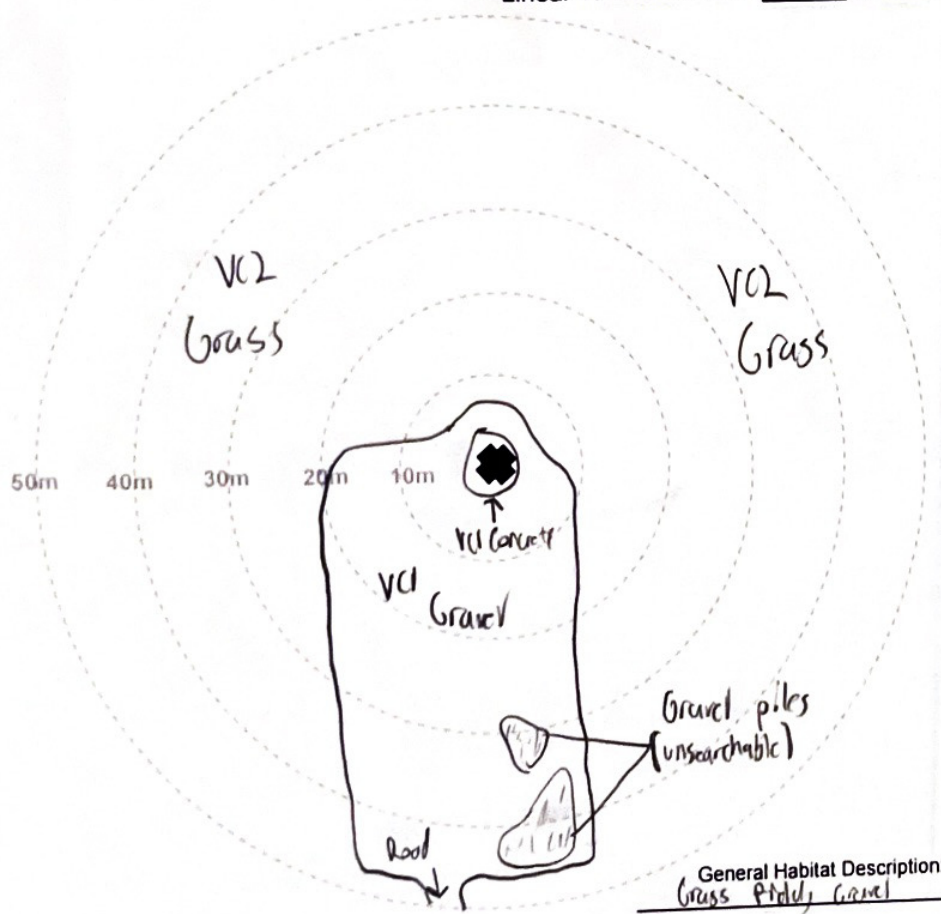
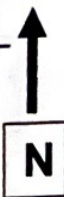
Photo Numbers (from turbine base)  
 Facing North: 19  
 Facing East: 20  
 Facing South: 21  
 Facing West: 22  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 14/09/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



Photo Numbers (from turbine base)  
 Facing North: 09  
 Facing East: 10  
 Facing South: 11  
 Facing West: 12  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 16/10/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

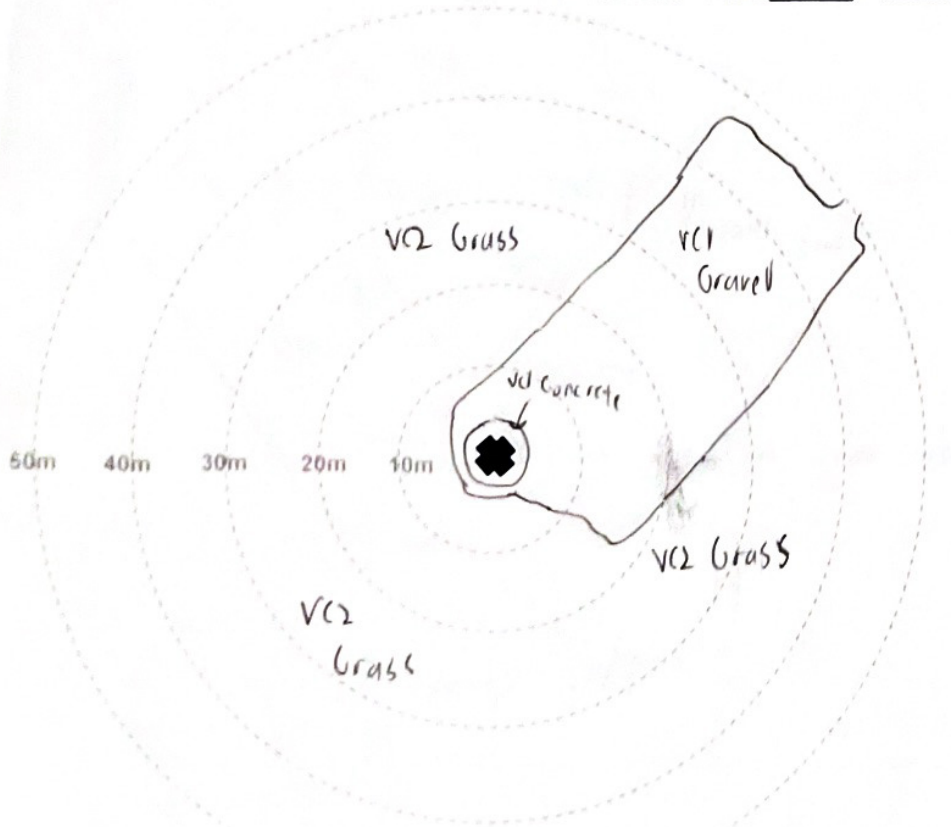
Project Name: Amherst Island WP Project #: 2121K Turbine #: S14 Degree of Slope +1.5 degrees Slope Orientation NW (e.g. SSW)

Photo Numbers (from turbine base)  
 Facing North: 17  
 Facing East: 18  
 Facing South: 19  
 Facing West: 20  
 (sketch habitat and visibility classes)

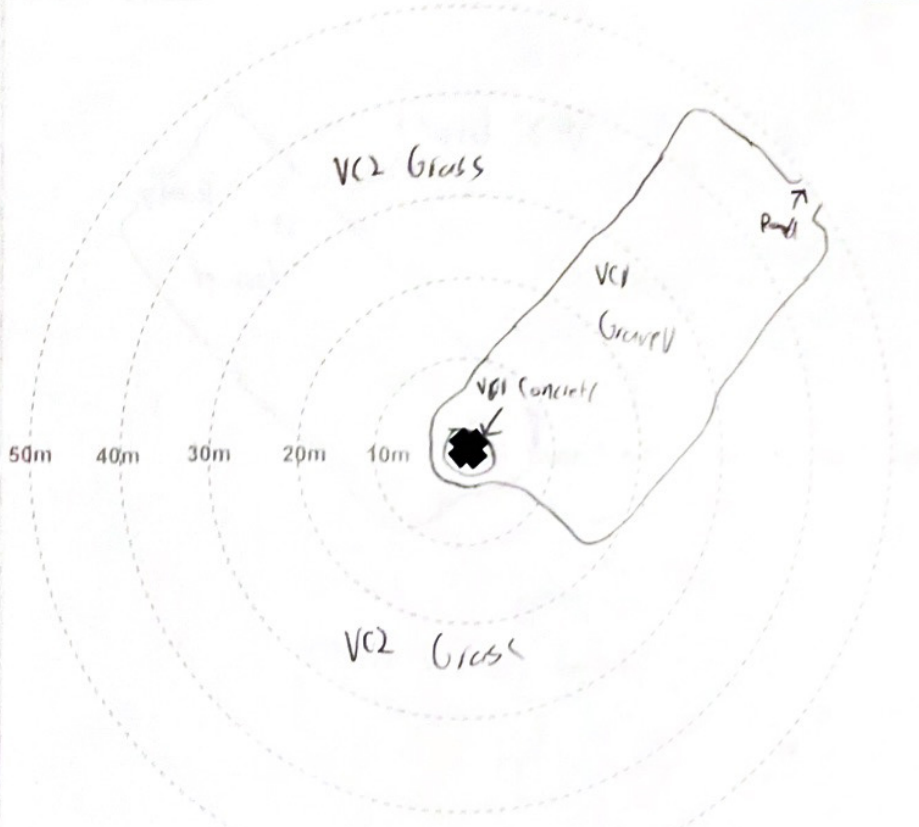
Date (DD/MM/YY): 15/05/23 ↑  
 Observer: MPH  
 Monthly/Seasonal  
 Linear Transect Width: 5 m **N**

Photo Numbers (from turbine base)  
 Facing North: 11  
 Facing East: 12  
 Facing South: 13  
 Facing West: 14  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 08/06/23 ↑  
 Observer: MPH  
 Monthly/Seasonal  
 Linear Transect Width: 5 m **N**



General Habitat Description:  
Grass Fieldy Gravel



General Habitat Description:  
Grass Fieldy Gravel

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island W.P Project #: 2121K Turbine #: 514

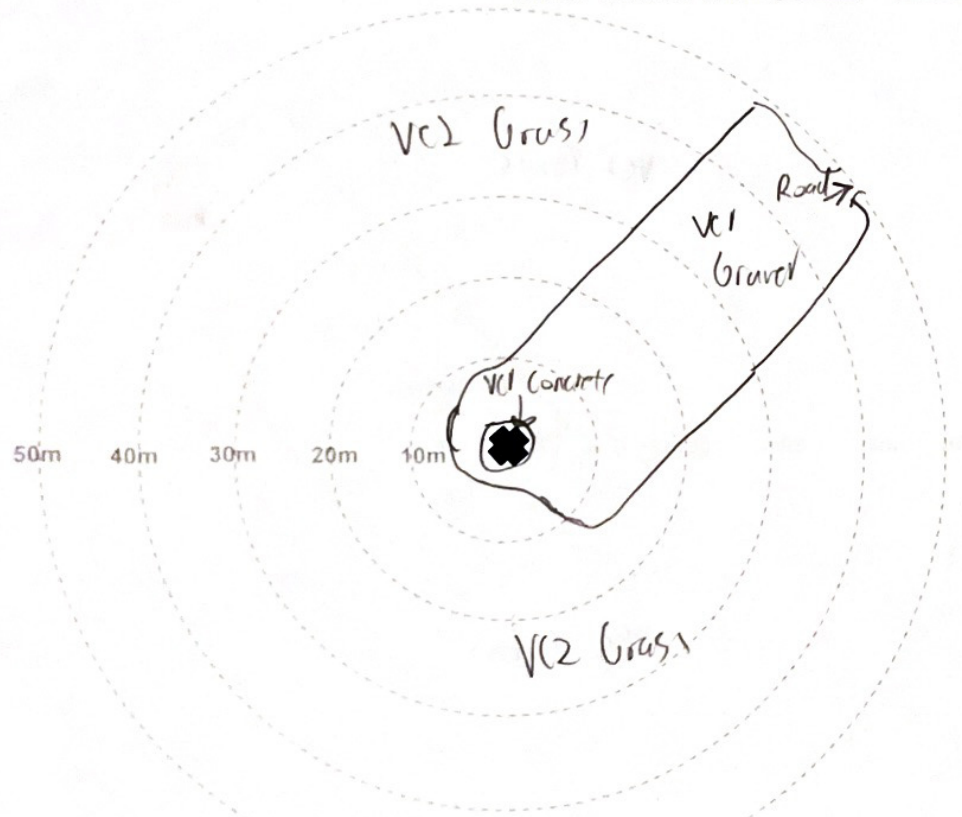
Photo Numbers (from turbine base)  
 Facing North: 05  
 Facing East: 06  
 Facing South: 07  
 Facing West: 08  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 14/07/23  
 Observer: M PD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m

