

Ministry of Tourism Culture and Sport
Confirmation Letter

April 5, 2013

**Ministry of Tourism,
Culture and Sport**

Culture Programs Unit
Programs and Services Branch
401 Bay Street, Suite 1700
Toronto, ON M7A 0A7
Telephone: (416)-314-7691
Email : lan.Hember@ontario.ca

**Ministère du Tourisme,
de la Culture et du Sport**

Unité des programmes culturels
Direction des programmes et des services
401 Rue Bay, Bureau 1700
Toronto, ON M7A 0A7
Téléphone: (416)-314-7691
Email: lan.Hember@ontario.ca



April 5, 2013

Niagara Region Wind Corporation
277 Lakeshore Road East, Suite 211
Oakville, ON L6J 6J3

**RE: “Niagara Region Wind Project, Final Stage 2 Archaeological Assessment, Various Lots and Concessions 1-6, Gainsborough Township, Concessions 7-10 Clinton Township, Regional Municipality of Niagara and Various Lots, Moulton Township, Haldimand County, Ontario”, Dated January 18, 2013, Filed with MTCS Toronto Office on January 29, 2013, MTCS Project Information Form No. P002-289-2012, MTCS File 26EA078
FIT Number F-001580-WIN-130-601 / FIT-FLKZ509**

Dear Proponent:

This letter constitutes the Ministry of Tourism and Culture’s written comments as required by s. 22(3)(a) of O. Reg. 359/09 under the *Environmental Protection Act* regarding archaeological assessments undertaken for the above project.

Based on the information contained in the report you have submitted for this project, the Ministry believes there are no outstanding concerns to the archaeological resources, and therefore the report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of the report(s).*

The report recommends the following:

Recommendations for Further Work

ARCHAEOLOGICAL SITES RECOMMENDED FOR FURTHER ASSESSMENT

Stage 2 Archaeological Assessment of the NRW Project has resulted in the identification of 50 archaeological sites for which Stage 3 AA (the Archaeological Site Assessment) has been recommended (see Table 17).

Table 1: Archaeological Sites Recommended For Further Assessment

Site #	Location	Borden #	# Tools/ Diagnostics	Approximate # Artifacts	Cultural Period	Site Dimensions (m)		Of Further Cultural Heritage Value or Interest?
						N-S	E-W	
1	SE 87	AfGv-129	0	25	Indeterminate	15	30	Yes
2	SE 87	AfGv-130	0	75	Indeterminate	20	80	Yes
3	SE 4	AgGu-183	0	> 100	Indeterminate	20	20	Yes
4	SE 37	AgGu-184	0	> 150	Multi-component	85	50	Yes
5	SE 24	AgGu-185	0	20	Indeterminate	20	40	Yes
6	SE 24	AgGu-186	0	> 25	Indeterminate	75	50	Yes
7	SE 24	AgGu-187	0	> 20	Indeterminate	35	15	Yes
8	SE 24	AgGu-188	0	> 40	Indeterminate	40	25	Yes
9	SE 29-4	AgGu-189	0	> 100	Multi-component	50	50	Yes
10	SE 14	AgGu-190	0	> 100	Indeterminate	25	85	Yes
11	SE 26(7A)	AgGu-191	0	> 50	Multi-component	50	60	Yes
12	SE 59	AgGv-118	1	1	Palaeo-Indian	10	10	Yes
13	SE 39	AgGu-192	0	> 25	Late Archaic	35	20	Yes
14	SE 39	AgGu-193	1	1	Palaeo-Indian	10	10	Yes
15	SE45	AgGu-194	1	9	Indeterminate	15	10	Yes
16	SE 36	AgGu-195	0	> 10	Indeterminate	10	10	Yes
17	SE 62	AgGu-196	0	> 20	Indeterminate	30	30	Yes
18	SE 62	AgGu-197	0	15	Indeterminate	30	20	Yes
19	SE 3 (1H)	AfGv-131	2	10	Late Archaic	15	20	Yes
20	SE 3 (1H)	AfGv-132	0	20	Indeterminate	15	20	Yes
21	SE 3 (1H)	AfGv-133	0	50	Indeterminate	60	40	Yes
22	SE 3 (1H)	AfGv-134	0	15	Indeterminate	15	10	Yes
23	SE 20 (14C)	AgGv-119	1	13	Indeterminate	15	15	Yes
24	SE 49 -4	AfGu-60	0	> 40	Indeterminate	40	80	Yes
25	SE 70	AfGv-135	0	> 100	Euro-Canadian	30	40	Yes
26	SE 52	AgGu-198	0	20	Indeterminate	10	15	Yes
27	SE 13	AgGu-199	0	11	Indeterminate	25	15	Yes
28	SE 13	AfGu-200	0	> 80	Indeterminate	125	50	Yes
29	SE 18	AfGv-136	0	> 30	Indeterminate	50	50	Yes
30	SE 26	AgGv-120	0	> 40	Indeterminate	25	75	Yes
31	SE 16 (5D)	AgGu-201	0	22	Indeterminate	20	15	Yes
32	SE 16 (5D)	AgGu-202	1	4	Indeterminate	10	10	Yes

Table 1: Archaeological Sites Recommended For Further Assessment

Site #	Location	Borden #	# Tools/ Diagnostics	Approximate # Artifacts	Cultural Period	Site Dimensions (m)		Of Further Cultural Heritage Value or Interest?
						N-S	E-W	
33	SE 21	AgGv-121	0	> 40	Indeterminate	60	60	Yes
34	SE 21	AgGv-122	2	10	Late Archaic	20	20	Yes
35	SE 20 (14D)	AgGv-123	0	15	Indeterminate	20	20	Yes
36	SE 77 (T23)	AfGv-137	0	40	Indeterminate	30	30	Yes
37	SE 77 (T49)	AfGv-138	0	20	Indeterminate	20	25	Yes
38	SE 119	AfGv-139	0	> 50	Indeterminate	100	100	Yes
39	SE 107	AgGv-124	0	35	Early Woodland	20	30	Yes
40	SE 16 (5E)	AgGu-203	1	1	Late Palaeo-Indian	10	10	Yes
41	SE 105	AfGv-143	0	> 30	Indeterminate	25	20	Yes
42	SE 53	AgGu-213	1	15	Indeterminate	20	20	Yes
43	SE 53	AgGu-214	6	50	Late Archaic	75	45	Yes
44	SE 53	AgGu-215	1	10	Early Woodland	13	30	Yes
45	SE 26 (7A)	AgGu-216	1	3	Late Archaic	10	10	Yes
46	SE 26 (7A)	AgGu-217	2	10	Indeterminate	15	20	Yes
47	SE 26 (7A)	AgGu-218	6	>50	Euro-Canadian	40	15	Yes
48	Tie-in	AhGx-690	1	>20	Indeterminate	30	50	Yes
49	SE 112	AfGu-62	0	>20	Indeterminate	15	20	Yes
50	SE 112	AfGu-63	0	>25	Indeterminate	20	55	Yes

NRWC-1

NRWC-1 (AfGv-129) is composed of approximately 25 pieces of Onondaga chert lithic debitage. The artifacts were located along the southern edge of the proposed access road along the existing property boundary. The site is approximately 15 m x 30 m located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-2

NRWC-2 (AfGv-130) is composed of approximately 75 pieces of Onondaga chert lithic debitage. The artifacts were located east of proposed turbine T84 within the eastern end of the turbine pad assessment area. The site is approximately 20 m x 80 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-3

NRWC-3 (AgGu-183) is composed of one scraper, one biface, one spokeshave, and over 100 pieces of lithic debitage all of Onondaga chert. The artifacts are located on level ground south of the proposed turbine pad, along the east side of an existing pig barn. The site is approximately 20 m x 20 m in area.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-4

NRWC-4 (AgGu-184) is composed of over 150 historic and pre contact lithic artifacts. Pre contact artifacts were comprised of one projectile point (Point 50), two drills, a biface and lithic debitage (5 secondary, 16 tertiary and 1 core) all manufactured from Onondaga chert. Point 50 is the mid-section of an indeterminate projectile point type. The historic artifacts consisted of glass fragments, ceramic fragments, clay pipe fragments, square nails, buttons, and a 1974 quarter. The historic artifacts date between the early 19th century and the late 21st century. The artifacts were located along the proposed access road east of the proposed turbine location. The site is approximately 85 m x 50 m.

This site meets the criteria for Stage 3 assessment as it consists of at least 20 artifacts that date the period of use to before 1900 (Section 2.2 Standard 1.c).

AgGu-184 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer, and a 50 m monitoring buffer (70 m total) will be erected around the site and no construction or disturbance will occur within the 70 m area. An alternative access road has been planned and subject to Stage 2 AA.

NRWC-5

NRWC-5 (AgGu-185) is composed of one projectile point (Point 17), and approximately 20 pieces of Onondaga chert lithic debitage. Point 17 is an indeterminate projectile point type manufactured from an unknown chert. The artifacts are located east of the

proposed turbine and along the eastern edge of the assessment area. The site is approximately 20 m x 40 m and situated on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGu-185 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site.

NRWC-6

NRWC-6 (AgGu-186) is composed of over 25 pieces of Onondaga chert lithic debitage. The artifacts are located west of the proposed turbines within the proposed laydown area. The site is approximately 75 m x 50 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-7

NRWC-7 (AgGu-187) is composed of two Onondaga chert bifaces and over 20 pieces of Onondaga chert lithic debitage. The artifacts are located approximately halfway between the proposed turbines, along the proposed access road. The site is approximately 35 m x 15 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-8

NRWC-8 (AgGu-188) is composed of two Onondaga chert scrapers and over 40 pieces of Onondaga chert lithic debitage. The artifacts were located south of the proposed turbine laydown area along the eastern edge of the assessment area. The site is approximately 40 m x 25 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-9

NRWC-9 (AgGu-189) is composed of over 100 pieces of historic and pre contact artifacts. Pre-contact artifacts were comprised of one projectile point (Point 14) and several pieces of Onondaga chert debitage. Point 14 is a notched base fragment of an

indeterminate projectile point type manufactured from Onondaga chert. The historic artifacts consisted of ceramics, square nails, buttons, and glass that date the initial occupation of the site approximately to the 1830s or 1840s. The artifacts were located along Concession 1 at the north end of the proposed access road. The site is approximately 50 m x 50 m.

This site meets the criteria for Stage 3 assessment as it consists of at least 20 artifacts that date the period of use to before 1900 (Section 2.2 Standard 1.c).

NRWC-10

NRWC-10 (AgGu-190) is composed of two Onondaga chert scrapers and over 100 pieces of Onondaga chert lithic debitage. The artifacts were located northeast of the proposed turbine, on the east side of the turbine pad assessment area. The site is approximately 85 m x 25 m along the edge of a tree line.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGu-190 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site.

NRWC-11

NRWC-11 (AgGu-191) is composed of two glass scrapers, one Onondaga chert tool and over 50 pieces of Onondaga chert lithic debitage. The artifacts were located along the southern end of the proposed access road and along the property boundary. One of the glass scrapers is manufactured from solarized glass, dating to the end of the 19th and early 20th century. The Onondaga chert tool has been heat altered and exhibits a scraper edge, a utilized edge, and a drill. The site is approximately 60 m x 50 m in area.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3) and also due to the presence of artifacts of special interest (Section 2.2 Standard 1b,iii).

NRWC-12

NRWC-12 (AgGv-118) is composed of a single projectile point (Point 40). Point 40 is a Late Palaeo Indian (c. 10,000 9,500 B.P.) Madina Plano projectile point type with a broken tip, which was manufactured from Onondaga chert. The projectile point was located along the eastern edge of the proposed access road approximately halfway between Elcho Road and the proposed turbine T51 pad.

This site meets the criteria for Stage 3 assessment as it consists of an artifact of special interest (Section 2.2 Standard 1b, iii).

NRWC-13

NRWC-13 (AgGu-192) is composed of one projectile point (Point 5), two bifaces and over 25 pieces of lithic debitage, all manufactured from Onondaga chert. Point 5 is a Late Archaic (c. 4,500-3,100 BP) Innes type projectile point manufactured from Onondaga chert. Of the lithic debitage, a sample was collected (2 secondary, 2 tertiary, and 2 utilized). The artifacts were located northwest of the proposed turbine. The site is approximately 35 m x 20 m and situated on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a diagnostic and several non-diagnostic artifacts (2 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.).

NRWC-14

NRWC-14 (AgGu-193) is composed of a single projectile point (Point 4) located northeast of the proposed turbine T06 within the proposed lay down area. Point 4 is a Late Palaeo-Indian (c. 10,000 - 9,500 B.P.) Madina Plano projectile point type manufactured from Collingwood chert.

This site meets the criteria for Stage 3 assessment as it consists of an artifact of special interest (Section 2.2 Standard 1b.iii).

NRWC-15

NRWC-15 (AgGu-194) is composed of one projectile point (Point 27), one biface, and 8 pieces of Onondaga lithic debitage. Point 27 is an indeterminate projectile point type with a missing base, manufactured from Onondaga chert. One indeterminate chert core and one Kettle Point chert secondary flake were noted within the assemblage. The artifacts were located north of the proposed turbine T78 along the northern end of the turbine pad assessment area. The site is approximately 15 m x 10 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-16

NRWC-16 (AgGu-195) is composed of over 10 pieces of Onondaga chert lithic debitage. The artifacts are located east of the proposed turbine within the proposed laydown area. The artifacts are located on a sandy rise in an area approximately 10 m x 10 m. This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-17

NRWC-17 (AgGu-196) is composed of one scraper manufactured from an unknown chert and over 20 pieces of Onondaga chert lithic debitage. The artifacts were located approximately halfway between proposed turbines T59 and T60 along a proposed laydown area in the middle of the assessment area. The site is approximately 30 m x 30 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-18

NRWC-18 (AgGu-197) is composed of approximately 15 pieces of Onondaga chert lithic debitage. The artifacts were located southeast of proposed turbine T59 along a proposed lay down area. The site is approximately 30 m x 20 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-19

NRWC-19 (AfGv-131) is composed of two projectile points (Points 9 and 11), and eight pieces of lithic debitage. Point 9 is broken and of indeterminate type manufactured from Onondaga chert and shows signs of heat alteration. Point 11 is the proximal end of a Late Archaic (4,500 - 3,100 B.P.) Genesee type projectile point manufactured from Onondaga chert. The artifacts were located southeast of the proposed transformer station location along the western edge of the proposed collector cable assessment area. The site is approximately 15 m x 20 m in area and is located on a small sandy rise.

Based on the criterion of a diagnostic artifact and two or more non-diagnostic artifacts this site meets the criteria for a Stage 3 assessment (Section 2.2 Standard 1a.i.1).

NRWC-20

NRWC-20 (AfGv-132) is composed of a projectile point with a broken tip and base (Point 10), and approximately 20 pieces of lithic debitage. Point 10 is an indeterminate projectile point type manufactured from Onondaga chert. The artifact was located southeast of the proposed transformer station location along the eastern edge of the proposed collector cable assessment area. The site is approximately 15 m x 20 m in area and is located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-21

NRWC-21 (AfGv-133) is composed of one uniface, four scrapers, one biface, and approximately 50 pieces of lithic debitage all manufactured from Onondaga chert. The artifacts were located along the northern edge of the proposed transformer station location. The site is approximately 60 m x 40 m in area and is located across two sandy ridges.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-22

NRWC-22 (AfGv-134) is composed of over 15 pieces of Onondaga chert lithic debitage. The artifacts were located in the northwestern corner of the proposed transformer station location and southwest of site NRWC-21. The site is approximately 15 m x 10 m in area, on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-23

NRWC-23 (AgGv-119) is composed of one broken Onondaga chert blade and 12 pieces of lithic debitage. The artifacts were located southwest of proposed turbine T53 and west of the proposed laydown area and proposed access road. The site is approximately 15 m x 15 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGv-119 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site.

NRWC-24

NRWC-24 (AfGu-60) is composed of over 40 pieces of Onondaga chert lithic debitage. The artifacts are located north of proposed turbine pad T17. The site is approximately 40 m x 80 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-25

NRWC-25 (AfGv-135) is composed of over 100 historic artifacts. The artifacts consist of glass and ceramic that date the initial occupation of the site approximately to the 1840s. The artifacts were located south of Highway 3 at the north end of the proposed access road. The site is approximately 30 m x 40 m.

This site meets the criteria for Stage 3 assessment as it consists of at least 20 artifacts that date the period of use to before 1900 (Section 2.2 Standard 1.c).

NRWC-26

NRWC-26 (AgGu-198) is composed of over 20 pieces of Onondaga chert lithic debitage in an area measuring 10 x 15 m. The artifacts are located in the southeast corner of the proposed turbine pad lay down area. This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-27

NRWC-27 (AgGu-199) is composed of 11 pieces of Onondaga chert lithic debitage located northeast of the proposed turbine along the northern edge of the assessment area. The artifacts are in an area approximately 25 m x 15 m.

This site meets the criteria for Stage 3 assessment as it consists of 10 or more artifacts in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGu-199 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site.

NRWC-28

NRWC-28 (AgGu-200) is composed of over 80 pieces of Onondaga chert lithic debitage and three bifacially worked tools. The artifacts are located east of the proposed turbine within the proposed laydown area. The artifacts are on a sandy rise in an area approximately 125 m x 50 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-29

NRWC-29 (AfGv-136) is composed of one scraper and over 30 pieces of lithic debitage of Onondaga chert. The artifacts were located northeast of the turbine within the laydown area and south of a tree line. The site is approximately 50 m x 50 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-30

NRWC-30 (AgGv-120) is composed of two broken Onondaga chert bifaces and over 40 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of two cores, one secondary flake and four tertiary flakes were collected. The artifacts were located on the northwest side of the proposed T38 within the proposed laydown area. The site is approximately 25 m x 75 m in area.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-31

NRWC-31 (AgGu-201) is composed of 22 pieces of Onondaga chert lithic debitage. The artifacts are of indeterminate age or cultural affiliation. The artifacts were located northeast of the proposed turbine within the turbine pad, along the edge of a tree line in an area approximately 20 m x 15 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-32

NRWC-32 (AgGu-202) is composed of one slate gorget and three pieces of Onondaga chert debitage. The artifacts were located west of the proposed turbine within a proposed laydown area along the western edge of the property boundary. The site is approximately 10 m x 10 m.