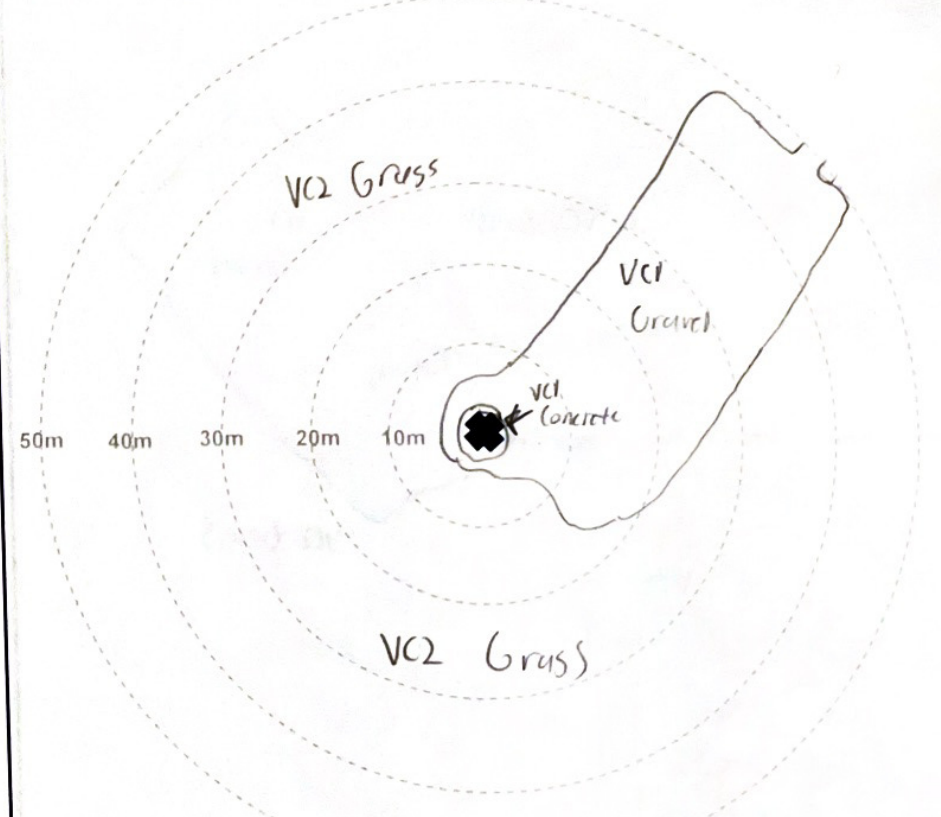


Photo Numbers (from turbine base)  
 Facing North: 07  
 Facing East: 08  
 Facing South: 09  
 Facing West: 10  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 14/08/23  
 Observer: M PD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Grass Field, Gravel



General Habitat Description:  
Grass field, Gravel

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

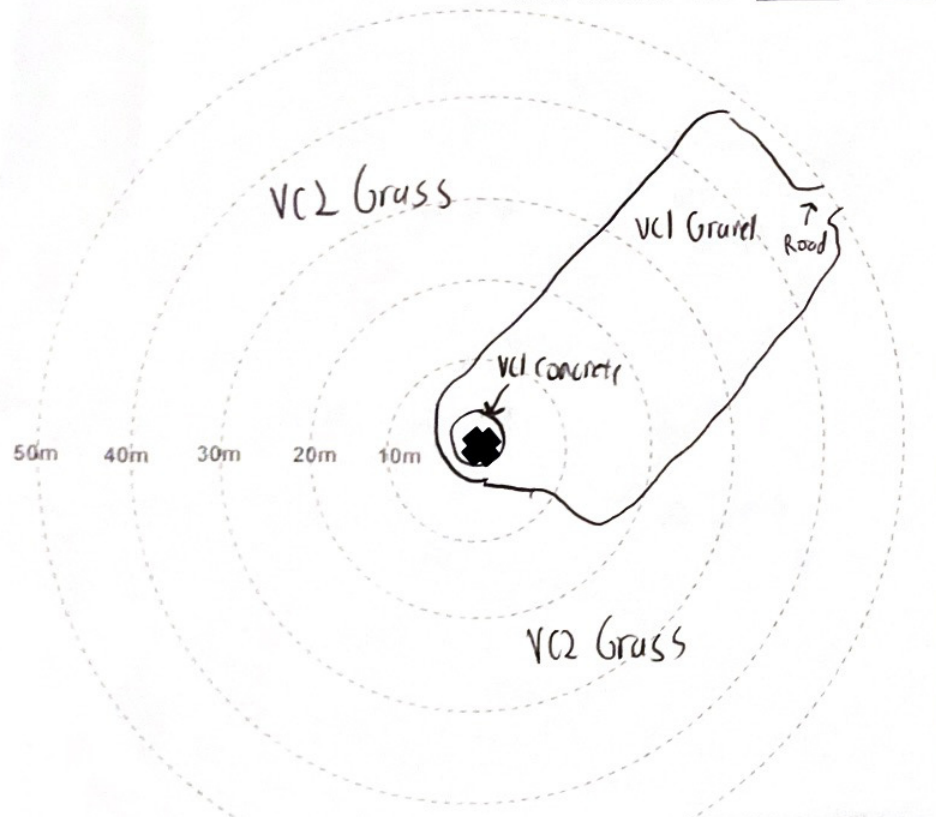


# Visibility Class Map

Project Name: Amherst Island W.P Project #: 2/21/16 Turbine #: S14

Photo Numbers (from turbine base)  
 Facing North: 11  
 Facing East: 12  
 Facing South: 13  
 Facing West: 14  
 (sketch habitat and visibility classes)

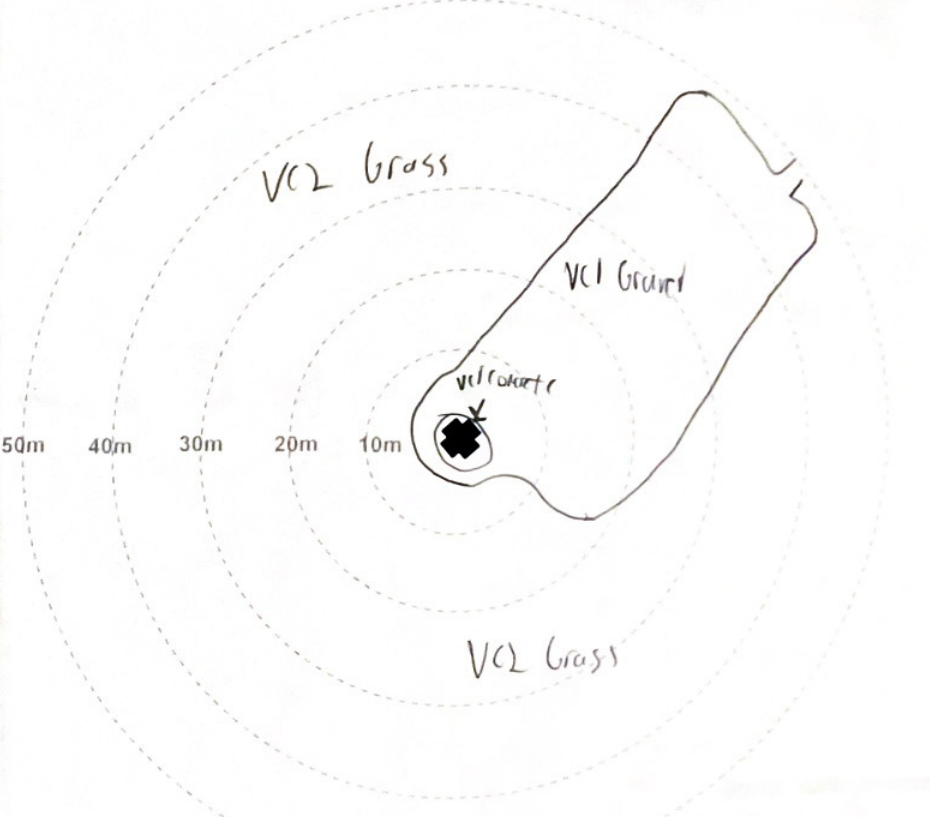
Date (DD/MM/YY): 14/09/23  
 Observer: M.P.D  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Grass field, Gravel

Photo Numbers (from turbine base)  
 Facing North: 05  
 Facing East: 06  
 Facing South: 07  
 Facing West: 09  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 16/10/23  
 Observer: M.P.D  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Grass field, Gravel

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# visibility Class Map

Project Name: Amherst Island WP Project #: 2121K Turbine #: S08 Degree of Slope +0.5 degrees Slope Orientation E (e.g. SSW)

Photo Numbers (from turbine base)  
 Facing North: 05  
 Facing East: 06  
 Facing South: 07  
 Facing West: 08  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 15 / 05 / 22

Observer: MPD

Monthly/Seasonal  
 Linear Transect Width: 5 m

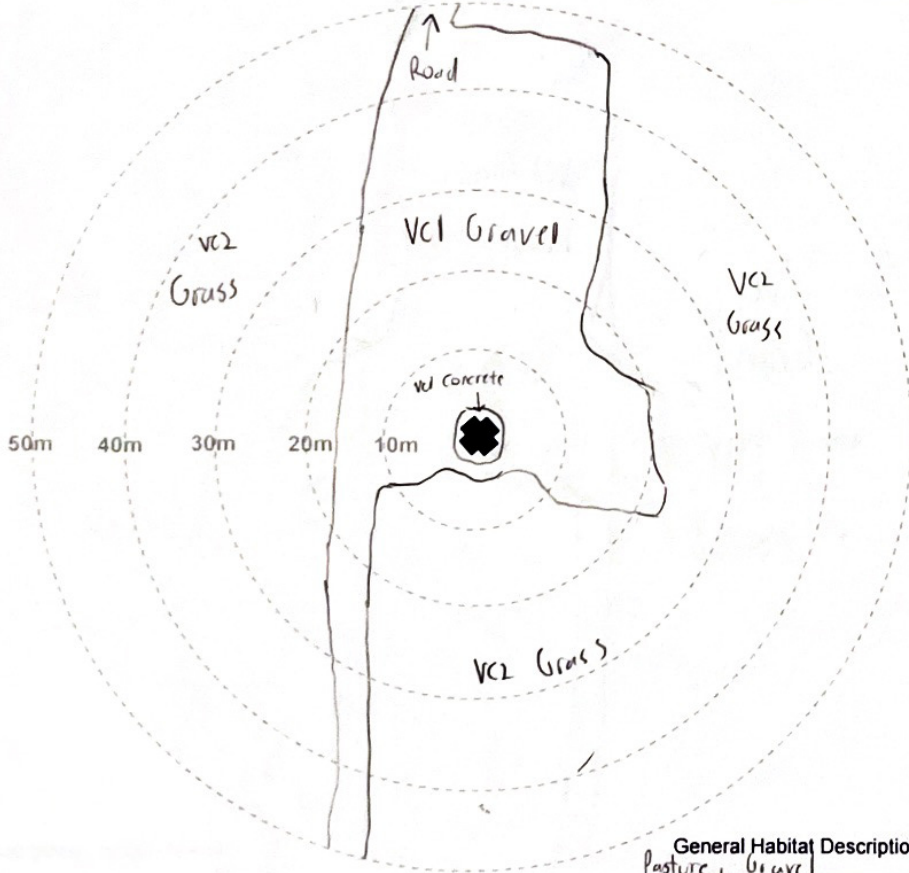
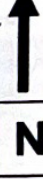


Photo Numbers (from turbine base)  
 Facing North: 31  
 Facing East: 32  
 Facing South: 33  
 Facing West: 34  
 (sketch habitat and visibility classes)