This site meets the criteria for Stage 3 assessment as it consists of an artifact of special interest (Section 2.2 Standard 1b).

NRWC-33

NRWC-33 (AgGv-121) is composed of one preform, one biface and over 40 pieces of lithic debitage all manufactured of Onondaga chert. The artifacts were located along the

proposed access road to turbine T36. The site is approximately 60 m x 60 m on a sandy rise south of a watercourse.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-34

NRWC-34 (AgGv-122) is composed of two projectile points (Points 34 and 35), and eight pieces of Onondaga chert lithic debitage. Point 34 is an indeterminate type projectile point manufactured from Onondaga chert. Point 35 is a Late Archaic (c. 4,500 – 3,100 B.P.) Crawford Knoll projectile point type manufactured from Kettle Point chert. The artifacts were located along the proposed access road, in an area approximately 20 m x 20 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of more than one diagnostic artifact within a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.1).

NRWC-35

NRWC-35 (AgGv-123) is composed of 15 pieces of Onondaga chert lithic debitage. The artifacts were located along the eastern edge of the proposed access road assessment area, and east of the tree line in an area approximately 20 m x 20 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-36

NRWC-36 (AfGv-137) is composed of approximately 40 pieces of Onondaga chert lithic debitage. The artifacts were located south of turbine T23 within the southern end of the assessment area. The site is approximately 30 m x 30 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-37

NRWC-37 (AfGv-138) is composed of approximately 20 pieces of Onondaga chert lithic debitage. The artifacts were located east of proposed turbine T49 along the eastern boundary of the assessment area. The site is approximately 20 m x 25 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-38

NRWC-38 (AfGv-139) is composed of one projectile point (Point 6), one broken biface and approximately 50 pieces of Onondaga chert lithic debitage. Point 6 is a projectile point manufactured from Onondaga chert of indeterminate age or cultural affiliation that has been heat altered. The artifacts were located south of the proposed turbine within the proposed turbine pad. The site is approximately 100 m x 100 m and consists of two concentrations of artifacts separated by a relic water course.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-39

NRWC-39 (AgGv-124) is composed of one projectile point of Onondaga chert (Point 30) and approximately 35 pieces of Onondaga chert lithic debitage. Point 30 is an Early Woodland (c 2950-2400 B.P.) Meadowood projectile point type with a broken base. The artifacts were located approximately halfway along the proposed access road north of the proposed turbine in an area approximately 20 m x 30 m.

This site meets the criteria for Stage 3 assessment as it consists of a diagnostic artifact and two or more non-diagnostic in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-40

NRWC-40 (AgGu-203), 0is composed of one projectile point (Point 2). Point 2 is a Late Palaeo-Indian (c. 10,000-9,500 B.P.) Madina Plano projectile point type manufactured from Collingwood chert. The projectile point was located along the western edge of the proposed access road and north of a relict watercourse.

This site meets the criteria for Stage 3 assessment as it consists of an artifact of special interest (Section 2.2 Standard 1b.iii).

NRWC-41

NRWC-41 (AfGv-143) is composed of over 30 pieces of Onondaga chert lithic debitage. The artifacts were located southeast of the proposed turbine, and east of the proposed access road. The site is approximately 25 m x 20 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AfGv-143 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site.

NRWC-42

NRWC-42 (AgGu-213) is composed of one utilized Onondaga chert core and approximately 15 pieces of Onondaga chert lithic debitage. The artifacts were located at the western edge of proposed turbine T27 along the western boundary of the assessment area. The site is approximately 20 m x 20 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-43

NRWC-43 (AgGu-214) is composed of four projectile points, one scraper, one biface and approximately 50 pieces of Onondaga chert lithic debitage. Two of the projectile points are identified as Early Woodland (2,950 – 2,400 B.P.) projectile points, including a Meadowood Cache Blade (Point 43) and a Meadowood Point (Point 44), both of Onondaga chert. A third projectile point is identified as a Late Archaic (4,500 – 2,100 B.P.) Perkiomen type (Point 41) also of Onondaga chert. Point 42 was manufactured of Selkirk chert and was of indeterminate age or cultural affiliation. The scraper and biface were made of Onondaga chert. The artifacts were located at the northern edge of proposed turbine T27. The site is approximately 75 m x 45 m.

This site meets the criteria for Stage 3 assessment as it consists of at least one diagnostic and two or more non-diagnostic artifacts within a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.1).

NRWC-44

NRWC-44 (AgGu-215) is composed of one projectile point base and approximately 10 pieces of Onondaga chert lithic debitage. The artifacts were located between proposed turbines T27 and T28. Point 45 was identified with the Early Woodland (2,950-2,400 B.P.) Meadowood type projectile point of Onondaga chert. The site is approximately 13 m x 15 m.

This site meets the criteria for Stage 3 assessment as it consists of at least one diagnostic and two or more non-diagnostic artifacts within a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.1).

NRWC-45

NRWC-45 (AgGu-216) is composed of one projectile point and two pieces of Onondaga chert lithic debitage. Point 46 is a Late Archaic (c. 4,500-3,100 BP) Crawford Knoll type

projectile point manufactured from Onondaga chert. The artifacts were located on the turbine pad, west of the stream running NS through the pad. The site is approximately 10 m x 10 m.

This site meets the criteria for Stage 3 assessment as it consists of a diagnostic and several non-diagnostic artifacts (2 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.).

NRWC-46

NRWC-46 (AgGu-217) is composed of one preform, one biface and 10 pieces of Onondaga chert lithic debitage. The site is of indeterminate age or cultural affiliation; all artifacts are manufactured from Onondaga chert. The artifacts were located on the turbine pad, west of the stream running NS through the pad. The site is approximately 15 m x 10 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGu-217 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site.

NRWC-47

NRWC-47 (AgGu-218) is composed of over 50 pieces of historic artifacts. The historic artifacts consisted of ceramics and glass. The limited number of dateable artifacts suggests the initial occupation of the site dates to approximately the mid-19th century. The artifacts were located along the north end of the proposed access road. The site is approximately 40 m x 15 m.

This site meets the criteria for Stage 3 assessment as it consists of at least 20 artifacts that date the period of use to before 1900 (Section 2.2 Standard 1.c).

NRWC-48

NRWC-48 (AhGx-690) is composed of one Onondaga chert biface and approximately 18 pieces of Onondaga chert lithic debitage, a Bois Blanc chert flake and a Selkirk chert flake. The artifacts were located between near the northern extent of the project area. The site was identified through the excavation of ten positive (*i.e.* artifact bearing) test pits on the 5 m testing grid. Eight of these test pits and several supplemental test pits were located in a core site area on the north side of the site area. Two other positive test pits were located peripheral to this core area positive test pits. Artifacts were also recovered on the surface between the peach trees. The positive pits and surface finds provided enough artifacts for the Stage 3 recommendation without digging a 1 x 1 m test

unit. The site as identified through the Stage 2 test pit survey is approximately 30 m x 40 m.

This site meets the criteria for Stage 3 assessment as it consists of a minimum of five non-diagnostic artifacts in a minimum 10 m x 10 m test pit survey area (Section 2.2 Standard 1a.ii.2).

NRWC-49

NRWC-49 (AfGu-62) is composed of over 20 pieces of Onondaga chert lithic debitage. The artifacts were located in an open field between Creek Road and Chippewa Creek. The site is approximately 15 m x 20 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-50

NRWC-50 (AfGu-63) is composed of over 25 pieces of Onondaga chert lithic debitage. The artifacts were located in an open field between Creek Road and Chippewa Creek. The site is approximately 20 m x 55 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

For all sites identified as requiring Stage 3 AA (the Archaeological Site Assessment) the assessment must be conducted according to the 2011 *Standards and Guidelines for Consultant Archaeologists*. The following standards for Stage 3 AA work apply:

Before carrying out fieldwork, review all relevant reports of previous fieldwork on the archaeological site or for that property;

Carry out the archaeological site assessment when weather and lighting conditions permit good visibility of all parts of the archaeological site. Do not carry out the archaeological site assessment when weather and lighting conditions (e.g., snow cover, frozen ground, excessive rain or drought, heavy fog) reduce the ability to identify and document any part of the archaeological site;

Using GPS record the locations of the following:

- a central fixed point within the archaeological site
- a permanent datum that can be tied to a development map; and

Provide representative photographs of all field conditions (e.g., ploughed field, pasture or woodlot, disturbances).

For each site located using pedestrian survey methodology the Stage 3 AA will be composed of two elements: a controlled surface pick-up (CSP) of artifacts on the surface of ploughed fields and test unit excavation. A CSP is a detailed survey of the ground surface in open fields that allows for precise recording of artifact locations and the collection of a representative sample of artifacts, including non-diagnostic artifacts. The following standards for Stage 3 AA CSP will apply:

If ground surface visibility has decreased in the time between the Stage 2 survey and the Stage 3 CSP, ensure that the site area is re-cultivated and weathered;

Accurately map the location of all artifacts on the ground surface using a total station, transit and tape, stadia rod, or GPS unit. Record and catalogue artifacts by their mapped location, recording any relevant information (e.g., spatial relationship of diagnostics, artifact concentration areas). Tie this map to the general site GPS readings by recording a central point in the scatter;

For very large and dense surface scatters, conduct a full CSP by grid units (maximum 5 m by 5 m units) over the archaeological site. Record and catalogue artifacts with their grid unit designation.

Ensure that decisions regarding the type and number of artifacts collected strike a balance between gathering enough artifacts to document the archaeological site and leaving enough in place to relocate the site if required (e.g., to conduct further assessment, define a protected area or conduct excavation);

Collect all formal artifact types and diagnostic categories, including, for 19th century archaeological sites, all refined ceramic sherds; and

Collect a representative sample of non-diagnostic artifacts, taking into consideration the archaeological site type, type and frequency of non-diagnostic artifacts, and the likelihood that further fieldwork will be required.

Based on the results of the Stage 2 AA, use of a grid unit CSP will likely need to be conducted at AgGu-200 due to its size and artifact density. All other sites should not require grid unit CSP.

The second component of the Stage 3 AA, test unit excavation, will be required at all identified archaeological sites. The purpose of the test unit excavation is to document the extent of buried artifacts, cultural features, soil stratigraphy and structures and to recover a representative sample of artifacts from across the archaeological site. The interval of the Stage 3 AA grid (of either 5 m or 10 m intervals) will be dependent on the age, type and nature of each identified site. Specific guidelines for this interval are provided in the 2011 *Standards and Guidelines for Consultant Archaeologists*. The following standards for Stage 3 AA test unit excavation will apply:

Excavate by 1 m square units;

To determine the placement of test units, establish a grid on the site based on the permanent datum to at least the accuracy of transit and tape measurements. Placing test units in unmeasured, estimated locations is not acceptable;

Excavate test units by hand. Do not use heavy machinery (e.g., gas-powered augers, backhoes) except to remove sterile or recent fill covering confirmed, deeply buried or sealed archaeological sites;

Excavate test units by systematic levels (stratigraphic or standardized);

Excavate test units into the first 5 cm of subsoil, unless excavation uncovers a cultural feature;

If test unit excavation uncovers a cultural feature, do not excavate into feature fill. Instead:

Record the exposed plan of the feature.

Place geotextile fabric over the unit floor and backfill the unit;

Screen all excavated soil through mesh with an aperture of no greater than 6 mm. For confirmed single component Palaeo-Indian and Early Archaic archaeological sites, for a sample of units (at least 20% of the total number of units in sandy soil and at least 10% of the total number of units in heavy soil), screen the entire contents of each unit through mesh with an aperture of no greater than 3 mm; and

Unless otherwise specified collect and retain all artifacts. Record and catalogue them by their corresponding grid unit designation.

Based on the results of the Stage 2 AA there are three sites that are presently believed to be single component Palaeo-Indian or Early Archaic sites: AgGv-118; AgGu-193; and AgGu-203. For these three sites 10% of the total number of test units excavated (specific number to be determined based on Table 3.1 in the 2011 *Standards and Guidelines for Consultant Archaeologists*) will need to be screened using 3 mm mesh.

The 2011 *Standards and Guideline for Consultant Archaeologists* also make special Stage 3 AA provisions for large sites and Late Woodland village sites. At present none of the recorded sites can be definitely attributed to the Late Woodland cultural era; however, several large sites have been identified, including: AgGu-184; AgGu-189; AgGu-190; and AfGu-200. While none of the sites, at present, qualify for the special provisions of the Late Woodland village, they do qualify as large sites. Accordingly, these sites may only require excavation of 50% of the required total test units, as determined by Table 3.1 of the 2011 *Standards and Guideline for Consultant Archaeologists*. This determination will only be able to be made in the field after the initiation of the Stage 3 AA and these provisions should be kept in mind during that work.

It should be anticipated that several of the sites will likely require Stage 4 mitigative excavations in the event that project design cannot avoid the sites. Sites of already

identified cultural heritage value and interest include all sites with Palaeo-Indian or Early Archaic components, and the Late Woodland site.

With the large number of Aboriginal archaeological sites documented through the Stage 2 AA it is expected that the involvement of First Nations in subsequent Stage 3 and/or Stage 4 AA will increase beyond the current level of the Stage 2 AA. Ongoing Aboriginal consultation will be part of the overall Project development, for archaeological resources and for other environmental components, and is a requirement of the 2011 *Standards and Guidelines for Consultant Archaeologists*. It is recommended that Aboriginal Engagement be carried out as required by the *Standards and Guidelines* and as outlined in the bulletin *Engaging Aboriginal Communities in Archaeology*.

ARCHAEOLOGICAL RESOURCES NOT RECOMMENDED FOR FURTHER ASSESSMENT

All remaining archaeological resources identified during the Stage 2 AA have been deemed to have had their cultural heritage value and/or interest fully documented at the Stage 2 AA. These sites are shown below in Table 18. None of these sites will require Stage 3 AA.

Table 2: Archaeological Resources Not Recommended For Stage 3 Archaeological Assessment

Site #	Location	Borden #	# Artifacts	Cultural Period		
					Cultural Heritage Value Fully Documented?	Stage 3 Req'd?
IF 1	SE 24	AgGu-204	1	Late Archaic	Yes	No
IF 2	SE 24	n/a	1	Indeterminate	Yes	No
IF 3	SE 24	AgGu-206	1	Late Woodland	Yes	No
IF 4	SE 24	AgGu-207	1	Late Archaic	Yes	No
IF 5	SE 24	n/a	1	Indeterminate	Yes	No
IF 6	SE 44	AfGv-140	1	Late Woodland	Yes	No
IF 7	SE 44	AfGv-141	1	Early Woodland	Yes	No
IF 8	SE 39	AgGu-209	1	Middle Archaic	Yes	No
IF 9	SE 39	n/a	1	Indeterminate	Yes	No
IF 10	SE 27	AgGv-125	1	Early Woodland	Yes	No
IF 11	SE 3 (1H)	AgGv-129	1	Late Woodland	Yes	No
IF 12	SE 113	n/a	1	Indeterminate	Yes	No
IF 13	SE 16 (5E)	AgGu-212	1	Early Woodland	Yes	No
IF 14	SE 11	n/a	1	Indeterminate	Yes	No
IF 15	SE 101	n/a	1	Indeterminate	Yes	No
IF 16	SE 37	n/a	1	Indeterminate	Yes	No
IF 17	SE 37	n/a	1	Indeterminate	Yes	No
IF 18	SE 37	n/a	1	Indeterminate	Yes	No
IF 19	SE 37	n/a	1	Indeterminate	Yes	No
IF 20	SE 16 (5E)	n/a	1	Indeterminate	Yes	No
IF 21	SE 117	n/a	1	Indeterminate	Yes	No
IF 22	SE 39	n/a	1	Indeterminate	Yes	No
IF 23	SE 39	n/a	1	Indeterminate	Yes	No
IF 24	SE 16 (5E)	n/a	1	Indeterminate	Yes	No
IF 25	SE 16 (5ABC)	n/a	1	Indeterminate	Yes	No
IF 26	SE 16 (5ABC)	n/a	1	Indeterminate	Yes	No
IF 27	SE 90	n/a	1	Indeterminate	Yes	No
IF 28	SE 52	n/a	1	Indeterminate	Yes	No

Table 2: Archaeological Resources Not Recommended For Stage 3 Archaeological Assessment