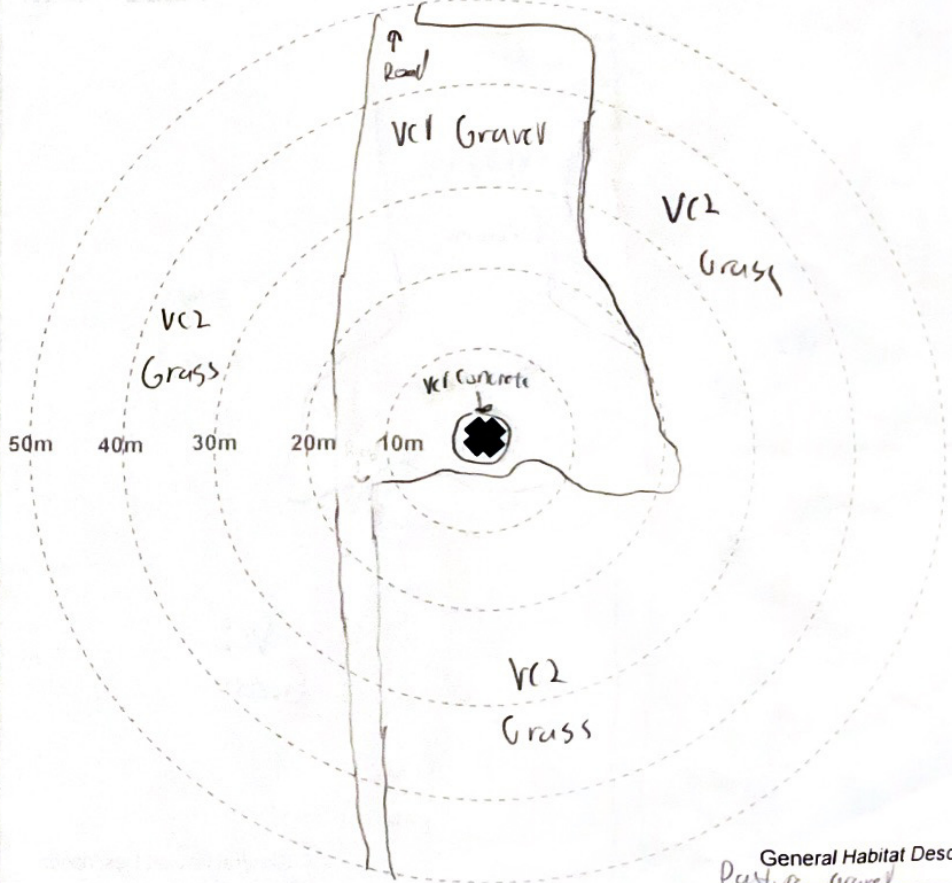
Date (DD/MM/YY): 08 / 06 / 23

Observer: MPD

Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Pasture, Gravel



General Habitat Description:  
Pasture, Gravel

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

Project Name: Amherst Island W.P Project #: 2121K Turbine #: 518

**Photo Numbers (from turbine base)**

Facing North: 17  
 Facing East: 18  
 Facing South: 19  
 Facing West: 20

(sketch habitat and visibility classes)

Date (DD/MM/YY): 14/07/23

Observer: MPD

Monthly/Seasonal  
 Linear Transect Width: 5 m



**Photo Numbers (from turbine base)**

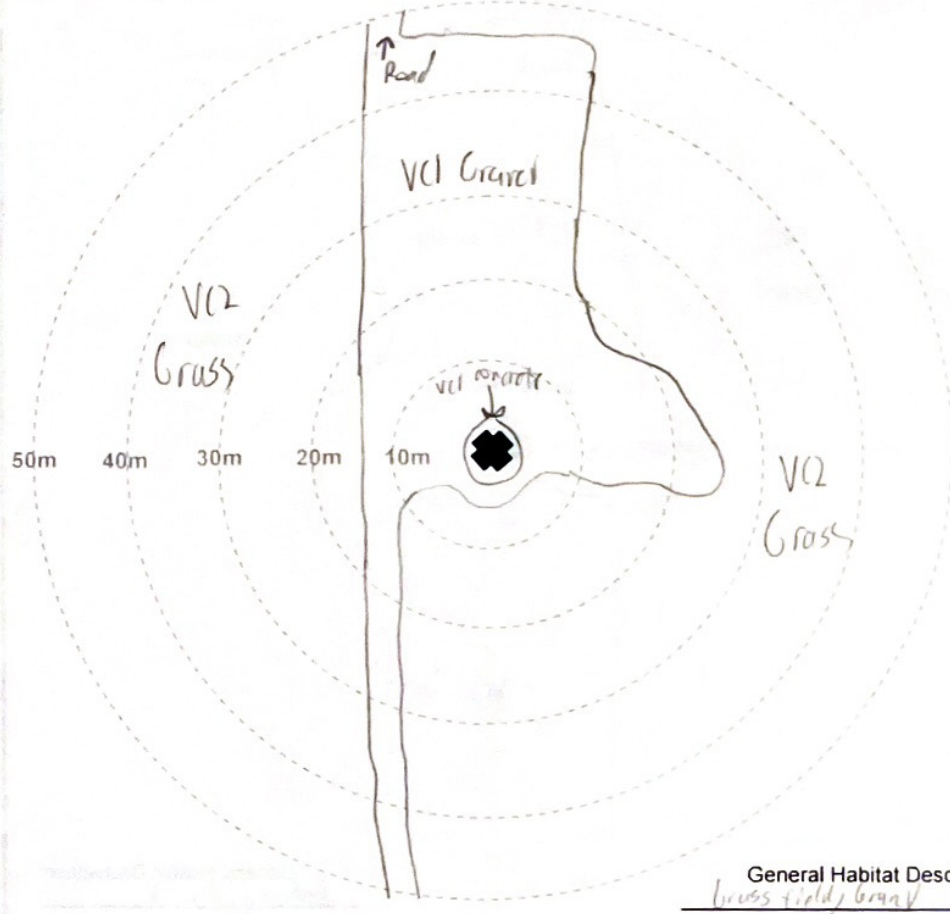
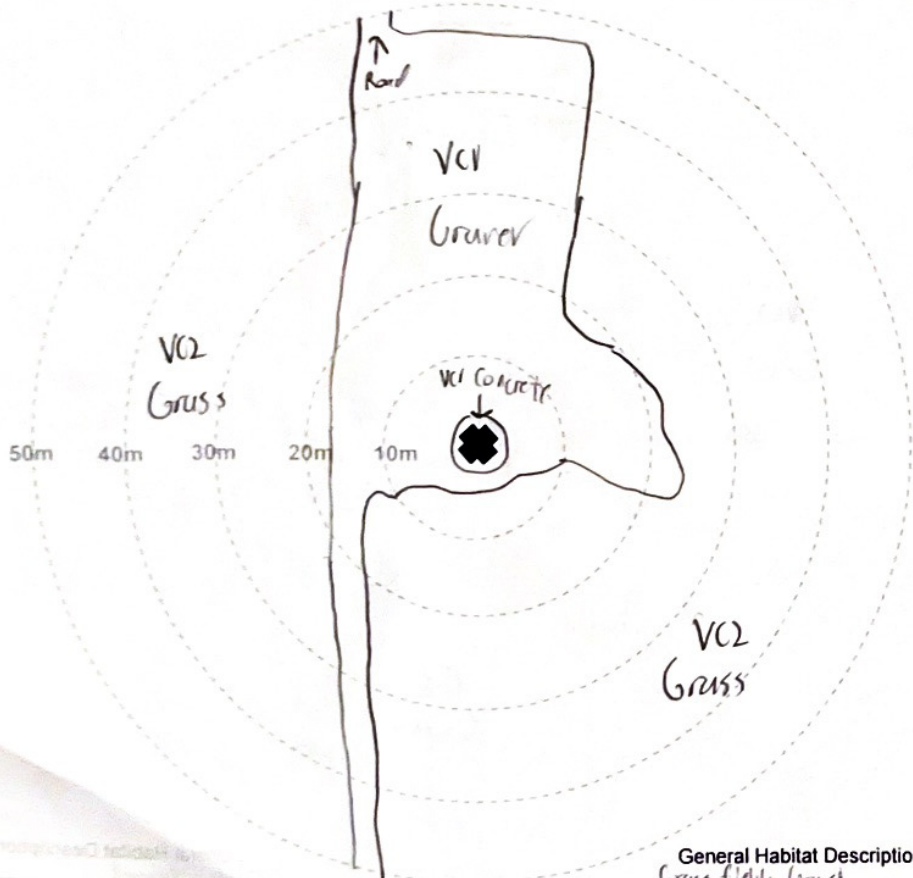
Facing North: 23  
 Facing East: 24  
 Facing South: 25  
 Facing West: 26

(sketch habitat and visibility classes)

Date (DD/MM/YY): 14/08/23

Observer: MPD

Monthly/Seasonal  
 Linear Transect Width: 5 m



**VISIBILITY CLASSES**

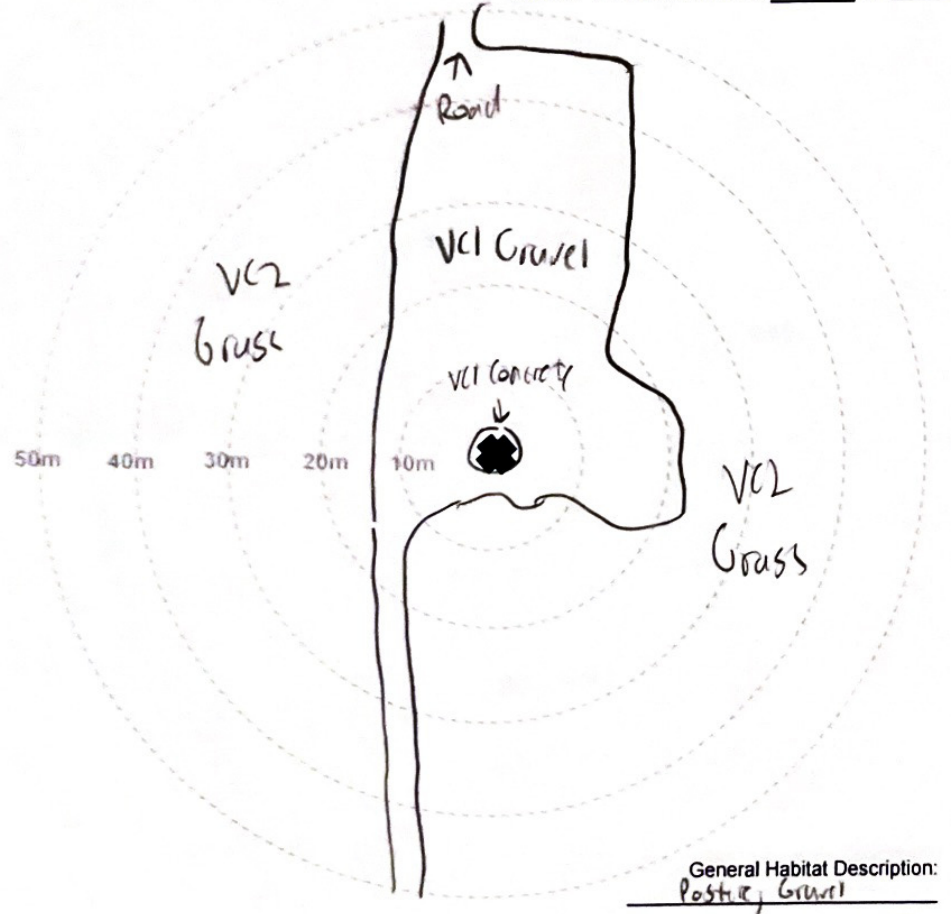
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# visibility Class Map

Project Name: Amherst Island W.P Project #: 2121K Turbine #: 5/8

Photo Numbers (from turbine base)  
 Facing North: 31  
 Facing East: 32  
 Facing South: 33  
 Facing West: 34  
 (sketch habitat and visibility classes)

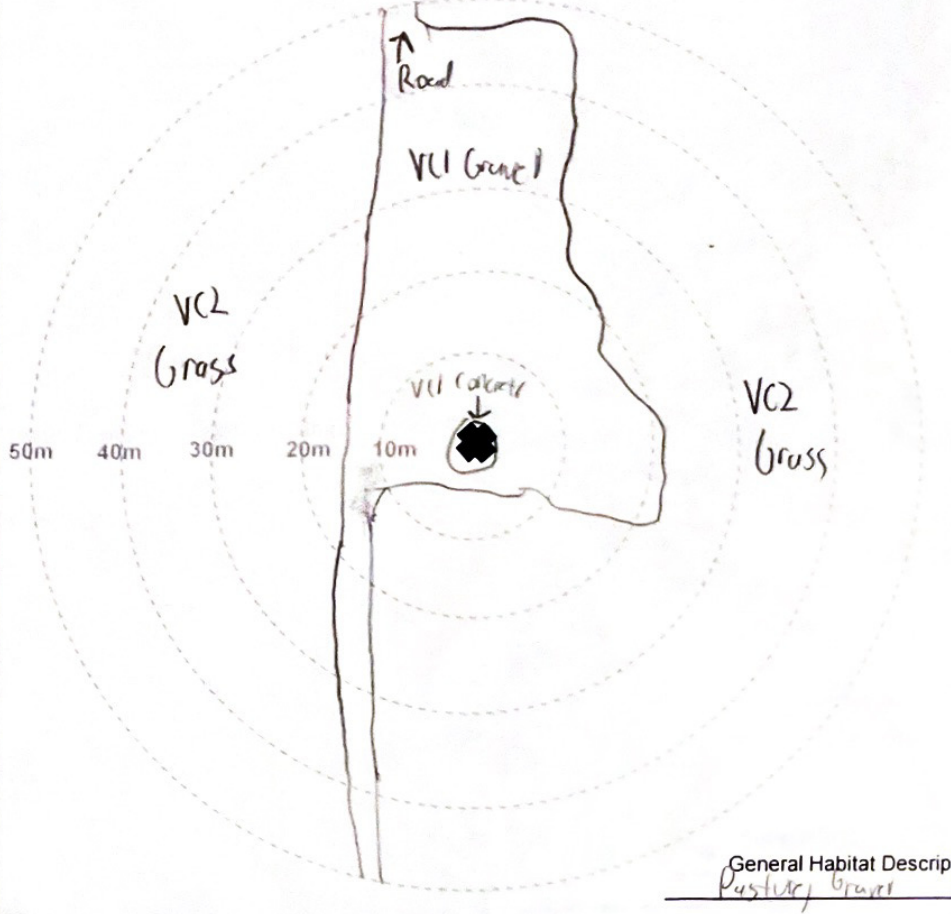
Date (DD/MM/YY): 14, 09, 23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Pasture, Gravel

Photo Numbers (from turbine base)  
 Facing North: 17  
 Facing East: 18  
 Facing South: 19  
 Facing West: 20  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 16, 10, 23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Pasture, Gravel

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# visibility Class Map

Project Name: Amherst Island WP Project #: 2121K Turbine #: S22 Degree of Slope +0.5 degrees Slope Orientation NW (e.g. SSW)

Photo Numbers (from turbine base)

Facing North: 05  
 Facing East: 06  
 Facing South: 07  
 Facing West: 08

(sketch habitat and visibility classes)

Date (DD/MM/YY): 11/05/23

Observer: MPD

Monthly/Seasonal  
 Linear Transect Width: 5 m

N

Photo Numbers (from turbine base)

Facing North: 05  
 Facing East: 06  
 Facing South: 07  
 Facing West: 08

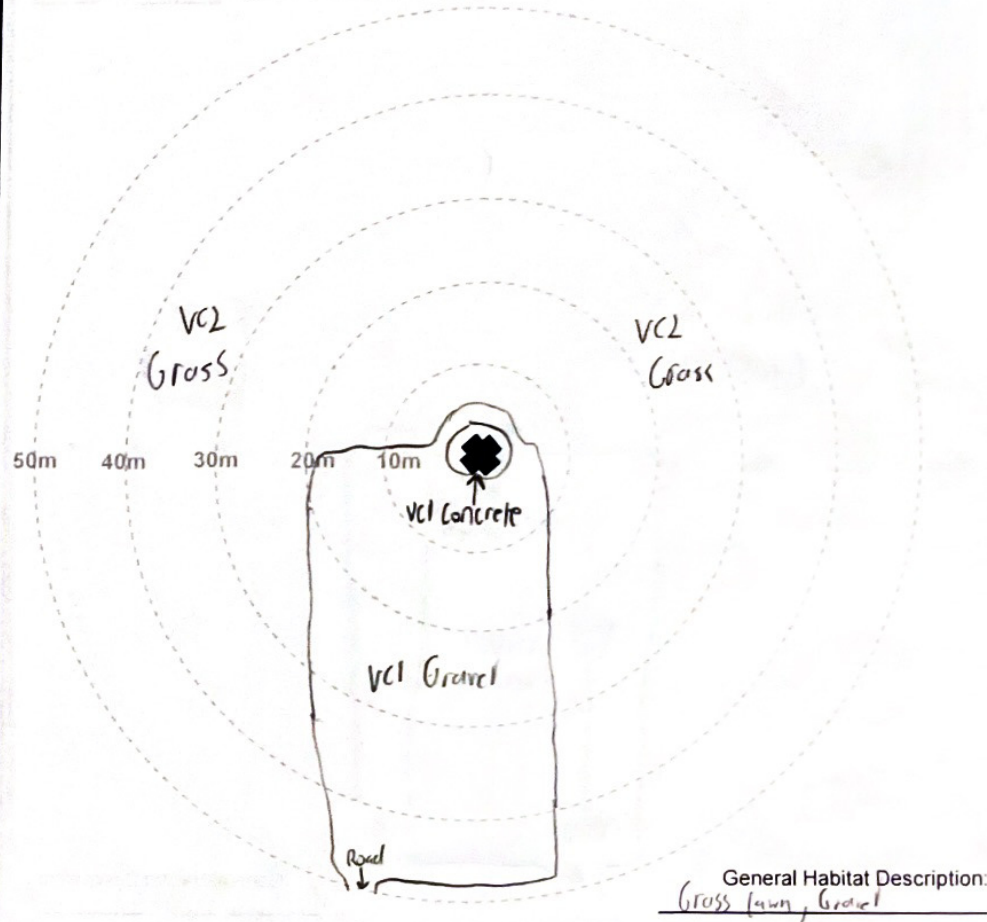
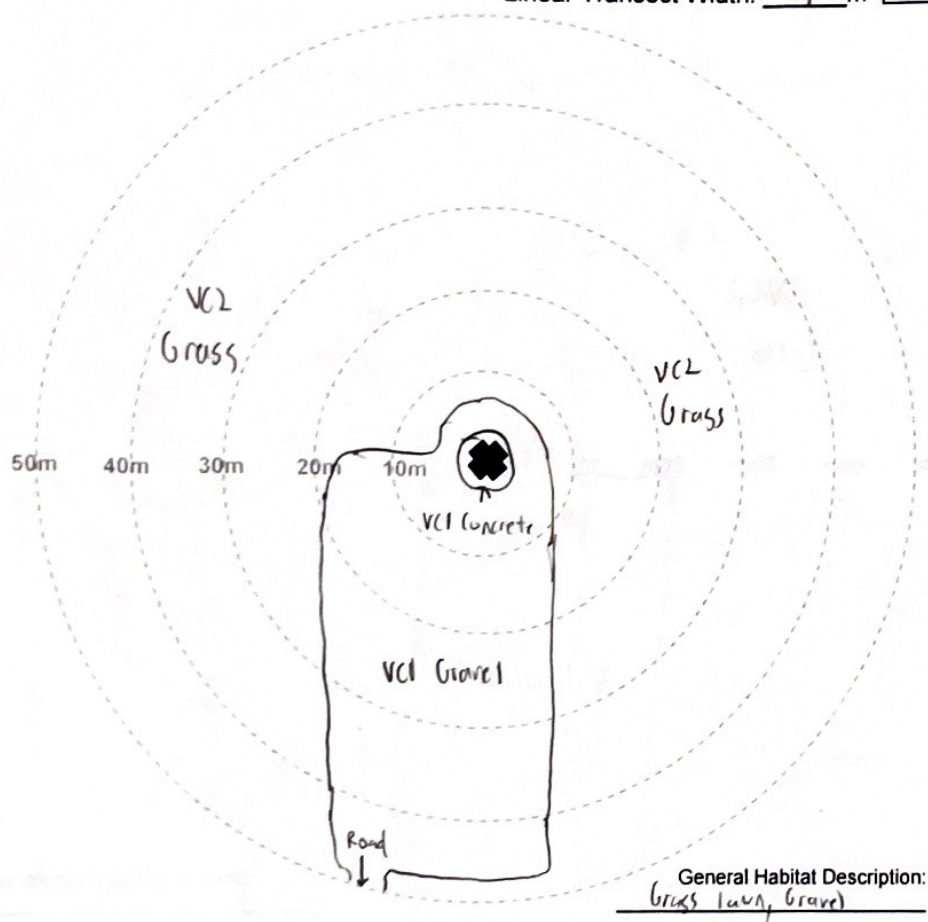
(sketch habitat and visibility classes)

Date (DD/MM/YY): 01/06/30

Observer: MPD

Monthly/Seasonal  
 Linear Transect Width: 5 m

N



## VISIBILITY CLASSES

Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island W.P Project #: 2121K Turbine #: S22

Photo Numbers (from turbine base)  
 Facing North: 07  
 Facing East: 08  
 Facing South: 09  
 Facing West: 10  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 10/07/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m