Site #	Location	Borden #	# Artifacts	Cultural Period		
					Cultural Heritage Value Fully Documented?	Stage 3 Req'd?
IF 29	SE 14	n/a	1	Indeterminate	Yes	No
IF 30	SE 14	n/a	1	Indeterminate	Yes	No
IF 31	SE 3 (1H)	n/a	1	Indeterminate	Yes	No
IF 32	SE 3 (1H)	n/a	1	Indeterminate	Yes	No
IF 33	SE 3 (1H)	n/a	1	Indeterminate	Yes	No
IF 34	SE 3 (1H)	n/a	1	Indeterminate	Yes	No
IF 35	SE 3 (1H)	n/a	1	Indeterminate	Yes	No
IF 36	SE 3 (1H)	n/a	1	Indeterminate	Yes	No
IF 37	SE 3 (1H)	n/a	1	Indeterminate	Yes	No
IF 38	SE 27	n/a	1	Indeterminate	Yes	No
IF 39	SE 60	n/a	1	Indeterminate	Yes	No
IF 40	SE 60	n/a	1	Indeterminate	Yes	No
IF 41	SE 29-4	n/a	1	Indeterminate	Yes	No
IF 42	SE 24	n/a	1	Indeterminate	Yes	No
IF 43	SE 24	n/a	1	Indeterminate	Yes	No
IF 44	SE 24	n/a	1	Indeterminate	Yes	No
IF 45	SE 26(7A)	n/a	1	Indeterminate	Yes	No
IF 46	SE 91	n/a	1	Indeterminate	Yes	No
IF 47	SE 91	n/a	1	Indeterminate	Yes	No
IF 48	SE 91	n/a	1	Indeterminate	Yes	No
IF 49	SE 91	n/a	1	Indeterminate	Yes	No
IF 50	SE 62	n/a	1	Indeterminate	Yes	No
IF 51	SE 62	n/a	1	Indeterminate	Yes	No
IF 52	SE 62	n/a	1	Indeterminate	Yes	No
IF 53	SE 108	n/a	1	Indeterminate	Yes	No
IF 54	SE 108	n/a	1	Indeterminate	Yes	No
IF 55	SE 17	n/a	1	Indeterminate	Yes	No
IF 56	SE 36	n/a	1	Indeterminate	Yes	No
IF 57	SE 36	n/a	1	Indeterminate	Yes	No
IF 58	SE 79	n/a	1	Indeterminate	Yes	No
IF 59	SE 79	n/a	1	Indeterminate	Yes	No
IF 60	SE 107	n/a	1	Indeterminate	Yes	No
IF 61	SE 107	n/a	1	Indeterminate	Yes	No
IF 62	SE 107	n/a	1	Indeterminate	Yes	No
IF 63	SE 107	n/a	1	Indeterminate	Yes	No
IF 64	SE 107	n/a	1	Indeterminate	Yes	No

Table 2: Archaeological Resources Not Recommended For Stage 3 Archaeological Assessment

Site #	Location	Borden #	# Artifacts	Cultural Period		
					Cultural Heritage Value Fully Documented?	Stage 3 Req'd?
IF 65	SE 18	n/a	1	Indeterminate	Yes	No
IF 66	SE 26	n/a	1	Indeterminate	Yes	No
IF 67	SE 26	n/a	1	Indeterminate	Yes	No
IF 68	SE 16 (5D)	n/a	1	Indeterminate	Yes	No
IF 69	SE 57	n/a	1	Indeterminate	Yes	No
IF 70	SE 57	n/a	1	Indeterminate	Yes	No
IF 71	SE 21	n/a	1	Indeterminate	Yes	No
IF 72	SE 20 (14D)	n/a	1	Indeterminate	Yes	No
IF 73	SE 20 (14D)	n/a	1	Indeterminate	Yes	No
IF 74	SE 20 (14D)	n/a	1	Indeterminate	Yes	No
IF 75	SE 13	AgGu-227	1	Late Archaic	Yes	No
IF 76	SE 13	AgGu-228	1	Early Woodland	Yes	No
IF 77	SE 105	n/a	1	Indeterminate	Yes	No
IF 78	SE 105	n/a	1	Indeterminate	Yes	No
IF 79	SE 24	AgGu-236	1	Middle Archaic	Yes	No
IF 80	SE 24	AgGu -224	1	Late Archaic	Yes	No
IF 81	SE 26 (7A)	AgGu-225	1	Late Woodland	Yes	No
IF 82	SE 26 (7A)	n/a	1	Indeterminate	Yes	No
IF 83	SE 26 (7A)	n/a	1	Indeterminate	Yes	No
IF 84	SE 26 (7A)	AgGu-226	1	Late Archaic	Yes	No
IF 85	SE 26 (7A)	n/a	1	Indeterminate	Yes	No
IF 86	SE 26 (7A)	n/a	1	Indeterminate	Yes	No
IF 87	SE 26 (7A)	n/a	1	Indeterminate	Yes	No
IF 88	SE 26 (7A)	n/a	1	Indeterminate	Yes	No
IF 89	SE 26 (7A)	n/a	1	Indeterminate	Yes	No
IF 90	SE 29-5	n/a	1	Indeterminate	Yes	No
IF91	SE 112	n/a	1	Indeterminate	Yes	No
IF 92	SE 112	n/a	1	Indeterminate	Yes	No
IF 93	SE 112	n/a	1	Indeterminate	Yes	No
IF 94	SE 112	n/a	1	Indeterminate	Yes	No
IF 95	SE 112	n/a	1	Indeterminate	Yes	No
IF 96	SE 112	n/a	1	Indeterminate	Yes	No
IF 97	SE 112	n/a	1	Indeterminate	Yes	No
IF 98	SE 102 4	n/a	1	Indeterminate	Yes	No
IF 99	SE 94	n/a	1	Indeterminate	Yes	No
IF 100	SE D	n/a	1	Indeterminate	Yes	No

Table 2: Archaeological Resources Not Recommended For Stage 3 Archaeological Assessment

Site #	Location	Borden #	# Artifacts	Cultural Period		
					Cultural Heritage Value Fully Documented?	Stage 3 Req'd?
CL-1	SE 45	AgGu-211	2	Late Archaic	Yes	No
CL-2	SE 35	AgGv-126	5	Indeterminate	Yes	No
CL-3	SE 87	AfGv-144	8	Indeterminate	Yes	No
CL-4	SE 87	AfGv-145	3	Indeterminate	Yes	No
CL-5	SE 4	AgGu-205	3	Indeterminate	Yes	No
CL-6	SE 37	AgGu-208	8	Indeterminate	Yes	No
CL-7	SE 37	n/a	2	Indeterminate	Yes	No
CL-8	SE 39	n/a	3	Indeterminate	Yes	No
CL-9	SE 16 (5D)	n/a	2	Indeterminate	Yes	No
CL-10	SE 16 (5ABC)	n/a	2	Indeterminate	Yes	No
CL-11	SE 90	n/a	2	Indeterminate	Yes	No
CL-12	SE 90	n/a	3	Indeterminate	Yes	No
CL-13	SE 14	AgGu-210	5	Indeterminate	Yes	No
CL-14	SE 70	n/a	2	Indeterminate	Yes	No
CL-15	SE 3 (1H)	n/a	4	Indeterminate	Yes	No
CL-16	SE 3 (1H)	AfGv-146	4	Indeterminate	Yes	No
CL-17	SE 3 (1H)	AgGv-128	8	Indeterminate	Yes	No
CL-18	SE 117	n/a	2	Indeterminate	Yes	No
CL-19	SE 60	n/a	3	Indeterminate	Yes	No
CL-20	SE 29-4	n/a	2	Indeterminate	Yes	No
CL-21	SE 24	n/a	4	Indeterminate	Yes	No
CL-22	SE 24	re-assigned as IF 79 and IF 80 following lab analysis				
CL-23	SE 91	AgGu-219	3	Indeterminate	Yes	No
CL-24	SE 91	n/a	3	Indeterminate	Yes	No
CL-25	SE 91	n/a	4	Indeterminate	Yes	No
CL-26	SE 62	n/a	4	Indeterminate	Yes	No
CL-27	SE 107	n/a	2	Indeterminate	Yes	No
CL-28	SE 107	n/a	3	Indeterminate	Yes	No
CL-29	SE 107	n/a	2	Indeterminate	Yes	No
CL-30	SE 16 (5D)	AgGu-220	2	Indeterminate	Yes	No
CL-31	SE 16 (5D)	n/a	2	Indeterminate	Yes	No
CL-32	SE 21	AgGu-221	2	Indeterminate	Yes	No
CL-33	SE 20 (14D)	AgGv-127	3	Indeterminate	Yes	No
CL-34	SE 20 (14D)	n/a	2	Indeterminate	Yes	No
CL-35	SE 13	AgGu-222	4	Indeterminate	Yes	No
CL-36	SE 13	n/a	3	Indeterminate	Yes	No

Table 2: Archaeological Resources Not Recommended For Stage 3 Archaeological Assessment

Site #	Location	Borden #	# Artifacts	Cultural Period		
					Cultural Heritage Value Fully Documented?	Stage 3 Req'd?
CL-37	SE 15	AfGv-142	6	Indeterminate	Yes	No
CL-38	SE 26 (7A)	AgGu-223	3	Indeterminate	Yes	No
CL-39	SE 4	AgGu-229	3	Indeterminate	Yes	No
CL-40	SE 62	n/a	2	Indeterminate	Yes	No
CL-41	SE 102 7	AfGv-147	3	Indeterminate	Yes	No

IF-1

IF-1 (AgGu-204) is composed of a single projectile point (Point 19) located southeast of the proposed turbines along the southern boundary of the assessment area. Point 19 is a Late Archaic (c. 4,500 – 3,100 B.P.) Innes type projectile point manufactured from Haldimand chert. This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-2

IF-2 is composed of a single projectile point (Point 20). Point 20 is the distal portion of an indeterminate projectile point manufactured from Onondaga chert. The projectile point is located southeast of the proposed turbines along the southern boundary of the assessment area. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-3

IF-3 (AgGu-206) is composed of a single projectile point (Point 21). Point 21 is a Late Woodland (c. 1,100 – 350 B.P.) Naticoke Notched projectile point type manufactured from Onondaga chert. The projectile point is located southeast of the proposed turbines north of IF-1 (Photo 6). This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-4

IF-4 (AgGu-207) is composed of a single projectile point (Point 22) located south east of T02 along the southern boundary of the assessment area. Point 22 is a Late Archaic (c. 4,500 – 3,100 B.P.) Crawford Knoll projectile point type manufactured from Onondaga

chert. This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-5

IF-5 is composed of a single projectile point (Point 23). Point 23 is an indeterminate type projectile point manufactured from Bois Blanc Formation chert and missing its base. The projectile point was located west of proposed turbines, between sites NRWC6 and NRWC7. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-6

IF-6 (AfGv-140) is composed of a single projectile point (Point 15) located at the junction of the proposed access road and turbine pad. Point 15 is the basal portion of a Late Woodland (c. 1,100-350 B.P.) Daniels Triangular projectile point type manufactured from Onondaga chert that has been heat altered.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-7

IF-7 (AfGv-141) is composed of a single projectile point (Point 16) located at the junction of the proposed access road and turbine pad, and northeast of Point 15. Point 16 is an Early Woodland (c. 2,950-2,400 B.P.) Meadowood projectile point type, which is missing a portion of the base, and is manufactured from Onondaga chert.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-8

IF-8 (AgGu-209) is composed of a single projectile point (Point 3) located north of the proposed turbine and approximately halfway between a relic watercourse and the existing property boundary. Point 3 is a Middle Archaic (8,000-6000 B.P.) Thebes type projectile point manufactured from Onondaga chert.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-9

IF-9 is composed of a single projectile point (Point 38) located west of the proposed access road. Point 38 is an indeterminate projectile point type with a broken tip manufactured from Onondaga chert. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-10

IF-10 (AgGv-125) is composed of a single projectile point (Point 13). The projectile point was located northeast of the proposed turbine within the proposed laydown area. Point 13 is the tip of an Early Woodland (2,950-2,400 B.P.) Meadowood projectile point type manufactured from Haldimand chert.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-11

IF 11 is composed of a single projectile point (Point 12). The projectile point was located on level ground north of the proposed transformer station location and along the west side of the proposed access road. Point 12 is a side-notched Late Woodland (1,100-350 B.P.) Jack's Reef style projectile point type manufactured from Onondaga Chert.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-12

IF-12 is composed of one projectile point (Point 51) located on level ground along the western edge of the proposed access road. The projectile point type is of indeterminate age or cultural affiliation and is manufactured from Onondaga chert. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-13

IF-13 (AgGu-212) is composed of one projectile point (Point 1). The projectile point was located southeast of the proposed turbine within a proposed laydown area and east of a relict watercourse. Point 1 is an Early Woodland (2,950 – 2,400 B.P.) Kramer type projectile point manufactured from Selkirk chert.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-14

IF-14 is composed of one projectile point (Point 7) of unknown chert located north of the proposed turbine along the northern edge of the proposed turbine pad assessment area. Point 7 is an indeterminate projectile point type missing its tip. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-15

IF-15 is composed of a single projectile point (Point 8). The projectile point was located east of the proposed turbine. Point 8 is the basal portion of a projectile point of indeterminate age or cultural affiliation manufactured from Onondaga chert. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-16

IF-16 is composed of one Onondaga chert preform. The artifact is located to the east of the proposed turbine and at the south end of the original proposed access road. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-17

IF-17 is composed of one piece of Onondaga chert lithic debitage. The artifact is located to the northwest of the proposed turbine along the western edge of the assessment area. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-18

IF-18 is composed of one piece of Onondaga chert lithic debitage. The artifact is located to the northwest of the proposed turbine. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as

such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-19

IF-19 is composed of one piece of Onondaga chert lithic debitage. The artifact is located to the northeast of the proposed turbine. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-20

IF-20 is composed of one Onondaga chert biface fragment. The artifact was located south of the proposed turbine location along the proposed access road, and north of site NRW-40. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-21

IF-21 is composed of a single Onondaga chert preform located on level ground at the northern end of the proposed access road. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-22

IF-22 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located east of the proposed access road, along the eastern boundary of the assessment area, and southeast of a small ephemeral watercourse. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-23

IF-23 is composed of a single projectile point (Point 39) located south of the proposed turbine located along the eastern edge of the proposed access assessment area. Point 39 is the medial section of an indeterminate projectile point type manufactured from Onondaga chert. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-24

IF-24 is composed of one piece of Onondaga chert lithic debitage. The artifact was located northeast of the proposed turbine along the existing property boundary. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet

minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-25

IF-25 is composed of one piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed turbine. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-26

IF-26 is composed of one piece of Onondaga chert lithic debitage. The artifact was located along the proposed access road approximately halfway between Vaughan Road and the south end of the proposed access road. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-27

IF-27 is composed of one piece of Onondaga chert lithic debitage located in the northern end of the survey area, along the eastern side of the proposed access road. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-28

IF-28 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located at the northern end and western side of the proposed access road, next to an existing outbuilding. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-29

IF-29 is composed of a single piece of Onondaga chert lithic debitage located south of the proposed turbine. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-30

IF-30 is composed of a single piece of Onondaga chert lithic debitage located south of the proposed turbine and north of IF-29. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment

and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-31

IF-31 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located on level ground north of the proposed transformer station location and along the west side of the proposed access road. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-32

IF-32 is composed of a single scraper reworked from a biface. The scraper was located on level ground along the north edge of the proposed transformer station location. The artifact is manufactured from Onondaga chert and is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-33

IF-33 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed transformer station location and east of site NRW-30. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-34

IF-34 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed transformer station location and east of site NRW-30. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-35

IF-35 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located on the west side of the proposed transformer station location along the western boundary of the assessment area. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-36

IF-36 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located on the west side of the proposed transformer station location along the western boundary of the assessment area, and south of IF-35. The artifact is of indeterminate

age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-37

IF-37 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located to the north of the proposed transformer station, west of the proposed access road, and along the western edge of the assessment area. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-38

IF-38 is composed of a single Onondaga chert uniface. The artifact was located northeast of the proposed turbine within the proposed laydown area and along the northern boundary of the assessment area. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-39

IF-39 is composed of a single Onondaga chert biface. The artifact was located southwest of the proposed turbine T09. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-40

IF-40 is composed of a single Onondaga chert biface. The artifact was located along the proposed access road. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-41

IF-41 is composed of a single Onondaga chert biface located along the western edge of the initial proposed access road, and north of the proposed turbine location. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-42

IF-42 is composed of a single drill tip manufactured from Onondaga chert. The artifact was located southwest of proposed turbines and east of IF-1, and IF-3 along the southern boundary of the assessment area. The artifact is of indeterminate age or

cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-43

IF# 43 is composed of the single Onondaga chert lithic debitage located northeast of proposed turbines along the northern boundary of the assessment area and south of a tree line. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-44

IF-44 is composed of a single projectile point (Point 18) located northwest of proposed turbines north of site NRWC6, and south of a tree line. Point 18 is an indeterminate projectile point type manufactured from indeterminate chert. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-45

IF-45 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located along the proposed access road approximately halfway between the proposed turbine and Elcho Road. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-46

IF-46 is composed of a single projectile point (Point 49). The projectile point was located north of the proposed turbine. Point 49 is the tip of a projectile point of indeterminable age of cultural affiliation manufactured from Onondaga chert. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-47

IF-47 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located north of the proposed turbine. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-48

IF-48 is composed of a single utilized flake of Onondaga chert that has been heat altered. The artifact was located southeast of the proposed turbine between the tree line and a small watercourse. The artifact is of indeterminate age or cultural affiliation. The

artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-49

IF-49 is composed of a single Onondaga chert biface. The biface was located east of the proposed turbine along the eastern end of the proposed access road assessment area. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-50

IF-50 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located on the north of access road to T59 and T60 locations and south of Concession 4. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-51

IF-51 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located north of the proposed turbine locations and south of Concession 4. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-52

IF-52 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed turbine location, along the tree line that runs along the eastern edge of the assessment area. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-53

IF-53 is composed of a single Onondaga chert biface. The biface was located southeast of the proposed turbine along the eastern edge of the assessment area. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-54

IF-54 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed turbine along the eastern edge of the assessment area. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet

minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-55

IF-55 is composed of one projectile point tip (Point 28). Point 28 is the tip of an indeterminate projectile point type manufactured from Onondaga chert. The projectile point was located along the eastern edge of the proposed access road. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-56

IF-56 is composed of a single broken Onondaga chert biface. The artifact was located north of the proposed turbine location along the western edge of the proposed access road right of way. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-57