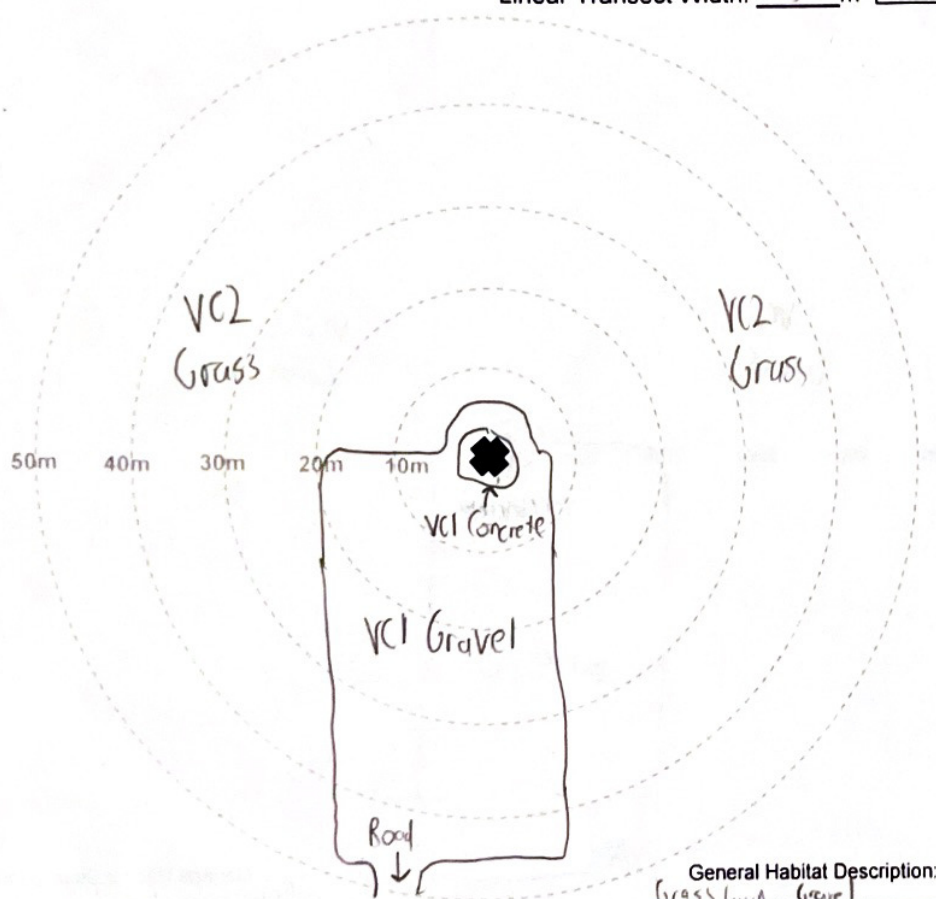
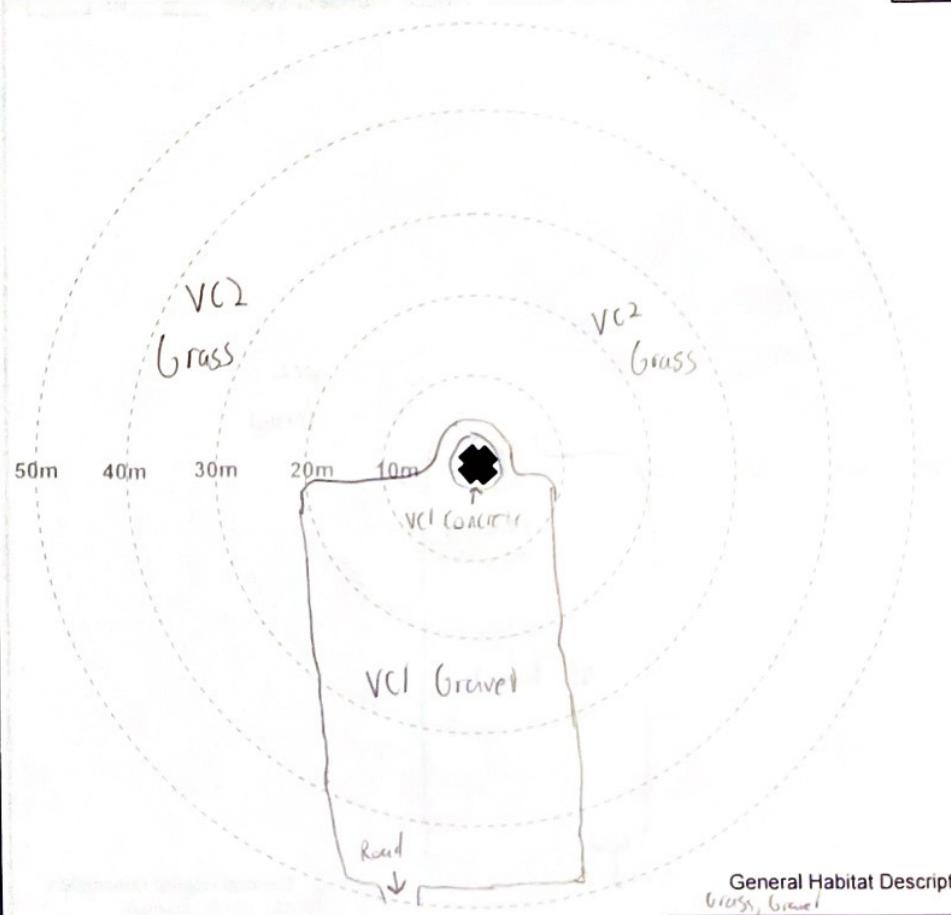


Photo Numbers (from turbine base)  
 Facing North: 11  
 Facing East: 10  
 Facing South: 11  
 Facing West: 12  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 03/08/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

Project Name: Amherst Island W.P

Project #: 2121K Turbine #: S22

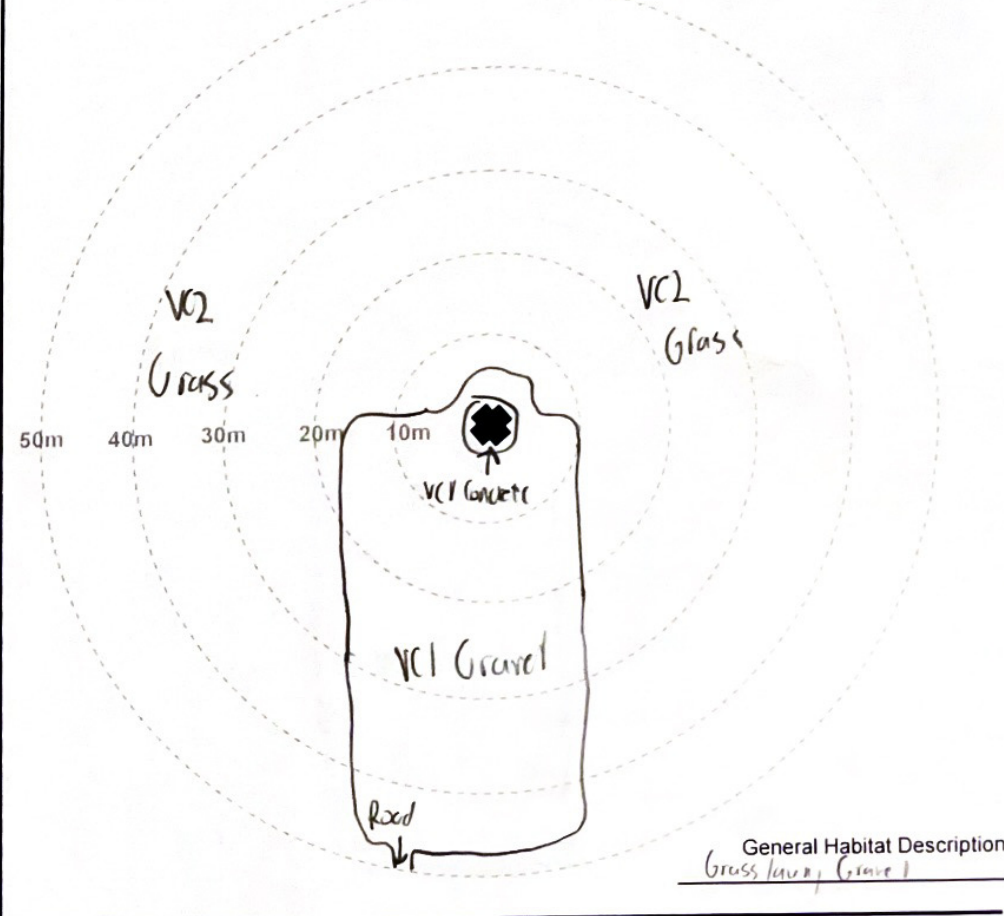
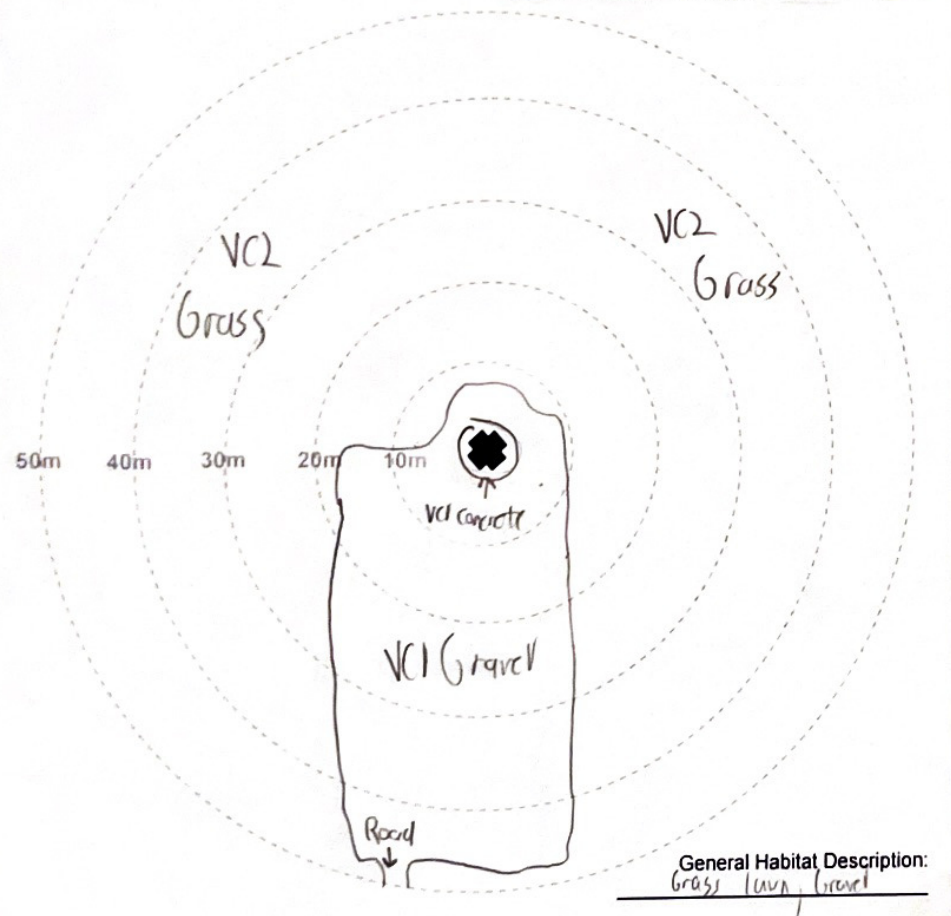
Photo Numbers (from turbine base)  
 Facing North: 05  
 Facing East: 06  
 Facing South: 07  
 Facing West: 08  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 11/09/23  
 Observer: MPD  
 Monthly/Seasonal Linear Transect Width: 5 m



Photo Numbers (from turbine base)  
 Facing North: 05  
 Facing East: 06  
 Facing South: 07  
 Facing West: 08  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 12/10/23  
 Observer: MPD  
 Monthly/Seasonal Linear Transect Width: 5 m



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island WP Project #: 2121K Turbine #: S18 Degree of Slope +1.0 degrees Slope Orientation S (e.g. SSW)

Photo Numbers (from turbine base)  
 Facing North: 1  
 Facing East: 2  
 Facing South: 3  
 Facing West: 4  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 15/05/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m

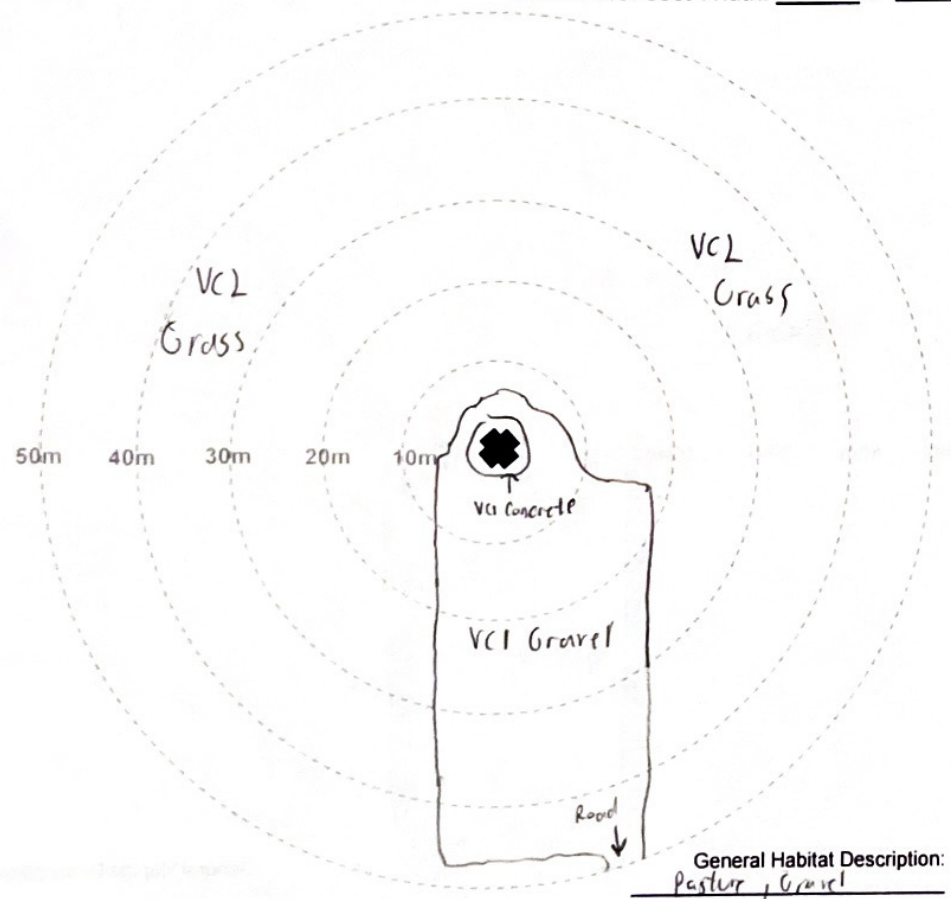
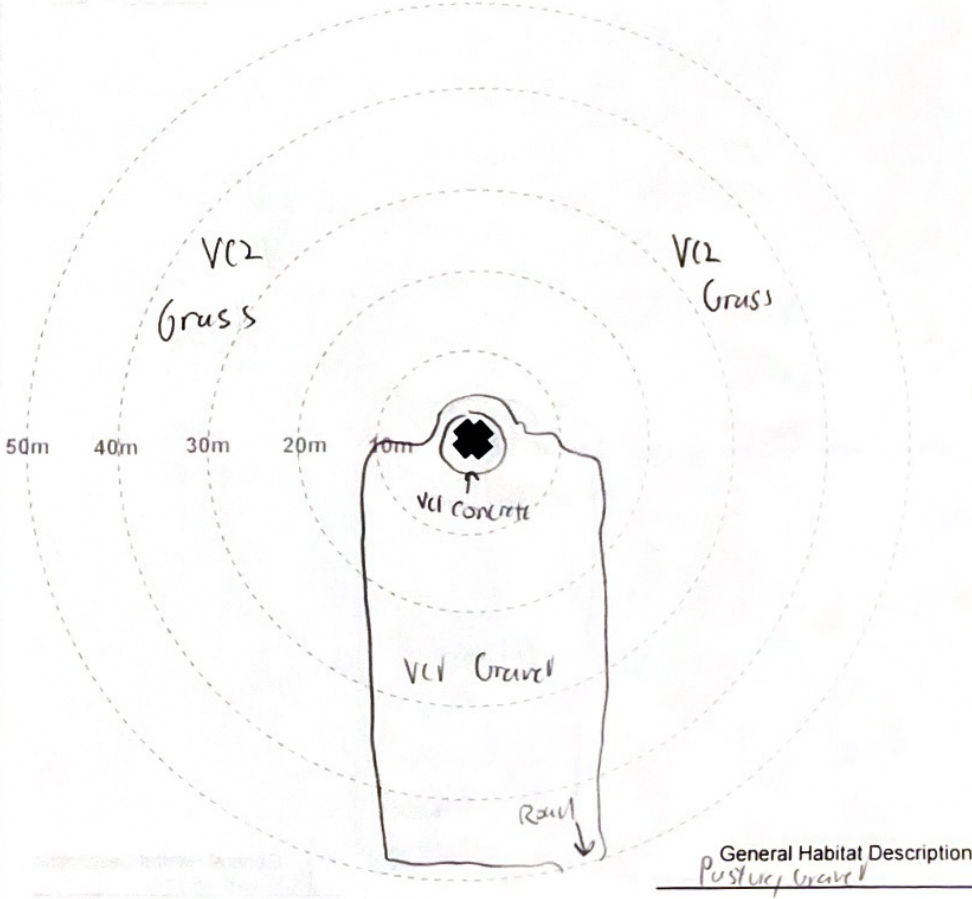
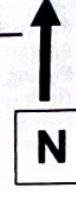


Photo Numbers (from turbine base)  
 Facing North: 27  
 Facing East: 28  
 Facing South: 29  
 Facing West: 30  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 08/06/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# visibility Class Map

Project Name: Amherst Island W.P

Project #: 2141c Turbine #: 523

Photo Numbers (from turbine base)  
 Facing North: 13  
 Facing East: 14  
 Facing South: 15  
 Facing West: 16  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 14/07/23 ↑  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m

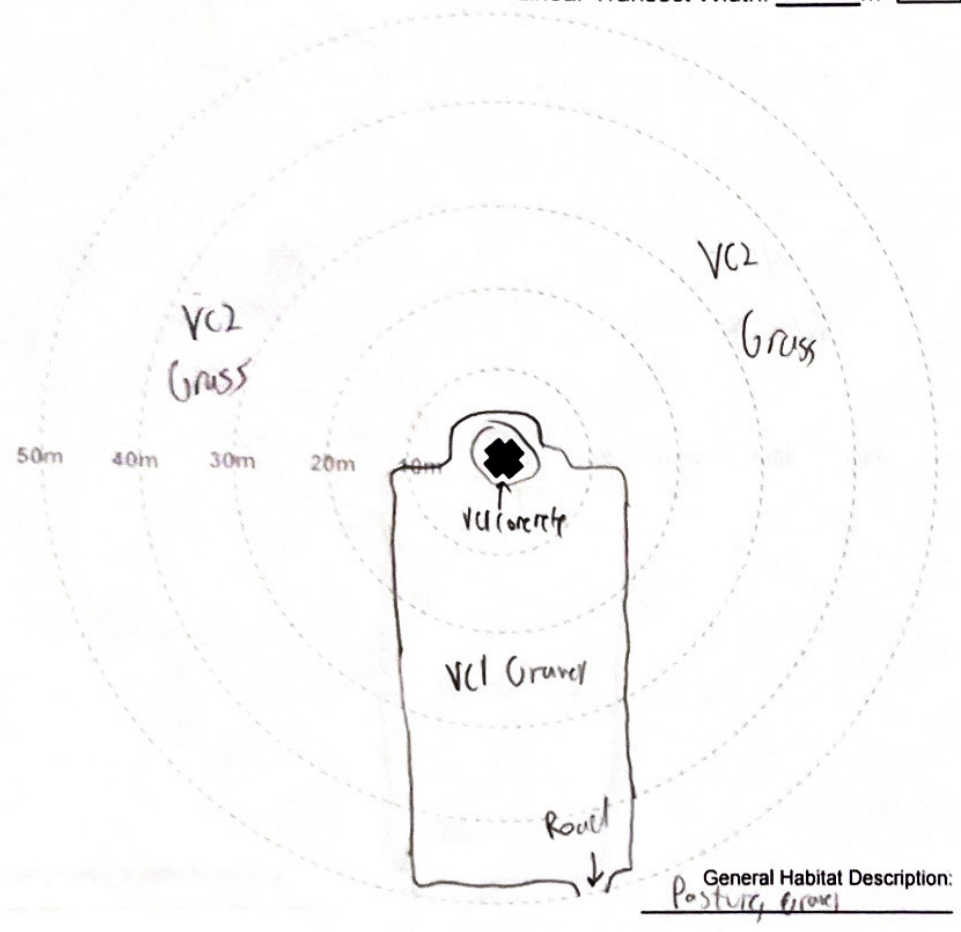
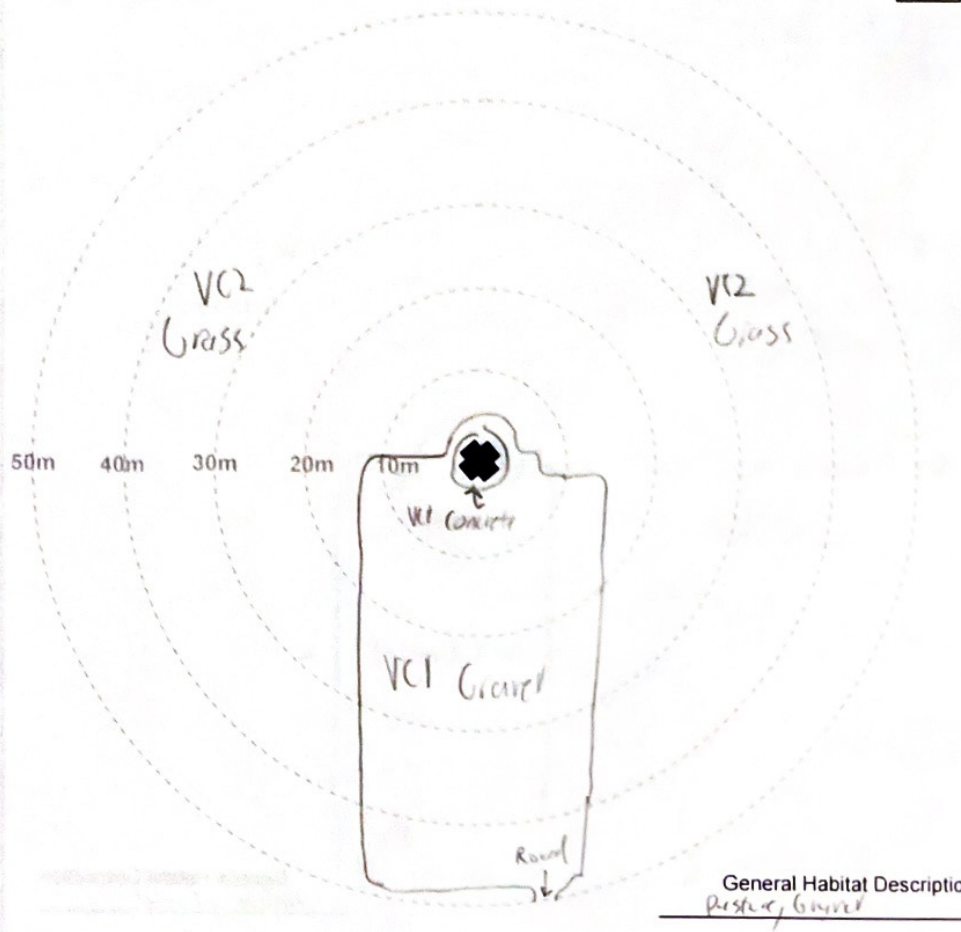


Photo Numbers (from turbine base)  
 Facing North: 17  
 Facing East: 18  
 Facing South: 19  
 Facing West: 20  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 14/08/23 ↑  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island W.P Project #: 2121K Turbine #: S28

Photo Numbers (from turbine base)  
 Facing North: 27  
 Facing East: 28  
 Facing South: 29  
 Facing West: 30  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 14/09/23