IF-57 is composed of a single broken Onondaga chert projectile point. Point 29 was located north of the proposed turbine location along the western edge of the proposed access road right of way. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-58

IF-58 is composed of a single broken biface manufactured from Onondaga chert. The artifact was located northwest of the southernmost turbine along the access road. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-59

IF-59 is composed of a single broken biface manufactured from Onondaga chert. The artifact was located northwest of the turbine along the access road. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-60

IF-60 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located at the proposed turbine location. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as

such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-61

IF-61 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed turbine location within the proposed laydown area. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-62

IF-62 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located north of the proposed turbine location within the proposed laydown area. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-63

IF-63 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located along the proposed access road, north of site NRWC-39 and west of a small watercourse. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-64

IF-64 is composed of a single Onondaga chert biface. The biface was located along the proposed turbine access road, north of NRWC-39. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-65

IF-65 is composed of one Onondaga chert core. The artifact was located southeast of the proposed turbine within the proposed laydown area. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-66

IF-66 is composed of a single Onondaga chert flake. The artifact was located north of the proposed turbine, west of the proposed access road, and south of a small watercourse. The flake is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-67

IF-67 is composed of a single Onondaga chert flake. The artifact was located north of the proposed turbine, west of the proposed access road, and south of a small watercourse. The flake is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-68

IF-68 is composed of one piece of Onondaga chert lithic debitage. The artifact was located north of the proposed turbine within the proposed laydown area. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-69

IF-69 is composed of one piece of Onondaga chert lithic debitage. The artifact was located between the proposed turbine location and Book Road, and south of the proposed access road. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-70

IF-70 is composed of one piece of Onondaga chert lithic debitage. The artifact was located east the proposed turbine location within the turbine pad assessment area. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-71

IF-71 is composed of one projectile point (Point 32). Point 32 is of indeterminate type, manufactured from Onondaga chert and missing its tip. The projectile point was located along the proposed access road and west of site NRW-33. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-72

IF-72 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located along the west side of the proposed access road. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-73

IF-73 is composed of a single preform manufactured from Haldimand chert. The artifact is of indeterminate age or cultural affiliation. The artifact was located within a proposed laydown area along the access road. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-74

IF-74 is composed of one projectile point (Point 36) located northwest of the proposed turbine within the proposed laydown area. The projectile point is of indeterminate age or cultural affiliation, manufactured from Onondaga chert and missing its tip. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-75

IF-75 (AgGu-227) is composed of a single projectile point (Point 37). Point 37 is a Late Archaic (4,500-3,100 B.P.) Crawford Knoll point type manufactured from Onondaga chert. The artifact was located south of the proposed turbine, along the southern edge of the proposed turbine pad assessment area.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-76

IF-76 (AgGu-228) is composed of a single projectile point (Point 52). Point 52 is an Early Woodland (2,950-2,400 B.P.) Meadowood style point type made of Onondaga chert. The point was located along the proposed access road approximately halfway between the proposed turbine location and Elcho Road.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-77

IF-77 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located south of the proposed turbine location along the southern edge of the assessment area. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-78

IF-78 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located south of the proposed turbine location and east of the proposed access road. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-79

IF-79 is composed of a single projectile point (Point 24). Point 24 is a medial section of a Middle Archaic (c. 8,000 - 4,500 B.P.) Stanley/Neville projectile point type with a serrated edge and manufactured from Onondaga chert, and was collected (Plate 9). The projectile point is located southwest of the proposed turbine and site NRWC-6 along the southern edge of the assessment area. IF-79 does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 Standards and Guidelines for Consultant Archaeologists Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-80

IF 80, designated as Point 25, is a Late Archaic (c. 4,500 – 3,100 B.P.) Crawford Knoll type projectile point manufactured from Onondaga chert. The point is largely complete, having a missing tip. The point was located southwest of the proposed turbine and site NRWC-6 along the southern edge of the assessment area.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-81

IF-81 (AgGu-225) is composed of one projectile point. Point 47 was located at the northern extent of the proposed turbine pad immediately west of the stream running NS thorough the pad. AgGu-225 is a Late Woodland (1,100 – 700 B.P.) Naticoke Notched type projectile point manufactured from Onondaga chert.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 Standards and Guidelines for Consultant Archaeologists Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-82

IF-82 is composed of one Onondaga chert biface fragment. The biface was located along the east boundary of the access road just east of NRWC- 47. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-83

IF-83 is composed of one Onondaga chert biface fragment with notch. The biface was located along the east boundary of the access road just south of NRWC- 47. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-84

IF-84 (AgGu-226) is composed of one projectile point (Point 48). Point 48 was located east of the stream running NS through the pad. The point is a Late Archaic (2,500 – 1,000 B.P.) Genesee type projectile point manufactured from Onondaga chert.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 Standards and Guidelines for Consultant Archaeologists Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-85

IF-85 is composed of one Onondaga chert biface fragment. The biface was located within the pad area just west of the stream running NS through the pad. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-86

IF-86 is composed of one Onondaga chert biface fragment. The biface was located within the pad area east of the stream running N-S through the pad. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-87

IF-87 is composed of one piece of Onondaga chert lithic debitage. The artifact was located on the proposed turbine pad east of the stream running NS through the pad. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-88

IF-88 is composed of one piece of Onondaga chert lithic debitage. The artifact was located at the northern extent proposed turbine pad and east of the stream running N-S through the pad. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-89

IF-89 is composed of one piece of Onondaga chert lithic debitage. The artifact was located at the southern extent of proposed turbine pad and east of the stream running N-S through the pad. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

IF-90

IF-90 is composed of a single Onondaga chert flake located along the eastern property boundary just north of Elcho Road. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

IF-91

IF-91 is composed of a single Onondaga chert flake. The flake was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

IF-92

IF-92 is composed of a single Onondaga chert flake. The flake was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum

criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

IF-93

IF-93 is composed of a single Onondaga chert flake. The flake was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

IF-94

IF-94 is composed of a single Onondaga chert biface. The biface was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

IF-95

IF-95 is composed of a single Onondaga chert flake. The flake was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

IF-96

IF-96 is composed of a single Onondaga chert biface. The biface was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

IF-97

IF-97 is composed of a single Onondaga chert biface. The biface was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

IF-98

IF-98 is composed of a single Onondaga chert flake. The flake was located along the northern edge of the midsection of the northern access road. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

IF-99

IF-99 is composed of a single Onondaga chert flake. The flake was located within the southeast portion of the turbine pad for turbine T85. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

IF-100

IF-100 is composed of a single Onondaga chert biface. The biface was located along the northern edge of the access road to turbine T94. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

CL-1

CL-1 is composed of one projectile point (Point 26) and one piece of Onondaga chert lithic debitage. Point 26 is a Late Archaic (c.4,500 - 3,100 B.P.) Genesee projectile point type manufactured from Onondaga chert and missing its tip. The projectile point was located along the proposed access road, approximately halfway between the proposed turbine and Vaughan Road.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-2

CL-2 (AgGv-126) is composed of one Onondaga chert biface and four pieces of lithic debitage in a 20 x 20 m area. The artifacts are located northeast of the proposed turbine along the northern edge of the assessment area. The artifacts are of indeterminate age or cultural affiliation.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-3

CL-3 is composed of eight pieces of Onondaga chert lithic debitage in an area measuring 15 x 20 m. The cluster of artifacts was located east of the proposed turbine location within the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-4

CL-4 is composed of three pieces of Onondaga chert lithic debitage in an area measuring 10 x 10 m. The cluster of artifacts was located north of the proposed turbine location within the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-5

CL-5 (AgGu-205) is composed of three Onondaga chert flakes. The artifacts were located on level ground approximately halfway along the eastern edge of the proposed access road. The flakes are in an area approximately 10 m x 5 m.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-6

CL-6 is composed of eight pieces of Onondaga chert lithic debitage in an area measuring 20 x 15 m. The artifacts are located adjacent to the western side of the proposed turbine within the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation. This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-7

CL-7 is composed of one Onondaga chert biface and one piece of Onondaga chert lithic debitage in a 5 x 5 m area. The artifacts are located along the eastern edge of the proposed access road along the existing property boundary. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-8

CL-8 is composed of three pieces of Onondaga chert lithic debitage in a 20 x 20 m area. The cluster of artifacts was located south of the proposed turbine location along the western side of the proposed access road. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment

and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-9

CL-9 is composed of two pieces of Onondaga chert lithic debitage in a 5 x 5 m area. The cluster of artifacts was located northwest of the proposed turbine location within the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-10

CL-10 is composed of two pieces of Onondaga chert lithic debitage in a 5 x 10 m area. The cluster of artifacts was located northeast of the proposed turbine location within the turbine pad assessment area. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-11

CL-11 is composed of two pieces of Onondaga chert lithic debitage within a 15 x 10 m area. The artifacts were located southwest of the proposed turbine within the southwest corner of the assessment area. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-12

CL-12 is composed of one Onondaga chert biface, one piece of Onondaga chert lithic debitage and one historic artifact in a 10 x 20 m area. The historic artifact is a fragment of a Bakelite pipe stem dating after 1907. The lithic artifacts are of indeterminate age or cultural affiliation. The artifacts were located north of the proposed turbine at the southern end of the proposed access road. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-13

CL-13 (AgGu-210) is composed of five pieces of Onondaga chert lithic debitage in an area 15 m x 5 m. The cluster of artifacts was located along the proposed access road approximately halfway between the proposed turbine location and Canborough Road. The artifacts are of indeterminate age or cultural affiliation.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3

assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-14

CL-14 is composed of two pieces of Onondaga chert lithic debitage. The artifacts were located approximately halfway between Highway 3 and the proposed turbine along the eastern side of the proposed access road. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-15

CL-15 is composed of four pieces of Onondaga chert lithic debitage in an area measuring 15 x 10 m. The cluster of artifacts was located southeast of the proposed transformer station location along the proposed collector cable assessment area, and southeast of site NRW-19. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-16

CL-16 is composed of four pieces of Onondaga chert lithic debitage in an area of 10 x 10 m area. The cluster of artifacts was located southeast of the proposed transformer station location along the northern edge of the proposed collector cable assessment area, and southeast of site NRW-20. The artifacts are of indeterminate age or cultural affiliation.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-17

IF-71 is composed of one projectile point (Point 32). Point 32 is of indeterminate type, manufactured from Onondaga chert and missing its tip. The projectile point was located along the proposed access road and west of site NRW-33. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-18

CL-18 is composed of two pieces of Onondaga chert lithic debitage in a 10 x 10 m area. The cluster of artifacts was located at the northern end of the proposed access road. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-19

CL-19 is composed of three pieces of Onondaga chert lithic debitage in an area measuring 15 x 20 m. The cluster of artifacts was located north of the proposed turbine locations along the eastern side of the proposed access road and north of site NRWC-12. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-20

CL-20 is composed of two pieces of Onondaga chert lithic debitage in a 5 x 5 m area. The cluster of artifacts was located north of the proposed turbine location along the western side of the proposed access road and southwest of site NRWC-9. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-21

CL-21 is composed of one Haldimand chert biface and two pieces of Onondaga chert lithic debitage. The artifacts are of indeterminate age or cultural affiliation. The artifacts are located between sites NRWC-7 and NRWC-6, north and east of a small meandering watercourse in an area approximately 15 m x 20 m area. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-23

CL-23 is composed of three pieces of Onondaga chert lithic debitage in a 5 x 10 m area. Of the three pieces, only one was kept for further analysis. The artifacts were located northeast of the proposed turbine. The artifacts are of indeterminate age or cultural affiliation. This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-24

CL-24 is composed of three pieces of Onondaga chert lithic debitage in an area measuring 10 x 15 m. The artifacts were located east of the proposed turbine and west of the tree line and a small watercourse. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment

and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-25

CL-25 is composed of four pieces of Onondaga chert lithic debitage in an area measuring 20 x 15 m. The artifacts were located east of the proposed turbine along the proposed access road. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-26

CL-26 is composed of four pieces of Onondaga chert lithic debitage in a 15 x 30 m area. The cluster of artifacts was located south of the proposed turbine location within the eastern side of the assessment area and west of IF-52. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-27

CL-27 is composed of two pieces of Onondaga chert lithic debitage in an area measuring 15 x 15 m. The cluster of artifacts was located northeast of the proposed turbine location, between CL-28 and CL-29. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-28

CL-28 is composed of an Onondaga chert biface and two pieces of Onondaga chert lithic debitage within a 20 x 10 m area. The cluster of artifacts was located northeast of the proposed turbine within the northeast corner of the assessment area and west of a small watercourse. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-29

CL-29 is composed of one Haldimand chert biface and one piece of Onondaga chert lithic debitage in a 10 x 15 m area. The cluster of artifacts was located east of the proposed turbine, north of the tree line and west of a small watercourse. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-30

CL-30 (AgGu-220) is composed of one projectile point (Point 31) and one piece of Onondaga chert lithic debitage. Point 31 is the medial section of a possible Early Woodland (2,950 – 2,400 B.P.) Meadowood projectile point type that was manufactured from Onondaga chert. The artifacts were located south of the proposed turbine within the proposed turbine pad in an area approximately 10 m x 15 m.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-31

CL-31 is composed of two pieces of Onondaga chert lithic debitage in a 10 x 10 m area. The cluster of artifacts was located south of the proposed turbine location within the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-32

CL-32 is composed of one projectile point (Point 33) and one piece of lithic debitage in a 15 x 10 m area. Point 33 is a Late Woodland (c. 1,100 – 350 BP) Nanticoke Triangular projectile point type manufactured from Onondaga chert and missing its tip. The projectile point was located east of the proposed turbine location and along the existing property boundary.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-33

CL-33 (AgGv-127) is composed of three pieces of Onondaga chert lithic debitage. The artifacts are of indeterminate age or cultural affiliation. The artifacts were located northeast of the proposed turbine along the east side of a water course in an area approximately 10 m x 10 m.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-34

CL-34 is composed of two pieces of Onondaga chert lithic debitage in a 10x 10 m area. The cluster of artifacts was located south of the proposed turbine location along the edge of the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-35

CL-35 is composed of four pieces of Onondaga chert lithic debitage in an area measuring 15 x 10 m. The cluster of artifacts was located south of the proposed turbine location at the southern end of turbine pad assessment area. The artifacts are of indeterminate age or cultural affiliation.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-36

CL-36 is composed of three pieces of Onondaga chert lithic debitage in an area measuring 20 x 10 m. The cluster of artifacts was located south of the proposed turbine location along the proposed access road. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-37

CL-37 is composed of six pieces of Onondaga chert lithic debitage in an area measuring 20 x 5 m. The cluster of artifacts was located northeast of the proposed turbine in the northeastern corner of the turbine pad assessment area. The artifacts are of indeterminate age or cultural affiliation.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-38

CL-38 is composed of three pieces of Onondaga chert lithic debitage. The cluster of artifacts was located at the northwestern extent of the access road and the southeast

origin of the turbine pad. The artifacts are of indeterminate age or cultural affiliation within a 10 x 10 m area.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-39

CL-39 (AgGu-229) is composed of three Onondaga chert flakes. The cluster of artifacts was located in the laydown area in an area approximately 10 m x 10 m, east of the residential home and between the barn and Vaughan Road. The artifacts are of indeterminate age or cultural affiliation.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a.

However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-40

CL-40 is composed of two Onondaga chert flakes. The cluster of artifacts was located in an open field in an area approximately 10 m x 15 m, where the access road joins the turbine pad. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

CL-41

CL-41 is composed of three Onondaga chert flakes. The cluster of artifacts was located in an open field in an area approximately 10 m x 10 m, just north of where the northern access road turns to the east. The artifacts are of indeterminate age or cultural affiliation.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a.

However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

PARTIAL CLEARANCE REQUEST

At this time Stantec is requesting Partial Clearance for the portions of the NRW Project where there are no further concerns for impacts to archaeological sites. This partial clearance is requested both for Project infrastructure locations where there are no archaeological sites where Stage 3 AA is required and at locations where sites requiring Stage 3 AA will be able to be avoided according to Section 7.8.5, Standards 1.e.i-iii. At locations with sites that can be avoided this will include the establishment of, and physical barrier around, a 20 m protective buffer as measured from the edge of the site (the 'No-Go Zone') and of a 50 m monitoring zone to be monitored by a licensed consultant archaeologist. These buffer zones will be shown on relevant construction drawings and established in the field prior to any Project related ground disturbing activities.