Observer: MPI

Monthly/Seasonal  
 Linear Transect Width: 5 m

N

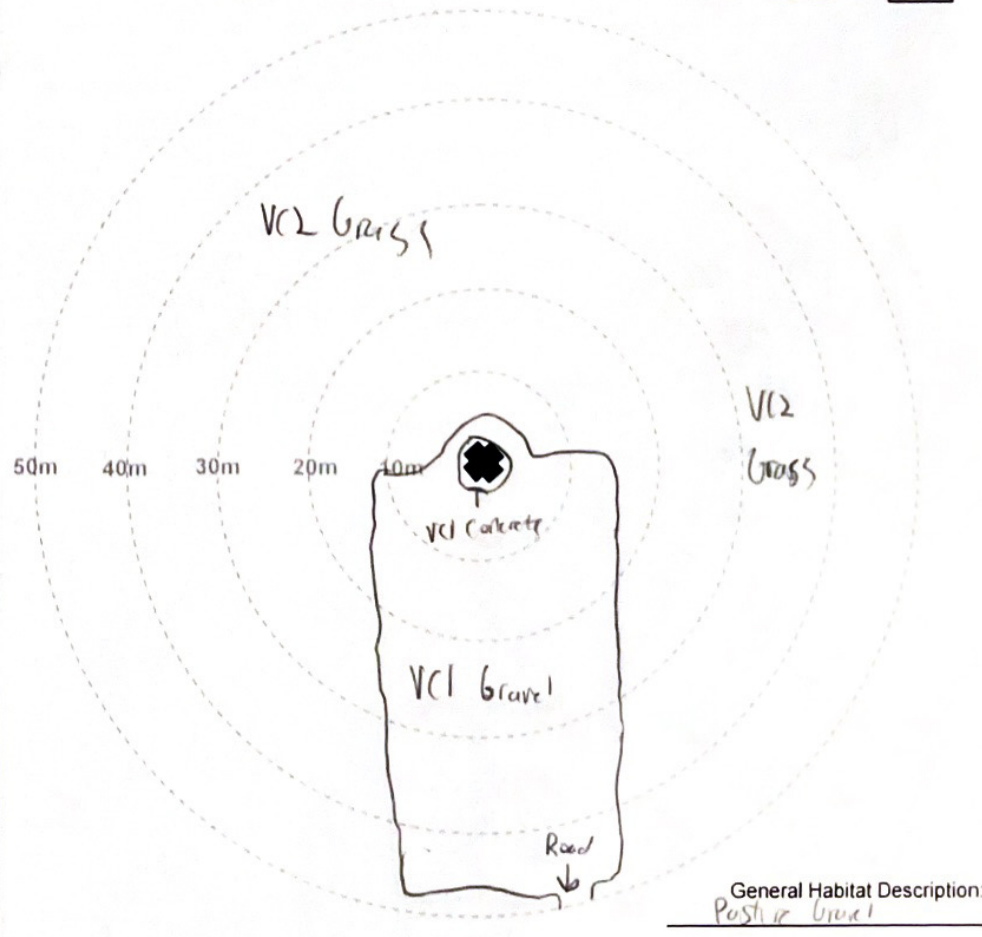
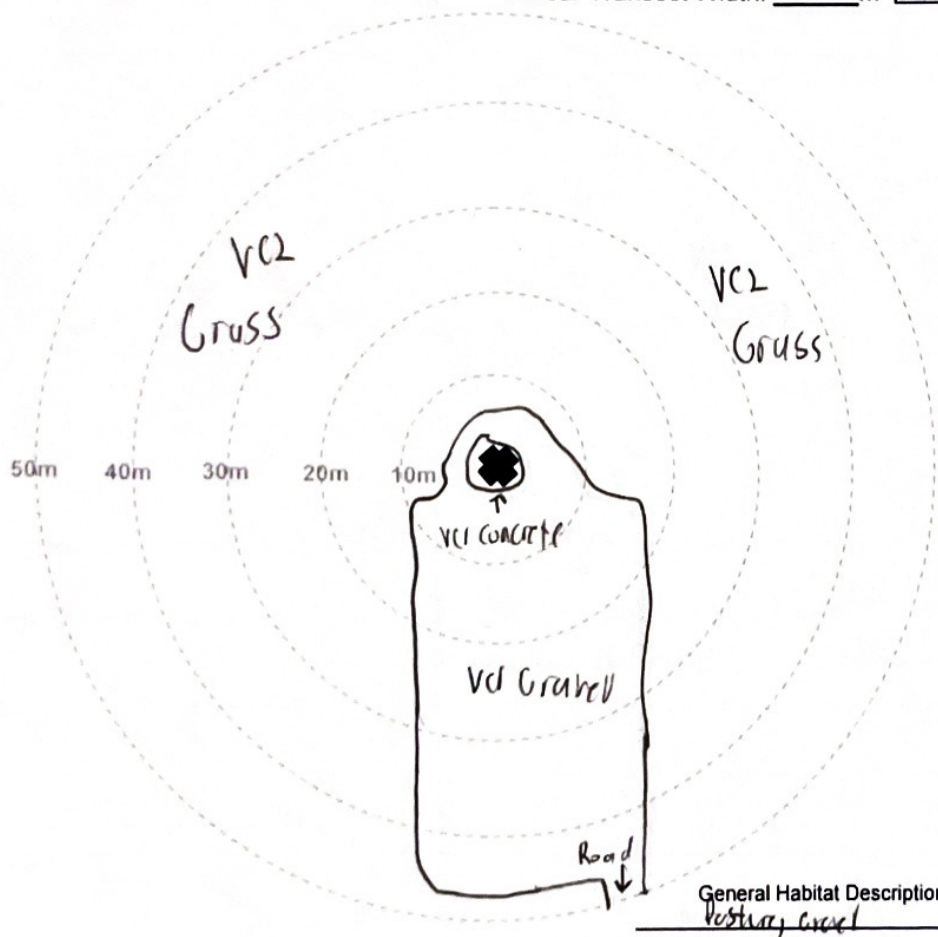
Photo Numbers (from turbine base)  
 Facing North: 13  
 Facing East: 14  
 Facing South: 15  
 Facing West: 16  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 16/10/23

Observer: MPI

Monthly/Seasonal  
 Linear Transect Width: 5 m

N



## VISIBILITY CLASSES

Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# visibility Class Map

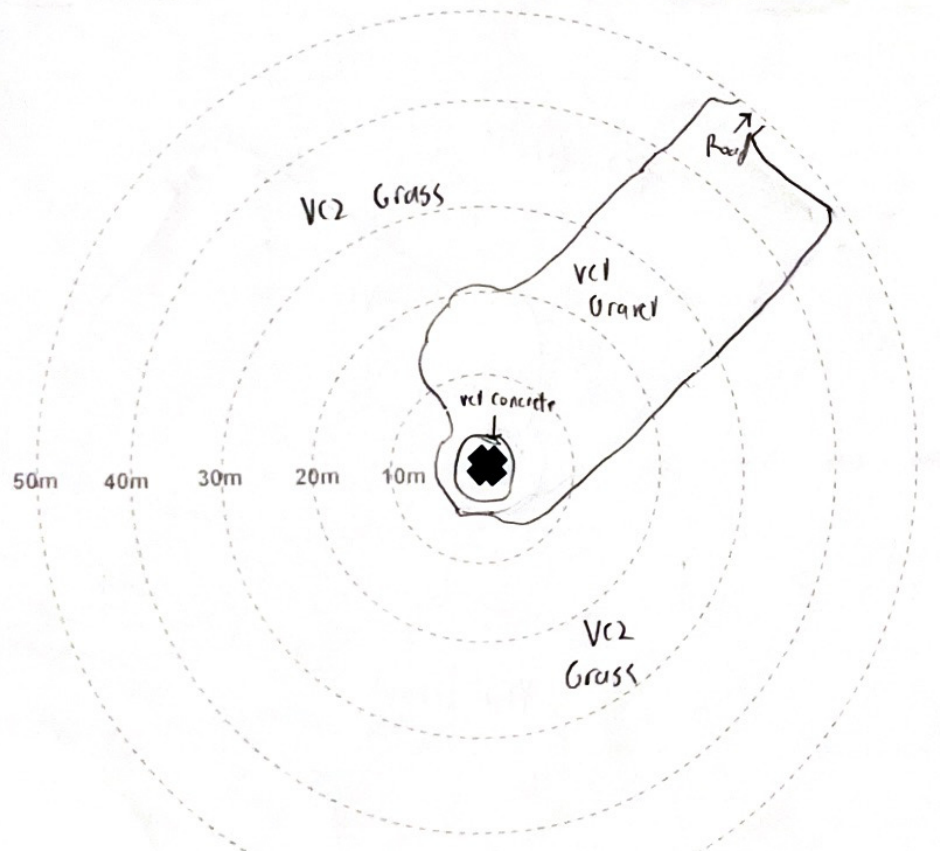
Project Name: Amherst Island WP Project #: 2121K Turbine #: S36 Degree of Slope +2.0 degrees Slope Orientation NE (e.g. SSW)

Photo Numbers (from turbine base)  
 Facing North: 25  
 Facing East: 26  
 Facing South: 27  
 Facing West: 28  
 (sketch habitat and visibility classes)

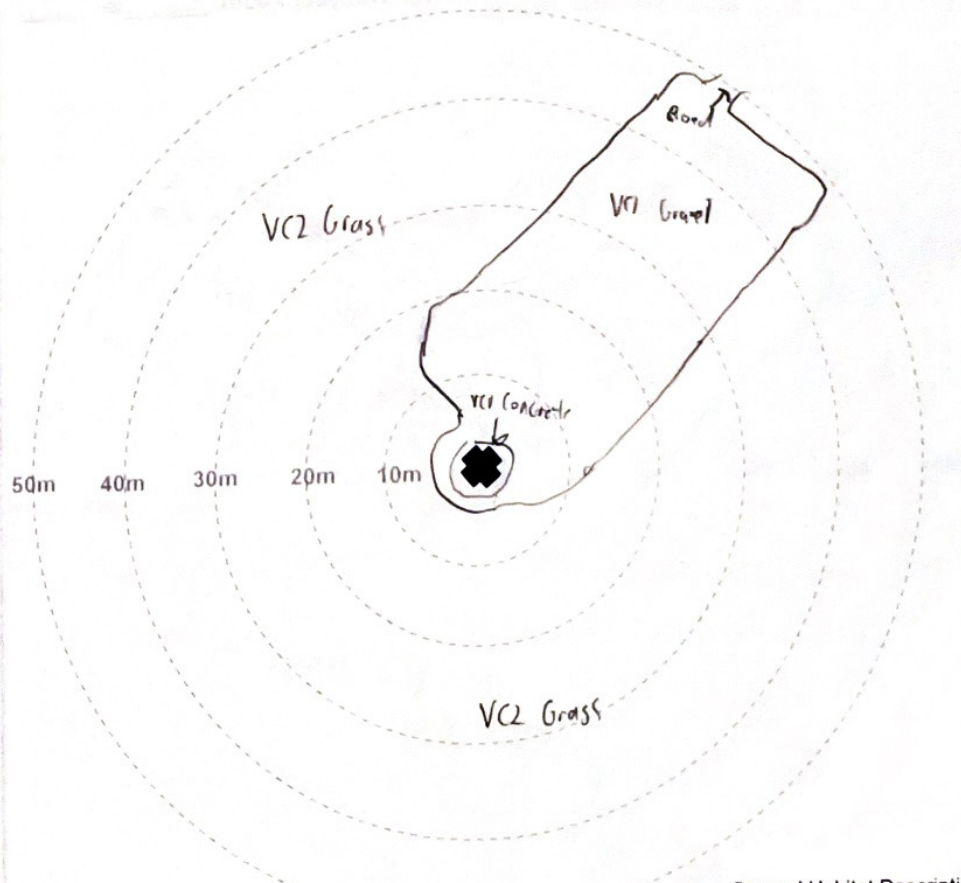
Date (DD/MM/YY): 11/05/23  
 Observer: MPI  
 Monthly/Seasonal Linear Transect Width: 5 m

Photo Numbers (from turbine base)  
 Facing North: 17  
 Facing East: 18  
 Facing South: 19  
 Facing West: 20  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 02/06/23  
 Observer: MPI  
 Monthly/Seasonal Linear Transect Width: 5 m