The locations requested for clearance at this time include:

- SE 91 (no sites requiring Stage 3 AA);
- SE 101 (no sites requiring Stage 3 AA);
- SE 106 (no sites requiring Stage 3 AA);
- SE D (no sites requiring Stage 3 AA);
- SE 94 1 (no sites requiring Stage 3 AA);
- SE 57 (no sites requiring Stage 3 AA);
- SE37 (site AgGu-184 requiring Stage 3 AA can be avoided as per Section 7.8.5, Standards 1.e.i);
- SE 51 (no sites requiring Stage 3 AA);
- SE 83 (no sites requiring Stage 3 AA);
- SE 90 (no sites requiring Stage 3 AA);
- SE 117 (no sites requiring Stage 3 AA);
- SE 29-5 (no sites requiring Stage 3 AA);
- SE 14 (site AgGu-190 requiring Stage 3 AA can be avoided as per Section 7.8.5, Standards 1.e.i);
- SE 92 (no sites requiring Stage 3 AA);
- SE 45 (no sites requiring Stage 3 AA);

- SE 1 (no sites requiring Stage 3 AA);
- SE 55 (no sites requiring Stage 3 AA);
- SE 27 (no sites requiring Stage 3 AA);
- SE 2 (no sites requiring Stage 3 AA);
- SE 16 (5A,B,C) (no sites requiring Stage 3 AA);
- SE 11(12B) (no sites requiring Stage 3 AA);
- SE 35 (10H) (no sites requiring Stage 3 AA);
- SE 23 (no sites requiring Stage 3 AA);
- SE 48 (no sites requiring Stage 3 AA);
- SE 19 (no sites requiring Stage 3 AA);
- SE 17 (no sites requiring Stage 3 AA);
- SE 27 (18B) (no sites requiring Stage 3 AA);
- SE 27 (18C) (no sites requiring Stage 3 AA);
- SE 22 (no sites requiring Stage 3 AA);
- SE 11(12C) (no sites requiring Stage 3 AA);
- SE 59-2 (no sites requiring Stage 3 AA);
- SE 35 (no sites requiring Stage 3 AA);
- SE 20 (14C) (site AgGv-119 requiring Stage 3 AA can be avoided as per Section 7.8.5, Standards1.e.i);
- SE 113 (no sites requiring Stage 3 AA);
- SE 47 (no sites requiring Stage 3 AA);
- SE 44 (no sites requiring Stage 3 AA);
- SE 82 (no sites requiring Stage 3 AA);
- SE 89 (no sites requiring Stage 3 AA);
- SE 102 7 (no sites requiring Stage 3 AA);

- SE 108 (no sites requiring Stage 3 AA);
- SE 102 4 (no sites requiring Stage 3 AA);
- SE 116 (no sites requiring Stage 3 AA);
- SE 114 (no sites requiring Stage 3 AA);
- SE 115 (no sites requiring Stage 3 AA);
- SE 105 (site AfGv-143 requiring Stage 3 AA can be avoided as per Section 7.8.5, Standards1.e.i);
- SE 49-1 (no sites requiring Stage 3 AA);
- SE 79 (no sites requiring Stage 3 AA);
- SE 77 (T24) (no sites requiring Stage 3 AA);

Three additional sites requiring Stage 3 AA can be avoided as per Section 7.8.5, Standard 1.e.i. However, the property cannot be cleared due to the presence of other sites requiring Stage 3 AA that are recommended for assessment.

The sites recommended for avoidance are as follows;

- AgGu-185 (SE 24)
- AgGu-199 (SE 13)
- AgGu-217 (SE 26(7A))

At present a construction monitoring schedule cannot be presented as the final construction timeline is yet to be determined. A letter from the proponent confirming their adherence to Section 7.8.5, Standards1.e.i-iii, including requirements for provision of protective buffer zones, archaeological monitoring zones and the presence of a licensed archaeologist during ground disturbing construction activities at any sites requiring monitoring was submitted to the MTCS as part of the electronic submission for this report.

The Ministry is satisfied with these recommendations.

This letter does not waive any requirements which you may have under the Ontario Heritage Act. A separate letter addressing archaeological licensing obligations under the Act will be sent to the archaeologist who completed the assessment and will be copied to you.

This letter does not constitute approval of the renewable energy project. Approvals of the project may be required under other statutes and regulations. It is your responsibility to obtain any necessary approvals or licences.

Please feel free to contact me if you have questions or require additional information.

Sincerely,

Irena Jurakic
A/Archaeology Review Officer

cc. Ms. Doris Dumais, Director, Ministry of the Environment – Approvals Program

Stage 2 Archaeological Assessment



Stantec

NIAGARA REGION WIND PROJECT
FINAL STAGE 2 ARCHAEOLOGICAL
ASSESSMENT, Various Lots,
Concessions 1-6 Gainsborough
Township, Concessions 7-10 Clinton
Township, Regional Municipality of
Niagara and Various Lots, Moulton
Township, Haldimand County, Ontario
REVISED REPORT

File No. 160950269
PIF# P002-289-2012
April 1, 2013

Prepared for:

Niagara Region Wind Corporation
277 Lakeshore Road East, Suite 211
Oakville, ON L6J 6J3

Prepared by:

Colin Varley (P002)

Stantec Consulting Ltd
2791 Lancaster Rd., Suite 200
Ottawa, ON K1B 1A7

Executive Summary

Stantec Consulting Ltd. (Stantec) was retained by Niagara Region Wind Corporation to prepare a Renewable Energy Approval Application, as required under Ontario Regulation 359/09 – Renewable Energy Approvals under Part V.0.1 of the *Environmental Protection Act* (O.Reg. 359/09)

Niagara Region Wind Corporation is proposing to develop, construct, and operate the 230 Megawatt (MW) Niagara Region Wind Farm (the Project) within the Townships of West Lincoln and Wainfleet and the Towns of Grimsby and Lincoln within the Niagara Region and within Haldimand County in Southern Ontario, in response to the Government of Ontario's initiative to promote the development of renewable electricity in the province. The Project Study Area is generally bounded by: Caistor Gainsborough Road to the West; the Queen Elizabeth Way to the North; the north shore of Lake Erie to the South and Balfour Street to the East.

A Stage 2 Archaeological Assessment (AA) was required in support of environmental permitting for the project. Based on a review of aerial imagery, existing archaeological potential maps, information regarding registered archaeological sites in the vicinity, local physiography and topography, Census returns, 19th century maps of the project area and soil integrity, a previous Stage 1 AA had identified that the majority of the Project Area is considered to have elevated potential for the presence of previously unknown archaeological resources of both prehistoric and historic disposition.

Given the elevated archaeological potential for both prehistoric and historic period archaeological resources within the Study Area it was recommended that any lands which are planned to be disturbed for development activity (including construction laydowns, temporary storage areas, etc.) undergo Stage 2 Archaeological Assessment prior to any ground disturbances.

The Stage 2 AA resulted in the identification of fifty (50) archaeological sites which meet criteria for further assessment and have been recommended to proceed to Stage 3 AA. There are an additional forty-one (41) artifact clusters and one hundred (100) Isolated Findspots identified and recorded for which the cultural heritage and value of the site has been sufficiently addressed at the Stage 2 AA and have not been recommended for further work.

NIAGARA REGION WIND PROJECT
FINAL STAGE 2 ARCHAEOLOGICAL ASSESSMENT
EXECUTIVE SUMMARY
April 1, 2013

NIAGARA REGION WIND PROJECT
STAGE 2 ARCHAEOLOGICAL ASSESSMENT

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List of Appendices

Appendix A: List of Registered Archaeological Sites Within the Study Area

Appendix B: Artifact Catalogues

Project Personnel

Project Director	Colin Varley, MA, RPA, Licence #P002
Field Directors	Colin Varley, MA, RPA Paige Glenen, M.Sc. (R386) Christienne Uchiyama, MA (P376) Tom Irvin, MA (P379) Vincent Bourgeois, MA (P381) Darren Kipping, MA (R422) Luke Fischer (R219)
Field Crew	Tavis Maplesden, B.A. Courtney Cameron, MA (P371) Krista Lane (R382) Genevieve Ferguson Kurt Hartung Melissa Wallace Courtney Merner Steven Van Damme (R466) Mandy MacKinnon Lauren Zapishny (R464) Laura Riffle Allison Jaagumagi
Report	Colin Varley, MA, RPA Paige Glenen, M.Sc. (R386) Courtney Cameron MA (P371) Sarah Rogers, B.Sc. (Hons.), G.Dip.

1.0 Introduction

Stantec Consulting Ltd. (Stantec) was retained by Niagara Region Wind Corporation (NRWC) to prepare a Renewable Energy Approval (REA) Application, as required under Ontario Regulation 359/09 – Renewable Energy Approvals under Part V.0.1 of the *Environmental Protection Act* (O.Reg. 359/09). According to subsection 6.(3) of O.Reg. 359/09, the Project is classified as a Class 4 Wind Facility and will follow the requirements identified in O.Reg.359/09 for such a facility.

This Stage 2 Archaeological Assessment is one component of the REA Application for the Project and has been prepared in accordance with the application guidelines.

The Project was initiated during the pre-submission phase of the development process. This Stage 2 AA has been conducted in accordance with the 2011 *Standards and Guidelines for Consultant Archaeologists* prepared by the Ministry of Tourism, Culture and Sport (MTCS).

2.0 Project Context

2.1 DEVELOPMENT CONTEXT

2.1.1 Project Description

Niagara Region Wind Corporation is proposing to develop, construct, and operate the 230 Megawatt (MW) Niagara Region Wind Farm (the Project) within the Townships of West Lincoln and Wainfleet and the Towns of Grimsby and Lincoln within the Niagara Region and within Haldimand County in Southern Ontario, in response to the Government of Ontario's initiative to promote the development of renewable electricity in the province. The Project Study Area is shown in Figure 1.

The basic components of the Project include 77 wind turbine generators (80 potential locations identified) each with a rated capacity of approximately 3.0 MW for a maximum installed nameplate capacity of 230 MW. An overhead and/or underground collection system connects each turbine to one of two transformer substations along a series of 34.5 kilovolt (kV) lines. Turbines are grouped into eight collector circuits that bring power (and data via fibre optic lines) to one of the transformer substations. Voltage is stepped up from 34.5kV to 115kV at each transformer substation by means of a 100 MVA base rated transformer with two stages of cooling (via fans). A 115kV transmission line transports power from each of the two transformer substations north to the tie-in location where the Project is connected to the Hydro One Networks Inc. (HONI) owned transmission line, south of the Queen Elizabeth Way (QEW) in Lincoln. Power generated from this Project will be conveyed along the existing HONI transmission line to the Beach Transformer Station in Hamilton.

Alternate transmission and collector lines routes have been identified and assessed to provide options during detailed design, the final selection of which route to follow will be confirmed following the consultation process, agency review and detailed design.

Other Project components include access roads, associated culverts at swales and waterbody crossings, and an operations and maintenance building. Temporary components during construction may include temporary laydown areas (for storage and staging areas at each turbine location), crane pads or mats, staging areas along access roads, delivery truck turnaround areas, central construction laydown areas and crane paths. All project components are illustrated on Figures 2a to 2e.

2.1.2 O.Reg. 359/09 Requirements

Stage 2 Archaeological Assessment (AA) has been conducted in accordance with Ontario Regulation (O.Reg. 359/09). All wind facilities, except for Class 2 wind facilities as outlined in Section 20, must follow Sections 21 and 22 of O.Reg. 359/09. Subsection 21 (2) states that:

(2) A person to whom this section applies shall ensure that,

(a) an archaeological assessment is conducted by a consultant archaeologist; and

(b) an archaeological assessment report is prepared by the consultant archaeologist mentioned in clause (a) and submitted to the Ministry of Tourism, Culture and Sport.

This report has been conducted by a consultant archaeologist as defined in Section 1:

“consultant archaeologist” means a consultant archaeologist as defined in subsection 1 (1) of Ontario Regulation 8/06 (Licences under Part VI of the Act — Excluding Marine Archaeological Sites) made under the Ontario Heritage Act.

In order to satisfy O.Reg.359/09, s.22 this Stage 2 Archaeological Assessment must be submitted to the Ministry of Tourism, Culture and Sport (MTCS) for review. Furthermore, comments provided by the MTCS must be included in the REA submission:

22. *As part of an application for the issue of a renewable energy approval, a person subject to subsection ... 21 (2) shall submit,*

(a) written comments provided by the Ministry of Tourism, Culture and Sport in respect of the archaeological assessment; [and]

(b) the archaeological assessment report.

2.1.3 Study Area

The Project will be located on privately owned lands and within municipal Rights of Way (RoW). The legal description of the parcels of land that will be used for the Project will be provided as part of the REA application.

The Project will be located within the Townships of West Lincoln and Wainfleet and the Towns of Grimsby and Lincoln within the Regional Municipality of Niagara and in Moulton Township, Haldimand County in Southern Ontario. The Project Study Area covers approximately 33,747.5 hectares (ha) and is generally bounded by Castor Gainsborough Road to the West; the Queen Elizabeth Way to the North; the north shore of Lake Erie to the South; and Balfour Street to the East (Figure 1).

Settlements in the general vicinity of the Project include Saint Anns, Silverdale, Rosendene, Bismark, Boyle, Fenwick, Vaughan, Elcho, Perry, Becketts Bridge, Wellandport, Mount Carmel, Forks Road, Lowbanks, Willow Bay, Beamsville, Smithville and Grimsby. The Study Area is primarily rural agricultural with small settlements scattered throughout the landscape, with more urban land uses located in the north along the south shore of Lake Ontario. Many woodlands and wetlands occur throughout the Study Area, which includes portions of the Niagara

Escarpment and Greenbelt Areas. Short Hills Provincial Park is located to the east of the Project Study Area and Rock Point Provincial Park is located to the south.

In accordance with O. Reg. 359/09, the "Project Location" includes all land and buildings/structures associated with the Project and any air space in which the Project will occupy. This includes structures such as turbines, access roads and power lines as well as any temporary work areas (the 'constructible area' for the Project) which are required to be utilized during the construction of the Project.

The "Project Study Area" was established to scope the siting of the proposed wind turbines, collector lines, access roads and temporary work areas. Similarly, the "Interconnector Study Area" was established to scope the location of the proposed 115kV transmission line, transformer substations and tie-in location. These two terms are intended to assist with background data collection and consultation, however have no formal definition or application under O.Reg. 359/09.

For the purposes of the REA reports, the "Zone of Investigation" includes all land, air and water within 120 metres of the "Project Location" where site investigations are required and were completed in accordance with O.Reg. 359/09.

Although O. Reg. 359/09 considers the REA process in terms of the Project Location, the siting process for wind projects is an iterative process and final location of Project components is not available at Project outset. Therefore, a Project Study Area is developed to examine the general area within which the Project components may be sited. Information gathered within this larger area feeds into the siting exercise.

Permission to access the various Project properties was secured from individual landowners by the proponent and fieldwork was conducted between May and December 2012.

2.2 HISTORIC CONTEXT

2.2.1 Archaeological Culture History of Southern Ontario

The following historical review is based on that found in the Stage 1 AA report for the Project (Stantec, 2012a).

The following summary of the prehistoric occupation of Southern Ontario (see Table 1 for chronological chart) is based on syntheses in Archaeologix (2008), Ellis and Ferris (1990) and Jacques Whitford (2008).

The first identified human occupation of Ontario begins just after the end of the Wisconsin Glacial period. The first human settlement can be traced back 11,000 years, when this area was settled by Native groups that had been living to the south of the emerging Great Lakes. This initial occupation is referred to as the "Palaeo-Indian" archaeological culture.

Early Palaeo-Indian (EPI) (11,000-10,400 BP) settlement patterns suggest that small groups followed a pattern of seasonal mobility extending over large territories. Many (although by no means all) of the EPI sites were located on former beach ridges associated with Lake Algonquin, the post-glacial lake occupying the Lake Huron/Georgian Bay basin, and it is likely that the vegetative cover of these areas would have consisted of open spruce parkland, given the cool climatic conditions. Sites tend to be located on well-drained loamy soils on elevations in the landscape, such as knolls. The fact that artifact assemblages of EPI sites are composed exclusively of stone skews our understanding of general resource extraction and use patterns. The taking of large game, such as caribou, mastodon and mammoth, appears to be of central importance to the sustenance of these early inhabitants. Moreover, EPI site location often appears to be located in areas which would have intersected with migratory caribou herds.

The Late Palaeo-Indian (LPI) period (10,400-10,000 BP) is poorly understood compared to the EPI, the result of less research focus than the EPI. As the climate warmed the spruce parkland was gradually replaced and the vegetation of Southern Ontario began to be dominated by closed coniferous forests. As a result many of the large game species that had been hunted in the EPI period either moved north with the more open vegetation, or became extinct. Like the EPI, LPI peoples covered large territories as they moved around to exploit different resources.

Table 1: Southern Ontario Prehistoric Cultural Chronology, Years Before Present (BP)		
ARCHAEOLOGICAL Period	Time	Characteristics
Early Palaeo-Indian	11,000–10,400 BP	caribou and extinct Pleistocene mammal hunters, small camps
Late Palaeo-Indian	10,400–10,000 BP	smaller but more numerous sites
Early Archaic	10,000-8,000 BP	slow population growth, emergence of woodworking industry, development of specialised tools
Middle Archaic	8,000–4,500 BP	environment similar to present, fishing becomes important component of subsistence, wide trade networks for exotic goods
Late Archaic	4,500-3,100 BP	increasing site size, large chipped lithic tools, introduction of bow hunting
Terminal Archaic	3,100-2,950 BP	emergence of true cemeteries with inclusion of exotic trade goods
Early Woodland	2,950-2,400 BP	introduction of pottery, continuation of Terminal Archaic settlement and subsistence patterns
Middle Woodland	2,400-1,400 BP	increased sedentism, larger settlements in spring and summer, dispersed smaller settlement in fall and winter, some elaborate mortuary

Table 1: Southern Ontario Prehistoric Cultural Chronology, Years Before Present (BP)

ARCHAEOLOGICAL Period	Time	Characteristics
		ceremonialism
Transitional Woodland	1,400-1,100 BP	incipient agriculture in some locations, seasonal hunting & gathering
Late Woodland (Early Iroquoian)	1,100-700 BP	limited agriculture, development of small village settlement, small communal longhouses
Late Woodland (Middle Iroquoian)	700-600 BP	shift to agriculture as major component of subsistence, larger villages with large longhouses, increasing political complexity
Late Woodland (Late Iroquoian)	600- 350 BP	very large villages with smaller houses, politically allied regional populations, increasing trading network

The transition from the Palaeo-Indian period to the Archaic archaeological culture of Ontario prehistory is evidenced in the archaeological record by the development of new tool technologies, the result of using an increasing number of resources as compared to peoples from earlier archaeological cultures, and developing a broader based series of tools to more intensively exploit those resources. During the Early Archaic period (10,000-8,000 BP), the jack and red pine forests that characterized the LPI environment were replaced by white pine dominated forests, with some deciduous elements. Early Archaic projectile points differ from Palaeo-Indian forms most notably by the presence of side and corner notching on their bases. A ground stone tool industry, including celts and axes, also emerges, indicating woodworking to be an important component of the technological development of Archaic peoples. Although there may have been some reduction in the degree of seasonal movement, it is still likely that population density during the Early Archaic was low, and band territories large.