General Habitat Description:  
Grass lawn, Gravel



General Habitat Description:  
Grass lawn, Gravel

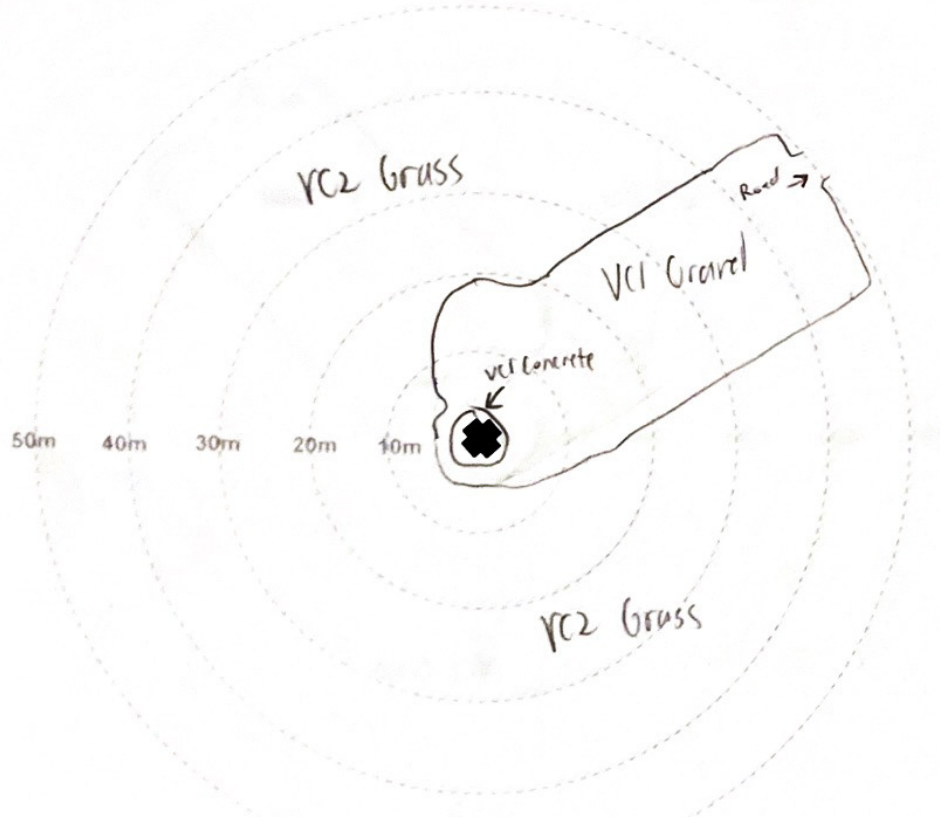
VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats

# Visibility Class Map

Project Name: Amherst Island W.P. Project #: 2121K Turbine #: S36

Photo Numbers (from turbine base)  
 Facing North: 25  
 Facing East: 26  
 Facing South: 27  
 Facing West: 28  
 (sketch habitat and visibility classes)

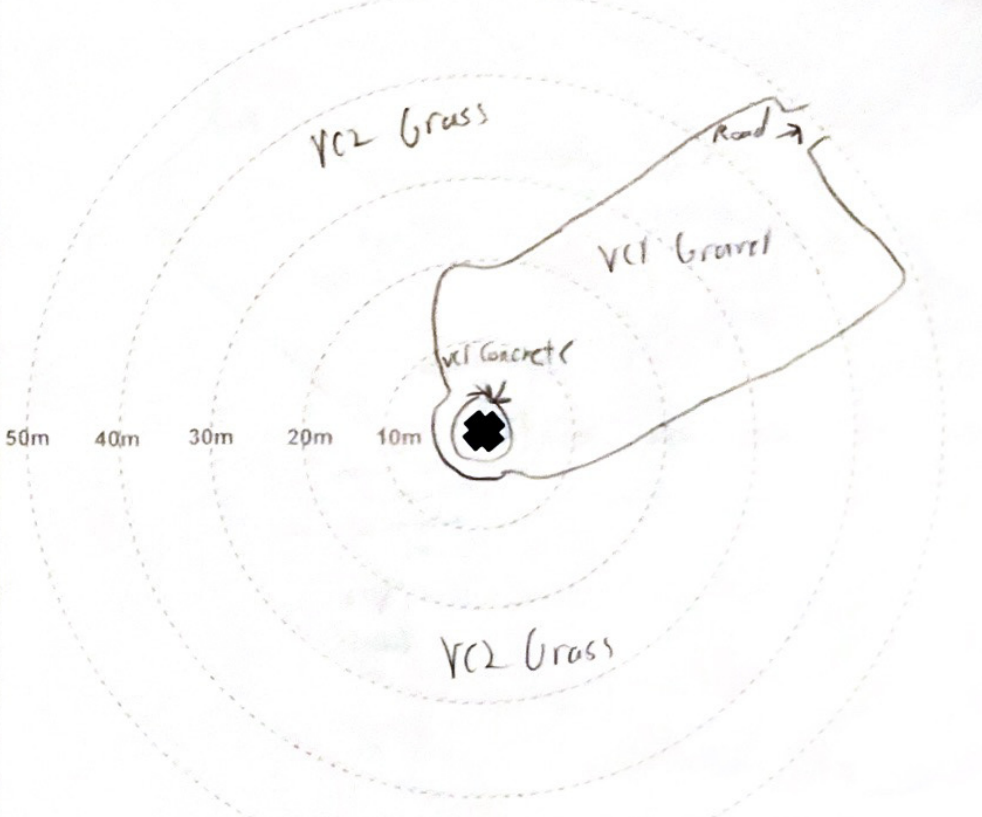
Date (DD/MM/YY): 10/07/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Grassy Gravel

Photo Numbers (from turbine base)  
 Facing North: 33  
 Facing East: 34  
 Facing South: 35  
 Facing West: 36  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 03/08/23  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m



General Habitat Description:  
Grassy Gravel

VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats



# Visibility Class Map

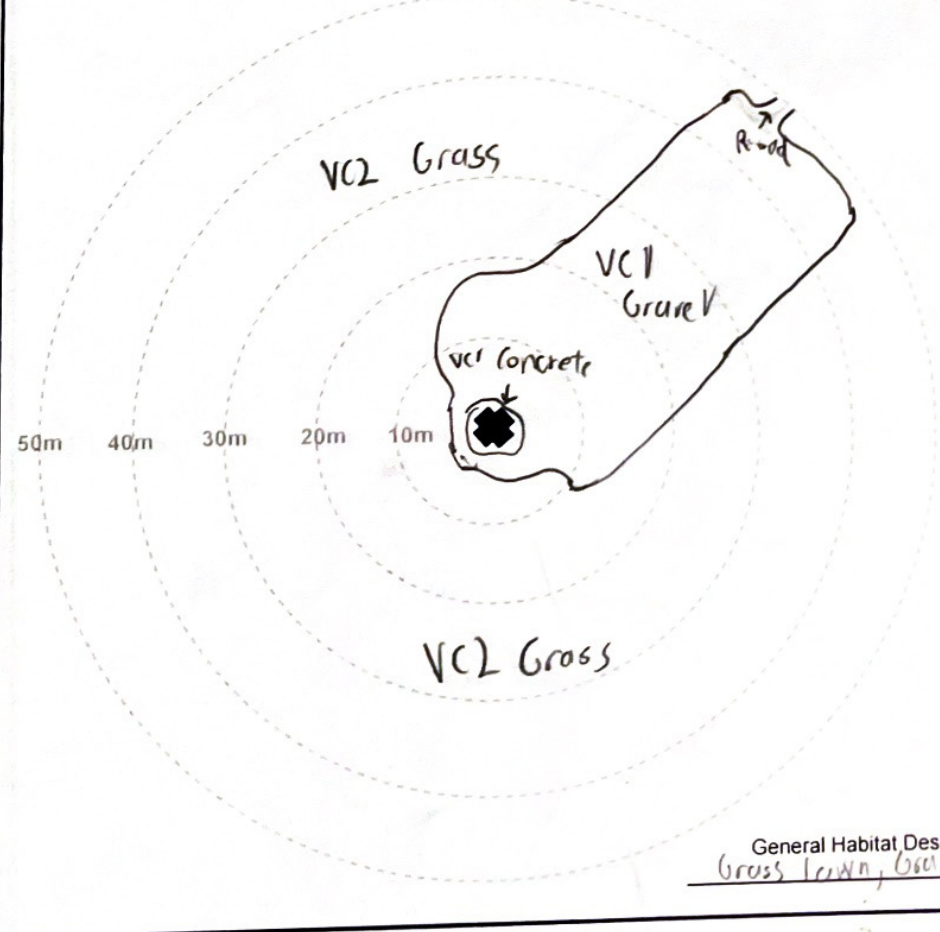
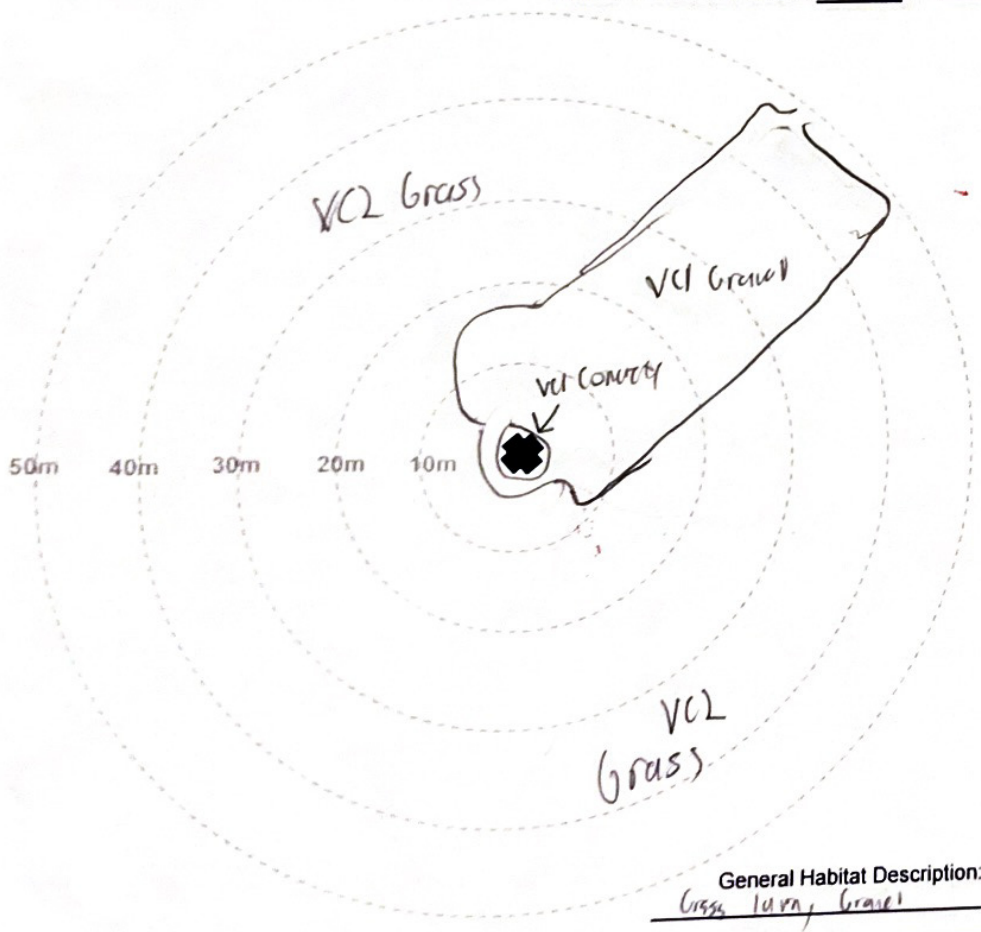
Project Name: Amherst Island W.P. Project #: 201K Turbine #: 536

Photo Numbers (from turbine base)  
 Facing North: 25  
 Facing East: 26  
 Facing South: 27  
 Facing West: 28  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 11/09/23 ↑  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m **N**

Photo Numbers (from turbine base)  
 Facing North: 17  
 Facing East: 18  
 Facing South: 19  
 Facing West: 20  
 (sketch habitat and visibility classes)

Date (DD/MM/YY): 12/10/23 ↑  
 Observer: MPD  
 Monthly/Seasonal  
 Linear Transect Width: 5 m **N**



VISIBILITY CLASSES	
Class 1	≥ 90% bare ground; vegetation ≤ 15cm tall
Class 2	≥ 25% bare ground; vegetation ≤ 15cm tall
Class 3	≤ 25% bare ground; less than 25% of veg. > 30cm tall
Class 4	Little or no bare ground; more than 25% of veg. > 30cm tall
Not Searchable	Dense shrubs, woods, or other unsearchable habitats