The development of a more diversified tool technology continued into the Middle Archaic period (8,000 -4,500 BP). The presence of grooved stone net-sinkers suggests an increase in the importance of fishing in subsistence activities. Another new tool, the bannerstone, also made its first appearance during this period. Bannerstones are ground stone weights that served as a counterbalance for "atlatls" or spear-throwers, again indicating the emergence of a new technology. The increased reliance on local, often poor quality chert resources for chipped stone tools suggests that in the Middle Archaic groups inhabited smaller territories that often did not encompass a source of high quality raw material. In these instances lower quality materials which had been glacially deposited in local tills and river gravels were used.

This reduction in territory size appears to have been the result of gradual region-wide population growth, which forced a reorganization of subsistence practices, as more people had to be supported from the resources of a smaller area. Stone tools especially designed for the preparation of wild plant foods suggest that subsistence catchment was being widened and new resources being more intensively exploited. A major development of the later part of the Middle Archaic period was the initiation of long distance trade. In particular, native copper tools manufactured from sources near Lake Superior were being widely traded.

The trend towards decreased territory size and a broadening subsistence base continued during the Late Archaic (4,500-2,900 BP). Late Archaic sites are far more numerous than either Early or Middle Archaic sites. It appears that the increase in numbers of sites at least partly represents an increase in population. However, around 4,500 BP water levels in the Great Lakes began to take their modern form, rising from lower levels in the Early and Middle Archaic periods. It is likely that the relative paucity of earlier Archaic sites is due to their being inundated under the rising lake levels.

The appearance of the first true cemeteries occurs during the Late Archaic. Prior to this period, individuals were interred close to the location where they died. However, with the advent of the Late Archaic and local cemeteries individuals who died at a distance from the cemetery would be returned for final burial at the group cemetery, often resulting in disarticulated skeletons, occasionally missing minor bone elements (e.g. finger bones). The emergence of local group cemeteries has been interpreted as being a response to both increased population densities and competition between local groups for access to resources as cemeteries would have provided symbolic claims over a local territory and its resources.

Increased territoriality and more limited movement are also consistent with the development of distinct local styles of projectile points. The trade networks which began in the Middle Archaic expand during this period, and begin to include marine shell artifacts (such as beads and gorgets) from as far away as the Mid-Atlantic coast. These marine shell artifacts and native copper implements show up as grave goods, indicating the value of the items. Other artifacts such as polished stone pipes and slate gorgets also appear on Late Archaic sites. One of the more unusual of the Late Archaic artifacts is the "birdstone", a small, bird-like effigy usually manufactured from green banded slate.

The Early Woodland period (2,900-2,200 BP) is distinguished from the Late Archaic period primarily by the addition of ceramic technology. While the introduction of pottery provides a useful demarcation point for archaeologists, it may have made less difference in the lives of the Early Woodland peoples. The first pots were very crudely constructed, thick walled, and friable. It has been suggested that they were used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil. These vessels were not easily portable, and individual pots must not have enjoyed a long use life. There have also been numerous Early Woodland sites located at which no pottery was found, suggesting that these poorly constructed, undecorated vessels had yet to assume a central position in the day-to-day lives of Early Woodland peoples.

Other than the introduction of this limited ceramic technology, the life-ways of Early Woodland peoples show a great deal of continuity with the preceding Late Archaic period. For instance, birdstones continue to be manufactured, although the Early Woodland varieties have "pop-eyes" which protrude from the sides of their heads. Likewise, the thin, well-made projectile points which were produced during the terminal part of the Archaic period continue in use. However, the Early Woodland variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance. The trade networks which were established in the Middle and Late Archaic also continued to function, although there does not appear to have been as much traffic in marine shell during the Early Woodland period. These trade items were included in increasingly sophisticated burial ceremonies, some of which involved construction of burial mounds.

In terms of settlement and subsistence patterns, the Middle Woodland (2,200-1,100 BP) provides a major point of departure from the Archaic and Early Woodland periods. While Middle Woodland peoples still relied on hunting and gathering to meet their subsistence requirements, fish were becoming an even more important part of the diet. Middle Woodland vessels are often heavily decorated with hastily impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of Middle Woodland vessels are easily identifiable.

It is also at the beginning of the Middle Woodland period that rich, densely occupied sites appear along the margins of major rivers and lakes. While these areas had been utilized by earlier peoples, Middle Woodland sites are significantly different in that the same location was occupied off and on for as long as several hundred years. Because this is the case, rich deposits of artifacts often accumulated. Unlike earlier seasonally utilized locations, these Middle Woodland sites appear to have functioned as base camps, occupied off and on over the course of the year. There are also numerous small upland Middle Woodland sites, many of which can be interpreted as special purpose camps from which localized resource patches were exploited. This shift towards a greater degree of sedentism continues the trend witnessed from at least Middle Archaic times, and provides a prelude to the developments that follow during the Late Woodland period.

The relatively brief period of the Transitional Woodland period is marked by the acquisition of cultivar plants species, such as maize and squash, from communities living south of the Great Lakes. The appearance of these plants began a transition to food production, which consequently led to a much reduced need to acquire naturally occurring food resources. Sites were thus occupied for longer periods and by larger numbers of people. Sites of the Transitional Woodland in the Hamilton and Niagara Peninsula area are part of the Princess Point Complex, named after the Princess Point site in Cootes Paradise, at the west end of Burlington Bay on Lake Ontario.

The Late Woodland period in southern Ontario is associated with societies referred to as the Ontario Iroquois Tradition. This period is often divided into three temporal components; Early, Middle and Late Iroquoian (Table 1).

Early Iroquoian peoples continued to practice similar subsistence and settlement patterns as the Transitional Woodland. Villages tended to be small, with small longhouse dwellings that housed either nuclear or, with increasingly, extended families. Smaller camps and hamlets associated with villages served as temporary bases from which wild plant and game resources were acquired. Horticulture appears to have been for the most part a supplement to wild foods, rather than a staple.

The Middle Iroquoian period marks the point at which a fully developed horticultural system (based on corn, bean, and squash) emerged, and at which point cultivars became the staple food source. In this period villages become much larger than in the Early Iroquoian period, and longhouses also become much larger, housing multiple, though related, nuclear families. Food production through horticulture resulted in the abandonment of seasonal mobility that had characterized aboriginal life for millennia. Hunting, fishing, and gathering of wild food activities continued to occur at satellite camps. However, for the most part most Iroquoian people inhabited large, sometimes fortified villages throughout southern Ontario.

The Late Iroquoian period in the Niagara Peninsula, along the north shore of Lake Erie and at the western end of Lake Ontario is marked by the emergence of the Neutral Iroquoians, one of several discrete groups that emerge from the Middle Iroquoian period. Neutral settlements include large villages of several longhouses and a number of associated smaller satellite villages (hamlets), seasonally occupied sites with only one or two small “cabins” (usually associated with working horticultural fields), and camps for specialized extractive activities such as hunting and fishing.

Discrete clusters of politically allied Neutral villages have been identified from the late prehistoric and early historic period. The Project Area is situated in close proximity to the Lower Grand River cluster, located on both sides of the Grand River above and below the Town of Cayuga, the Upper Twenty Mile Creek cluster to the west and the Grimsby cluster to the north

2.2.2 Historic Period Occupation

The historic land use of the subject properties within the larger project area was predominantly agricultural, including ploughed fields, pasture and orchards. No Project Areas where infrastructure will be located have been subject to any notable development inconsistent with agricultural activities which were historically present. At some locations there are wood lots present, which are often associated with land not suited for agricultural purposes. The historical use of most of the properties as agricultural fields allowed for the majority of the Stage 2 AA to be conducted using a pedestrian survey strategy. Test pit excavation accounted for only a small part of the Stage 2 AA.

Present land use of each property can be found in Table 4.

2.2.2.1 Niagara Region

The earliest written record of the Niagara Peninsula dates to an account of Niagara Falls published in 1604. The account had been written by Samuel de Champlain and was based on the stories of First Nations populations he encountered during his first trip to what is now Canada in 1603 (de Volpi, 1966). Etienne Brûlé may have visited the Niagara Region as early as 1611, but it was not until 1615 that Champlain, personally, explored Lake Ontario. The Niagara River between Lake Ontario and Lake Erie was outlined in the 1632 *Les Voyages de la Nouvelle France Occidentale, Dicte Canada, Faits par le Sr. De Champlain* (de Volpi, 1966). In 1678 Father Jean Louis Hennepin sketched the Falls (de Volpi, 1966). The sketch was reproduced in 1697 in Father Hennepin's *Nouvelle découverte d'un très grand pays situé dans l'Amerique, entre le Nouveau Mexique et la mer glaciale*. An illustration, showing a ladder ascending the Falls, accompanied a story in a 1751 edition of *The Gentleman's Magazine*. Although French explorers, missionaries and traders would continue to pass through the area during the 17th and 18th centuries, no concerted effort was made by the French to settle the region, although a series of forts, blockhouses and fortified trading posts were constructed near present-day Youngstown, New York at the mouth of Niagara River, including: Fort Conti, 1678-1679 (destroyed by fire); Fort De Nonville, 1687-1688 (abandoned); and Fort Niagara, 1726 (captured by British forces in 1759) (Porter, 1896).

The stone fort at Niagara was enlarged to its present-day size around 1755 in response to increased tension in the region between the French and British. The fort was captured by the British following a 19-day siege led by Sir William Johnson (Porter, 1896). When writing about Fort Niagara and the Niagara Peninsula in his 1770 *A General History of the British Empire in America*, John Huddleston wrote that, "Niagara is without exception the most important post in America and secures a greater number of communications, through a more extensive country, than perhaps any other pass in the world" (Wynne, 1770). When the Province of Quebec was divided into Upper and Lower Canada in 1791, Lieutenant-Governor John Graves Simcoe chose Niagara as the first seat of government for Upper Canada (1792 until 1794) and began surveying the region to accommodate settlement (de Volpi, 1966).

During the War of 1812, the Niagara Peninsula was the setting for a number of pivotal battles, including those at Queenston Heights, Fort George, Chippewa, Fort Niagara, and Lundy's Lane. Owing to its close proximity to the United States, the region was one of the first settled as a result of the war by United Empire Loyalists (UELs), German mercenaries, Pennsylvania German settlers, First Nations, and those wishing to take advantage of generous land grants and low tax rates aimed at stimulating settlement along the Canadian-United States border.

The Welland Canal, built between 1824 and 1830, provided a gateway between Lake Ontario and Lake Erie and established the Niagara Peninsula as an economic and commercial centre, particularly given the superior agricultural conditions in the area.

2.2.2.2 Caistor Township, Lincoln County

Lieutenant Governor John Graves Simcoe issued a proclamation in 1792 dividing Upper Canada into nineteen counties. Lincoln County was one of these original nineteen (Lincoln County Council, 1956). Each of the townships in Lincoln County were given the names of British towns in Lincoln County, England. Lincoln County was established through a Provincial Act in 1798 which stated that, “the township of Clinton, Grimsby, Saltfleet, Barton, Ancaster, Glanford, Binbrook, Gainsborough and Caistor, do form and constitute the first riding of the County of Lincoln...” (Lincoln County Council, 1956).

The topography in Caistor Township is generally characterised by gently rolling hills, primary watercourses such as Twenty Mile Creek, the Chippewa River (now Welland River), and a network of smaller watercourses with fertile floodplains. Prior to European survey and settlement, Caistor was crossed by numerous trails and portage routes, some of which have evolved into modern roadways (Lincoln County Council, 1956). The first settler in Caistor Township was, by many accounts, an escaped slave by the name of Diamond who had travelled up the Chippewa River to settle along its shore in Concession 1 in 1778 (Lincoln County Council, 1956). In 1782, Henry Dochstader, a UEL from New York, was granted Lots 2, 3, and 4, Concession 1 and “bought out the improvements” attributed to Diamond. A number of UELs settled in Caistor in the 1790s, including members of the Lymburner, Merritt, Dean, and Killins families. By 1817 24 families, totaling 156 residents, had settled in Caistor (Lincoln County Council, 1956).

Early settlers in Caistor Township made use of the established trails and portage routes to carry provisions. The first saw mill was constructed in Lot 6, Concession 2 along the Chippewa River by John Lymburner in 1799 and the first log schoolhouse was constructed in Lot 2, Concession 1 in 1816 (Lincoln County Council, 1956). Small communities such as Caistorville slowly developed over the 19th and 20th centuries; however, swaths of forest and undeveloped land can still be found throughout the township.

The historical Township of Caistor was amalgamated with the Townships of South Grimsby and Gainsborough on January 1, 1970 to become the Township of West Lincoln (Township of West Lincoln, 2012).

2.2.2.3 Clinton Township, Lincoln County

Clinton Township grew quickly as a result of incentives to settle in Upper Canada at the end of the 18th century. By 1800, at least 66 families were living in Clinton Township (Lincoln County Council, 1956). Among the earliest settlers in the area was Jacob Beam, a UEL and member of Butler’s Rangers. It was after Jacob Beam that Beamsville, established as a police village only three years after the founding of Lincoln County, was named. As a UEL, Jacob Beam was originally granted 400 acres of land in Clinton Township and an additional 500 acres in Grimsby Township (Lincoln County Council, 1956). The homesteads of two early settlers, the Book and

Teeter families, may be located in optioned parcels based on information provided in Page's 1876 Illustrated Atlas of the Counties of Lincoln and Welland (Table 2).

Table 2: Early Settlers in Clinton Township					
Settler Name	Date of Settlement	Matching Names from Page (1876) within Proposed locations	Township	Lot(s)	Conc.
Book	1788-89	Clark, John, and William Book	Clinton	14-16	9, 10
Teeter	1788-89	Albert I. Teeter	Clinton	20, 21	9

Agricultural land in Clinton Township is fertile, being comprised on nutrient rich sandy loam soils. Excellent agricultural conditions, coupled with the township's advantageous location along the Niagara Escarpment, along the south shore of Lake Ontario made the area attractive to early settlement. By 1876 there were 600 residents, a court, Free Mason's lodge, Orange Hall, wine factory and a bell factory as well as numerous specialists including a tinsmith, druggist and doctor in the Village of Beamsville alone (Page, 1876).

2.2.2.4 Gainsborough Township, Lincoln County

The historic Township of Gainsborough, now part of amalgamated West Lincoln Township, was historically the largest township in the County of Lincoln. The township is characterised by rolling topography and contains two primary watercourses, the Chippewa River and Twenty Mile Creek.

John Dochstader was the first European settler to arrive in Gainsborough in 1783. Dochstader settled on Lots 1 and 2, along Concessions 1 and 2. The surrounding land was settled in the following years by members of the Heaslip, Henry, Hodges, Reese, Comfort, Gee, and Hutt families, among others (Lincoln County Council, 1956). Schoolhouses were constructed near Gee bridge and in St. Ann's prior to 1800 and the first log church was constructed on Lot 13, Concession 6 in 1799. Although settlement of Gainsborough Township was slower than others in the region due to its "inland" location, several small communities developed in the 18th and 19th century which still survive today, including: St. Ann's, Wellandport, and Bismark.

The community of St. Ann's was originally founded as Snyder's Mills in the 1790s. The settlement was named after Adam Snyder, who arrived from New Jersey in 1793 and within a year had erected a grist mill and a saw mill along the Twenty Mile Creek. An inn and trading post were constructed at St. Ann's by Adam Mingle in 1816. The name St. Ann's is said to derive from the reputation of Ann Freas, Snyder's wife, as a benevolent and welcoming woman (Lincoln County Council, 1956).

Bismark developed at the crossroads of Highway 20 and Highway 57 during the 19th century. It was once a busy market centre and the location of the township hall (Lincoln County Council, 1956).

Wellandport was settled around 1795 along a narrow strip of land between Beaver Creek and Chippewa River. The settlement is located at the present-day intersection of Highway 57 and Canboro Road. By 1820, several hotels, mills and distilleries had been constructed at Wellandport to support the community which was developing there as a result of the increasing use of the two rivers for the transportation of lumber and other goods (Lincoln County Council, 1956). Page's 1876 map of Gainsborough Township illustrates the level of development within and around optioned properties by the second half of the 19th century.

In general, land-use in Gainsborough Township remains largely agricultural. The homesteads of 17 early settlers may be located with optioned parcels of land based on information provided in Page's 1876 *Illustrated Atlas of the Counties of Lincoln and Welland* (Table 3). Among these early settlers were the Heaslip, Snyder, Lane, Gee, Johnson, Kennedy, and Dils families.

Table 3: Early Settlers in Gainsborough Township					
Settler Name	Date of Settlement	Matching Names from 1876 within Proposed locations	Township	Lot(s)	Conc.
Heaslip	1782	Leonard Heaslip	Gainsborough	11,12	1
Heaslip	1782	J.L. Heaslip, M. Heaslip	Gainsborough	13,14	4
Snyder	1793-4	Jason Snyder	Gainsborough	17	5
Snyder	1793-4	George Snyder	Gainsborough	23	6
Snyder	1793-4	Rob. Snyder	Gainsborough	8	2
Snyder	1793-4	John Snyder	Gainsborough	12	1
Lane	1793-4	N.N. Lane	Gainsborough	11	6
Lane	1793-4	Mrs. R. Lane	Gainsborough	15	3
Gee	1793-4	Abraham Gee Estate	Gainsborough	16	3
Gee	1793-4	Jacob Gee	Gainsborough	21,22	4
Gee	1793-4	C. Gee	Gainsborough	6	3

Gee	1793-4	Ezra Gee (on present-day Gee Road)	Gainsborough	20	3
Johnson	1793-4	Nathan Johnson	Gainsborough	3	5
Kennedy	1793-4	Samuel Kennedy	Gainsborough	22	5
Kennedy	1793-4	John Kennedy	Gainsborough	21	5
Kennedy	1793-4	Jacob Kennedy	Gainsborough	25,26	1
Peter Dils	1796	J.C. Dils	Gainsborough	8	1

2.2.2.5 Grimsby Township, Lincoln County

The first European settlers arrived in Grimsby Township in 1787-1788. By 1833, the township was sufficiently settled and developed to justify its division into South Grimsby and North Grimsby Townships along the Niagara escarpment, which cuts through the middle of the township from the east to the west. The settlements of Smithville and Grimsby, in South Grimsby and North Grimsby Townships, respectively, were established in the 1780s. Grimsby Township was in the home of John Green, in Grimsby Township, that the first municipal council meeting in Upper Canada was held on April 5, 1790 (Lincoln County Council, 1956).

Prior to the War of 1812 the Village of Grimsby was known as The Forty. The Forty was originally established around 1790 as settlers such as Robert Nelles, John Green and John Beamer began constructing mills along the Forty Mile Creek. By 1812, Grimsby was the site of two schools, one church, several stores and two distilleries. The Battle of Stoney Creek took place east of the settlement on June 8, 1813.

After the War of 1812 both Grimsby and Smithville continued to develop. By 1876 Grimsby had a population of over six hundred inhabitants, with four churches, three schools, a fruit canning factory, a brewery and numerous mills and stores. Smithville had a population of over seven hundred inhabitants, with five churches, two pump factories, a shingle factory, and several stores (Lincoln County Council, 1956).

2.2.2.6 Wainfleet Township, Lincoln County

Wainfleet Township is characterised by poorly drained, often marshy land and, as a result, was one of the slowest in Lincoln County to be settled (Wainfleet Historical Society, 1992). Among the first settlers in Wainfleet Township was David Morgan, who arrived from Pennsylvania during the American Revolution. Other early settlers included William Fares, Jacob Minor, Henry Zavitz, Abram Kinnaird, and Lawrence Furry, the founder of the community of Lowbanks (Sidey *et.al.*, 1887). The construction of the Feeder Canal between 1824 and 1829 further connected Wainfleet Township with neighbouring communities, but more importantly contributed to the drainage of the surrounding area (Wainfleet Historical Society, 1992). Page's 1876 map

of Wainfleet Township illustrates the level of development within and around optioned properties by the second half of the 19th century.

2.2.2.7 Haldimand County

Haldimand County is located within the Haldimand Tract, an area six miles on either side of the Grand River, from its headwaters to Lake Erie which was granted to the Six Nations in 1784. In 1792, Norfolk County was established from lands within the Haldimand Tract. Haldimand County, named after Sir Frederick Haldimand, was established as its own county in 1800 (Bructon, 1967). One of the oldest settlements in Moulton Township is Lowbanks which was founded in 1772 by Lawrence Furry, originally from Pennsylvania (Paisley, 1967).

The County was officially opened for settlement by the Crown in 1832 but settlement was slow due to heavily forested and often swampy lands. The Feeder Canal, built between 1824 and 1829, is one of the most notable man-made features in Moulton Township. It connects the Grand River at Dunnville in the west to the Welland Canal in Welland in the east. During the 19th century, regular freights along the Feeder Canal made it an important route for the transportation of timber and cordwood (Paisley, 1967). Page's 1876 map of Moulton Township illustrates the level of development within and around optioned properties by the second half of the 19th century.

2.3 ARCHAEOLOGICAL CONTEXT

There are at present one hundred and sixty six (166) registered archaeological sites within a 1 km radius of the Study Area (von Bitter, pers. comm; Appendix A). Of these 166 sites, three (3) sites (or components of multi-component sites) date to the Palaeo-Indian period, thirty two (32) sites date to the Archaic period and twenty one (21) sites date to the Woodland period. Another thirteen (13) date to the Euro-Canadian period, of which one is a Post-Contact First Nations site. One hundred and two (102) of the registered archaeological sites are of an indeterminate cultural affiliation (von Bitter, pers. comm.). One late Woodland period ossuary is located within the Study Area, but not within constructible locations (von Bitter, pers. comm.). The Study Area is not located within any municipal archaeology plans (Arcaro, 2012 pers. comm.; DeFields, 2012 pers. comm.; Eichenbaum, 2012 pers. comm.; Kolasa, 2012 pers. comm.; Langley, 2012 pers. comm.; Simon, 2012 pers. comm.).

The vast majority of the sites within the Study Area were identified by archaeologists as a result of the Environmental Assessment (EA) process for development projects between 1984 and present (ARA, 1993a, 1993b; ASI, 1988, 1989, 1990, 1992, 1997, 2001, 2005, 2009; Archaeologix, 2002; Fisher, 2001a, 2001b; Griffin-Short, 1993, 1994a, 1994b, 1995; Janusas, 1988; LMA, 2001a, 2001b, 2001c; MHC, 1992a, 1992b, 1994a, 1994b, 1994c, 1997, 2004a, 2004b, 2004c, 2004d, 2005a, 2005b, 2005c, 2006a, 2006b; MIA, 1985, 1988a, 1988b; Poulton, 1997; TMHC, 2005a, 2005b, 2005c; Woodley, 2004a, 2004b, 2004c, 2005, 2006). Research focused archaeological surveys were undertaken by D. Strothers in 1974, W. Fox in the 1970s and C. Ellis of McMaster University in 1977 (Ellis, 1979; Fox, 1976, 1979; Strothers, 1974).

Between 1984 and 2000, two surveys accounted for the majority of the archaeological sites recorded in the Study Area. The first was undertaken by Robert Pearce of the Museum of Indian Archaeology for the Ontario Waste Management Corporation in the historic Gainsborough Township. The second was undertaken by Robert Mayer for his work on a variety of subdivisions throughout the project area. Since the turn of the millennium, work has been conducted by a wide variety of archaeologists over the entire Study Area (von Bitter, pers. comm.)

The prevalence of previously recorded archaeological sites throughout the Study Area demonstrate the area's potential for the recovery of archaeological materials on all sites with soil integrity. The entire region has been intensively used by prehistoric peoples in part due to the fact several well-known sources of high quality tool stone occur within, or very close to, the Study Area. These tool sources include Haldimand and Onondaga cherts to the south and west, and Ancaster and Niagara cherts, to the northwest and northeast, respectively (Fox, 2009).

Overall conditions within the Study Area are excellent for both prehistoric and historic period occupation. Prehistoric peoples had access to a wide variety of niches for the harvesting of plant, fish and animal resources. Historic peoples encountered fertile, well-watered soils upon which to settle. In addition, the topography of the area is advantageous for transportation due to its proximity to both Lake Erie and Ontario and the numerous watercourses throughout the region.

The Study Area is located in the Haldimand Clay Plain physiographic region, a large region that occupies the majority of the Niagara Peninsula south of the Niagara Escarpment down to Lake Erie. It is a region of approximately 1,350 square miles characterized by recessional moraines in the northern part, deep river valley in the middle, and flat and low lying ground in the south (Chapman and Putnam, 1984).

The vast majority of the surficial geology of the Study Area is silty heavy clay loam till and alluvial deposits in flood plains spanning the length of region's waterways. In the historic Lincoln County the dominant soil series is Haldimand clay loam with small pockets of Lincoln clay till, predominately along waterways (Wicklund and Mathews, 1963). The surficial geology in the historic Welland County is similar, although Berrien and Wauseon series sandy loam soils are also found within the Study Area (Presant and Kingston, 1989). In Haldimand County the silty clay loam tills, such as the Gobles and Kelvin series of soils, are characterized by poor to imperfect drainage (Presant and Acton, 1984).

2.4 RECENT REPORTS

Other than the existing historic documentation, the Niagara Region Wind Project has been documented in recent archaeological assessments, names the Stage 1 archaeological assessment conducted by Stantec, entitled *Niagara Region Wind Farm Stage 1 Archaeological Assessment, Various Lots, Concessions 1-6 Gainsborough Township, Concessions 7-10 Clinton Township, Regional Municipality of Niagara and Various Lots, Moulton Township,*

Haldimand County (Stantec, 2012a) produced by Stantec on December 2, 2012 under PIF P002-263-2011. Stantec recently conducted a Stage 1 Archaeological Assessment of the Hydro One Networks Inc. Transmission Line Upgrade within the study area. This report was entitled *DRAFT Stage 1 Archaeological Assessment, Hydro One Networks Inc. Transmission Line Upgrade, Lots 21-23, Concession 1, Clinton Township, Lots 1-23, Concession 1 and Lot A, East Gore, Grimsby Township, Regional Municipality of Niagara and Lots 1-33, Concession 1, Saltfleet Township, Wentworth County, City of Hamilton* produced by Stantec on December 18, 2012 under PIF P376-001-2012 (Stantec, 2012b).

3.0 Stage 2 Field Methods

Field assessment followed standard procedures as outlined in the 2011 *Standards and Guidelines for Consultant Archaeologists* prepared by the Ministry of Tourism, Culture and Sport (MTCS, 2011). All Stage 2 AA survey was completed under weather and light conditions that permitted good visibility. The NRW Stage 2 AA encompassed a total of 647.23 ha, 545.73 ha (84.2%) was assessed through pedestrian survey, 1.67 ha (0.3%) was assessed through test pit survey, 97.49 (15.1%) ha was disturbed (this includes roadways within the project area that the transmission, collectors, and fibre optic lines run through), 0.34 ha or 0.05% was not assessed due to a slope >20 degrees, 0.33 ha or 0.05 % was old project component that will not be used and the remaining 1.67 ha or 0.3 % were low lying and wet (not surveyed) (Table 4).

The collector lines, transmission lines, and fibre optic cables are all within disturbed roadways, unless otherwise noted.

The survey perimeters were identified in the field with stakes placed by surveyors to be used as a guide for ploughing to the project extents. Where ploughing was not possible and a test pit survey was conducted the stakes were placed to indicate project extent. GPS coordinates were also available on the field mapping carried by field directors during all field work.

All pedestrian survey was completed on recently ploughed lands with greater than 80% visibility of the ground surface at 5 m intervals (or less). Ploughing of the fields was deep enough to provide total topsoil exposure. Ploughed fields were allowed to weather through several rainfalls prior to pedestrian survey. When artifacts were encountered survey interval was reduced to 1 m intervals and intensified for an area of minimum 20 x 20 m from either the individual artifact or from the center of the initial scatter encountered until the full extent of the site was determined. Test pits were excavated at 5 metre (m) intervals in a grid pattern across the Project property. Each test pit was excavated by hand and was a minimum of 30 cm diameter and was excavated 5 cm into subsoil to allow for examination of stratigraphy, evidence of cultural features or fill soils. All excavated soil was passed through a screen of 6 mm mesh. All test pits were backfilled. Positive pits provided enough artifacts for Stage 3 recommendation without digging a 1 x 1 m test unit. All diagnostic or formal tools encountered during the survey were collected.

Recording of archaeological site locations for the 2012 Stage 2 AA was conducted using a handheld Garmin GPS75 Geographic Position System (GPS) device. All GPS co-ordinates in this study were located in the UTM grid 17T and were recorded using the North American Datum (NAD) 83 datum. The method of correction for GPS co-ordinates was 3D Differential GPS (DGPS).

All diagnostic or formal tools were collected during the Stage 2 AA. Projectile Points collected during the field survey were given specific numeric designations by tool type (e.g., Point).

Table 1: Location, Survey Strategy and Results of Stage 2 AA By Survey Area							
Survey Area	Location (Lot, Concession, Township)	Date(s) Assessed	Weather and Lighting during Assessment	Field Conditions (Agricultural field, woodlot, manicured lawn etc.)	Survey Methodology	Archaeological Sites Recorded	Associated Figures and Plates
SE 91	Lots 1, 2 and 3, Conc. 6, Gainsborough	June 4, 2012	Mild temperature, slightly overcast, good lighting	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu- 219, CL-24, CL-25, IF-46, IF-47, IF-48, IF-49	Figure 3, Supplemental Figure 1, Photos 1, 2 and 3
SE 101	Lot 38, Conc. 6, Gainsborough	June 4, 2012	Mild temperature, slightly overcast, good lighting	Agricultural field, ploughed	Pedestrian, 5 m intervals	IF-15	Figure 4, Supplemental Figure 2, Photos 4 and 5
SE 107	Lot 6, Conc. 4, Gainsborough	June 21, 2012	Warm temperature, with overcast skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGv-124, CL-27, CL-28, CL-29, IF-60, IF-61, IF-62, IF-63, IF-64	Figure 5, Supplemental Figure 3, Photos 6 and 7, Plate 4
SE 106, SE D and SE 94 1	Lots 30 and 31, Conc. 5, Gainsborough	Dec 4 and 11, 2012	Dec 4 – cool with overcast skies; Dec 11 – cool with overcast skies.	Agricultural field, ploughed; low and wet woodlot (not tested)	Pedestrian, 5 m intervals	IF-99, IF-100	Figure 6, Supplemental Figure 4, Photos 8, 9, 10 and 11.
SE 57	Lot 16 and 17, Conc.5, Gainsborough	June 4-5, 2012	Warm, slightly cloudy, both June 4 and 5	Agricultural field, ploughed	Pedestrian, 5 m intervals	IF-69, IF-70	Figure 7, Supplemental Figure 5, Photo 12
SE 52	Lot 12, Conc. 5, Gainsborough	May 23, 2012	Warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-198, IF-28	Figure 8, Supplemental Figure 6, Photo 13
SE 36	Lot 21, Conc. 4, Gainsborough	May 16, 2012	Warm temperature, overcast	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-195, IF-56, IF-57	Figure 9, Supplemental Figure 7, Photos 14 and 15.
SE 37	Lots 22 and 23, Conc. 4, Gainsborough	May 16, 2012, June 7, 2012 November 29, 2012	May 16 - warm temperature, clear skies; June 7 - hot day with clear skies, Nov 29 - cool day with overcast skies.	Agricultural field, ploughed; disturbed access road (existing farm road)	Pedestrian, 5 m intervals	AgGu-184, AgGu- 208, IF-16, IF-17, IF-18, IF-19	Figure 10, Supplemental Figure 8 and A, Photos 16 and 17, Plate 6
SE 62	Lots 24 and 25, Conc. 4, Gainsborough	June 5, 2012 December 5, 2012	June 5 - warm temperature, clear skies Dec 5 - cool temperature with clear skies.	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-196, AgGu-197, CL-26, CL-40, IF-50, IF-51, IF-52	Figure 11, Supplemental Figure 9, Photo 18, Plate 11
SE 51	Lot 25, Conc. 3, Gainsborough	May 16, 2012 June 4, 2012	May 16- Warm temperature, overcast with drizzle; June 4 warm temperature, overcast skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	None	Figure 12, Supplemental Figure 10, Photo 19
SE 39	Lot 13, Conc.4, Gainsborough	June 4, 2012	Mild temperature, some light rain, overcast skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-209, AgGu-192, AgGu-193, CL-8, IF-8, IF-9, IF-22, IF-23	Figure 13, Supplemental Figure 11, Photos 20 and 21, Plates 1 and 2
SE 83	Lot 12, Conc. 3, Gainsborough	December 12, 2012	Cool temperature, clear skies.	Fallow agricultural field, ploughed; woodlot at southern edge of property	Pedestrian and test pit, 5 m intervals	None	Figure 14, Supplemental Figure 12, Photo 22
SE 90	Lot 2, Conc.4, Gainsborough	May 23, 2012	Warm temperature, clear skies.	Agricultural field, ploughed	Pedestrian, 5 m intervals	CL-11, CL-12, IF-27	Figure 15, Supplemental Figure 13, Photo 23
SE 117	Lots 3 and 4, Conc. 3, Gainsborough	June 4, 2012 June 8, 2012 July 11, 2012	June 4-Mild temperature, overcast; June 8-warm temperature, overcast; June 11- warm temperature, clear skies.	Agricultural field, ploughed	Pedestrian, 5 m intervals	CL-18, IF 21	Figure 16, Supplemental Figure 14, Photo 24
SE 26	Lot 9, Conc. 3, Gainsborough	June 4, 2012	Mild temperature, some light rain Woodlot low lying with standing water	Agricultural field, ploughed; low and wet woodlot (not tested)	Pedestrian, 5 m intervals	AgGv-120, IF-66, IF-67	Figure 17, Supplemental Figure 15, Photos 25 and 26
SE 24	Lot 20, Conc. 3, Gainsborough	May 17-18, 2012	May 17- warm, clear skies; May 18-warm, clear skies.	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-185, AgGu-186, AgGu-187, AgGu-188, AgGu-204, AgGu-206, AgGu-207, AgGu-224, AgGu-236, CL-21,IF-1, IF-2, IF-3, IF-5, IF-42, IF-43, IF-44	Figure 18, Supplemental Figure 16 and B, Photos 27, 28 and 29, Plates 2, 5, 9 and 11
SE 45	Lot 23, Conc.2, Gainsborough	June 5, 2012	Warm temperature, clear skies	Agricultural field, ploughed; woodlot at southern edge of property	Pedestrian and test pit, 5 m intervals	AgGu-211, AgGu-194 CL-1	Figure 19, Supplemental Figure 17, Photos 30 and 31, Plate 3
SE 29-4	Lot 26, Conc.1, Gainsborough	May 25, 2012	Hot temperature, windy with overcast skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-189, CL-20, IF-41	Figure 20, Supplemental Figure 18, Photos 32 and 33, Plate 7
SE 29-5	Lots 23 and 24, Conc.	November 28, 2012	Cool day, overcast skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	IF-90	Figure 21, Supplemental Figure 19, Photo 34

Table 1: Location, Survey Strategy and Results of Stage 2 AA By Survey Area							
Survey Area	Location (Lot, Concession, Township)	Date(s) Assessed	Weather and Lighting during Assessment	Field Conditions (Agricultural field, woodlot, manicured lawn etc.)	Survey Methodology	Archaeological Sites Recorded	Associated Figures and Plates
	2, Gainsborough						
SE 14	Lot 23, Conc.1, Gainsborough	May 15, 2012 June 5, 2012 June 19, 2012	May 15-very warm temperatures, clear skies; June 5-Mild temperature, clear skies; June 19-hot day, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-190, AgGu-210, IF-29, IF-30	Figure 22, Supplemental Figure 20 and C, Photos 35 and 36, Plate 11
SE 92, SE 45 2 and SE 1	Lots 20 and 21, Conc. 2, Gainsborough and Lot 20, Conc. 3, Gainsborough	November 27, 2012	Cool day, overcast skies	Agricultural field, ploughed Manicured Lawn	Pedestrian and test pit, 5 m intervals	None	Figure 23, Supplemental Figure 21, Photo 37
SE 55	Lot 21, Conc. 2, Gainsborough	May 23, 2012	Warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	None	Figure 24, Supplemental Figure 22, Photo 39
SE 13	Lot 20, Conc.2, Gainsborough	May 8, 2012	Warm temperature, overcast skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-199, AgGu-200, AgGu-222, AgGu-227, AgGu-228, CL-35, CL-36	Figure 25, Supplemental Figure 23 and D, Photo 38, Plate 9
SE 2 and SE 27	Lots 20 and 21, Conc. 2, Gainsborough	November 27, 2012	Cool day, overcast skies	Manicured lawn	Test pit, 5 m intervals	None	Figure 26, Supplemental Figure 24, Photo 40
SE 26 (7A)	Lot 17, Conc. 2, Gainsborough	May 25, 2012 September 14, 2012	May 25- Cool, windy with overcast skies; Sept 14-Overcast, cool	Agricultural field, ploughed; low and wet stream (not tested)	Pedestrian, 5 m intervals	AgGu-191, AgGu-216, AgGu-217, AgGu-218, AgGu-223, AgGu-225, AgGu-226, IF-45, IF-82, IF-83, IF-85, IF-86, IF-87, IF-88, IF-89	Figure 27, Supplemental Figure 25 and E, Photos 41 and 42, Plates 3, 5, 8 and 10
SE 4	Lot 17, Conc.3, Gainsborough	May 17, 2012 November 28, 2012	May 17-warm, clear skies; Nov 28-cool, overcast skies	Agricultural field, ploughed; disturbed area around barn	Pedestrian, 5 m intervals	AgGu-183, AgGu-205, AgGu-209	Figure 28, Supplemental Figure 26, Photo 43, Plate 11
SE 16 (5E)	Lot 13, Conc. 3, Gainsborough	May 25, 2012 June 21, 2012	May 25-hot temperature, windy with overcast skies; June 21-hot temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-203, AgGu-212, CL-9, IF-20, IF-24	Figure 29, Supplemental Figure 27, Photo 44, Plates 1 and 4
SE 16 (5D)	Lot 14, Conc. 3, Gainsborough	June 4, 2012 June 5, 2012	Both days were warm with clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-201, AgGu-202, AgGu-220,, CL-31, IF-68	Figure 30, Supplemental Figure 28, Photo 45, Plates 4 and 9
SE 16 (5 A,B,C)	Lot 15, Conc. 2, Gainsborough	May 25, 2012 June 21, 2012	May 25-hot temperature, windy with overcast skies; June 21-hot temperature, clear skies	Agricultural field, ploughed; manicured lawn	Pedestrian, 5 m intervals; Test pit 5 m intervals	CL-10, IF-25, IF-26	Figure 31, Supplemental Figure 29, Photos 46 and 47
SE 11 (12B)	Lot 14, Conc. 3, Gainsborough	December 4, 2012	Cool temperature, overcast skies	Agricultural field, ploughed; low and wet area not tested	Pedestrian, 5 m intervals	None	Figure 32, Supplemental Figure 30, Photo 48
SE 35 (10H)	Lot 13, Conc. 3, Gainsborough	December 4, 2012	Cool temperature, overcast skies	Agricultural field, ploughed; woodlot, at western edge of property	Pedestrian and test pit, 5 m intervals	None	Figure 33, Supplemental Figure 31, Photo 49
SE 23	Lot 15, Conc. 3, Gainsborough	December 11, 2012	Cool temperature, overcast skies	Manicured lawn	Test pit, 5 m intervals	None	Figure 34, Supplemental Figure 32, Photo 50
SE 48 and SE 19	Lots 9 and 10, Conc. 3, Gainsborough	December 11, 2012	Cool temperature, overcast skies	Agricultural field, ploughed; low and wet woodlot (not tested); grassed area	Pedestrian and test pit, 5 m intervals	None	Figure 35, Supplemental Figure 33, Photos 25 and 51
SE17 and SE 27 (18B)	Lot 11, Conc.2, Gainsborough	May 16, 2012 June 21, 2012 December 11, 2012	May 16-warm temperature, overcast with drizzle; June 21-hot temperature, clear skies; Dec 11- Cool temperatures, overcast skies	Agricultural field, ploughed; woodlot at northern edge of property; low and wet area (not tested)	Pedestrian and test pit, 5 m intervals	IF-55	Figure 36, Supplemental Figure 34, Photos 52, 53, 54 and 55

Table 1: Location, Survey Strategy and Results of Stage 2 AA By Survey Area							
Survey Area	Location (Lot, Concession, Township)	Date(s) Assessed	Weather and Lighting during Assessment	Field Conditions (Agricultural field, woodlot, manicured lawn etc.)	Survey Methodology	Archaeological Sites Recorded	Associated Figures and Plates
SE 27 (18C)	Lot 8, Conc. 3, Gainsborough	May 23, 2012	Warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGv-125, IF-38	Figure 37, Supplemental Figure 35, Photo 56, Plate 4
SE 11 (12C)	Lot 4, Conc. 2, Gainsborough	May 16, 2012 June 4, 2012	May 16- Warm temperature, overcast with drizzle; June 4 warm temperature, overcast skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	IF-14	Figure 38, Supplemental Figure 36, Photo 57
SE 60 and SE 59	Lot 3, Conc. 1, Gainsborough	May 16, 2012 May 29, 2012 November 28, 2012	May 16- Warm temperature, overcast with drizzle; May 29- warm, clear skies; Nov 28-cool temperature, overcast skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGv-118, CL-19, IF-39, IF-40	Figure 39, Supplemental Figure 37, Photo 58, Plate 1
SE 59-2	Lot 4, Conc. 1, Gainsborough	November 28, 2012	Cool temperature, overcast skies	Municipal road allowance; manicured lawn	Test pit, 5 m intervals	None	Figure 40, Supplemental Figure 38, Photo 59
SE 35	Lot 6, Conc. 2, Gainsborough	June 5, 2012	Warm with clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGv-126	Figure 41, Supplemental Figure 39, Photo 60
SE 21 and SE 22	Lots 11 and 12, Conc. 1, Gainsborough	June 6, 2012 December 20, 2012	June 6- warm day with overcast skies; Dec 20- cool, overcast	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGv-121, AgGv-122, CL-32, IF-71	Figure 42, Supplemental Figure 40, Photo 61, Plates 3 and 5
SE 3 (1H)	Lots 11 and 12, Conc. 1, Gainsborough	June 8, 2012	Warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AfGv-131, AfGv-132, AfGv-133, AfGv-134, AgGv-128, AfGv-146, AgGv-129, CL-15, IF-11, IF-31, IF-32, IF-33, IF-34, IF-35, IF-36, IF-37	Figure 43, Supplementary Figure 41, Photos 62, 63 and 66, Plates 2, 5 and 12
SE 20 (14C)	Lot 2, Conc. 4, Caistor	June 5, 2012 November 30, 2012	June 5 - Warm with clear skies; November 30 – Overcast and cool	Agricultural field, ploughed; pond and disturbed access road (not tested)	Pedestrian, 5 m intervals	AgGv-119	Figure 44, Supplemental Figure 42 and F, Photo 64
SE 20 (14D)	Lot 2, Conc. 3, Caistor	June 7, 2012 June 8, 2012	Warm temperature, slightly overcast both days	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGv-123, AgGv-127, CL-34, IF-72, IF-73, IF-74	Figure 45, Supplemental Figure 43, Photo 65
SE 112	Lot 43, Conc. 7, Wainfleet	December 5, 2012	Cool temperature, overcast skies	Agricultural field, ploughed; slope >20 degrees (not tested)	Pedestrian, 5 m intervals	AfGu-62, AfGu-63, IF-91, IF-92, IF-93 IF-94, IF-95, IF-96, IF-97	Figure 46, Supplemental Figure 44, Photo 66
SE 113	Lot 42, Conc.7, Wainfleet	June 15, 2012	Warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	IF-12	Figure 47, Supplemental Figure 45, Photo 67
SE 47	Lot 41, Conc. 6, Wainfleet	June 6, 2012	Warm day with overcast skies	Agricultural field, ploughed; disturbed access road and gravel pad for barn (not tested)	Pedestrian, 5 m intervals	None	Figure 48, Supplemental Figure 46, Photo 68
SE 44	Lots 4 and 5, Gore A, Moulton	May 16, 2012 May 28, 2012	May 16-warm temperature, overcast with drizzle; May 28- warm weather, clear	Agricultural field, ploughed	Pedestrian, 5 m intervals	AfGv-140, AfGv-141	Figure 49, Supplemental Figure 47, Photo 69, Plates 4 and 5
SE 18	Lots 5 and 6, Gore A, Moulton	May 28, 2012 May 29, 2012	May 28- warm weather, clear; May 29-warm, clear skies	Agricultural field, ploughed; disturbed access road (not tested)	Pedestrian, 5 m intervals	AfGv-136, IF-65	Figures 49, 50, 51, Supplemental Figures 47, 48, 49, Photos 70 and 71, Plate 12
SE 110	Lot 4, North of Forks Road, Moulton	May 28, 2012 May 29, 2012	May 28- warm weather, clear; May 29-warm, clear skies	Agricultural field, ploughed; disturbed access road (not tested)	Pedestrian, 5 m intervals	None	Figures 49, 50, 51, Supplemental Figures 47, 48, 49, Photos 70 and 71
SE 82	Lot 8, North of Forks Road, Moulton	May 15, 2012	very warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	None	Figure 52, Supplemental Figure 50, Photo 72
SE 89	Lots 14 and 15, North of Forks Road, Moulton	June 6, 2012	warm day with overcast skies	Agricultural field, ploughed; disturbed access road (not tested)	Pedestrian, 5 m intervals	None	Figure 53, Supplemental Figure 51, Photo 73
SE 70	Lots 13 and 14, South of Forks Road, Moulton	May 15, 2012 June 5, 2012	May15- very warm temperature, clear skies; June 5- warm with clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AfGv-135, CL-14	Figure 54, Supplemental Figure 52, Photo 74

Table 1: Location, Survey Strategy and Results of Stage 2 AA By Survey Area							
Survey Area	Location (Lot, Concession, Township)	Date(s) Assessed	Weather and Lighting during Assessment	Field Conditions (Agricultural field, woodlot, manicured lawn etc.)	Survey Methodology	Archaeological Sites Recorded	Associated Figures and Plates
SE 102 7 and SE 102 1	Lots 1 - 4, South of Forks Road, Moulton	May 23, 2012 December 6, 2012 December 11, 2012	May 23-warm temperature, clear skies; Dec 6- cool temperatures, overcast; Dec 11-cool temperatures, overcast	Agricultural field, ploughed	Pedestrian, 5 m intervals	AfGv-147, IF-98	Figure 55, Supplemental Figure 53, Photo 75
SE 87	Lot 7, Conc. 2 Cross, Moulton	May 15, 2012	Very warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AfGv-129, AfGv-130, AfGv-144, AfGv-145	Figure 56, Supplemental Figure 54; Photo 76
SE 108	Lots 5 and 6, Conc.1 Cross, Moulton	May 15, 2012	Very warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	IF-53, IF-54	Figure 57, Supplemental Figure 55, Photos 77 - 80
SE 102 4	Lot 2, Conc. 3 Cross, Moulton	June 7, 2012	Warm temperature, slightly overcast	Agricultural field, ploughed	Pedestrian, 5 m intervals	None	Figure 46, Supplemental Figure 58, Photo 81
SE 116	Lots 18 and 19, South of Forks Road, Moulton	December 6, 2012 December 11, 2012	Dec 6- cool temperature, overcast; Dec 11-cool temperatures, overcast	Agricultural field, ploughed; manicured lawn at origin of access Road at Hwy 3	Pedestrian and test pit, 5 m intervals	None	Figure 59, Supplemental Figure 57, Photo 82
SE 114	Lot 26, Range 1 from Grand River, Moulton	June 8, 2012	Warm temperature, slightly overcast	Agricultural field, ploughed	Pedestrian, 5 m intervals	None	Figure 60, Supplemental Figure 58, Photo 83
SE 119	Lot 25, Range 1 from Grand River, Moulton	June 20, 2012	Very warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AfGv-139	Figure 61, Supplemental Figure 59, Photo 84
SE 115	Lot 1, Conc. 4 Cross, Moulton	May 17, 2012	Warm temperature, clear skies	Agricultural field and pasture, ploughed	Pedestrian, 5 m intervals	None	Figure 62, Supplemental Figure 60, Photo 85
SE 105	Lot 11, Conc. 3, Sherbrooke and Lots 18 and 19, Conc. 2, Moulton	June 7, 2012	Warm temperature, slightly overcast	Agricultural field, ploughed; disturbed access road (not tested)	Pedestrian, 5 m intervals	AfGv-143, AfGv-142, IF-77, IF-78	Figure 63, Supplemental Figure 61 and G, Photo 86
SE 49-4	Lots 12, 13 and 14, Conc.2 Fle, Moulton	June 6, 2012 November 29, 2012	June 6- very warm temperature, clear skies; Nov 29-cool temperature, clear skies	Agricultural field, ploughed; disturbed access road (not tested)	Pedestrian, 5 m intervals	AfGu-60	Figure 64, Supplemental Figure 62; Photo 87
SE 49-1	Lots 6, 7, and 8, Conc. 2 Fle, Moulton	June 6, 2012 November 29, 2012	June 6- very warm temperature, clear skies; Nov 29-cool temperature, clear skies	Agricultural field, ploughed; disturbed access road (not tested)	Pedestrian, 5 m intervals	None	Figure 65, Supplemental Figure 63; Photo 88
SE 79	Lot 8, Conc. 1 Fle, Moulton	June 19, 2012	Warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	IF-58, IF-59	Figure 66, Supplemental Figure 64; Photo 89
SE 77 (T24)	Lot 31, Conc. 2, Wainfleet	June 8, 2012	Warm temperature, slightly overcast	Agricultural field, ploughed; disturbed access road (not tested)	Pedestrian, 5 m intervals	None	Figure 67, Supplemental Figure 65, Photo 90
SE 77 (T23)	Lot 32, Conc. 1, Wainfleet	June 6, 2012	Very warm temperature, clear skies	Agricultural field, ploughed; disturbed access road (not tested)	Pedestrian, 5 m intervals	AfGv-137	Figure 68, Supplemental Figure 66, Photo 91
SE 77 (T49)	Lot 1, Conc. 1 Fle, Moulton	June 19, 2012	Warm temperature, clear skies	Agricultural field, ploughed; disturbed access road (not tested)	Pedestrian, 5 m intervals	AfGv-138	Figure 69, Supplemental Figure 67, Photo 92
SE 53	Lot 22, Conc. 5, Gainsborough	August 22, 2012	Very warm temperature, clear skies	Agricultural field, ploughed	Pedestrian, 5 m intervals	AgGu-213, AgGu-214, AgGu-215	Figure 70, Supplemental Figure 68, Photo 93, Plates 3, 4 and 12
Tie-in	Lot 21, Conc.1, Clinton	August 22, 2012	Very warm temperature, clear skies	Orchard	Test pit, 5 m intervals	AhGx-690	Figure 71, Supplemental Figure 69, Photo 94 and 95, Plate 9

Archaeological resources that meet the definition of artifact and archaeological site under the *Ontario Heritage Act* and the criteria listed in Section 2.2 of the 2011 *Standards and Guidelines for Consultant Archaeologists* will require Stage 3 archaeological assessment. Archaeological resources that do not require Stage 3 assessment either lack cultural heritage value or interest and, therefore, do not meet the definition of an artifact and archaeological site under the *Ontario Heritage Act* or their cultural heritage value or interest has been sufficiently assessed and documented in Stage 2. Since the Project Area is located west of the Niagara Escarpment the minimum number of non-diagnostic artifacts, such as stone flakes from the production of stone tools, for a Stage 3 assessment to be required is higher than in the remainder of the province. These more stringent requirements for land west of the Escarpment recognise that there is a much higher occurrence of archaeological sites consisting of less than ten (10) pieces of chipping detritus where their cultural heritage value or interest can be sufficiently documented and assessed at Stage 2. As outlined in the 2011 *Standards and Guidelines for Consultant Archaeologists* at least one of the following criteria should be met in order for an archaeological site to require a Stage 3 assessment:

- Pre-contact archaeological resources containing diagnostic artifacts or a concentration of artifacts (or both):
 - In pedestrian survey, finding within a 10 m x 10 m area:
 - at least one diagnostic artifact or fire-cracked rock in addition to two or more non-diagnostic artifacts; or
 - in areas on or west of the Niagara Escarpment, at least 10 non-diagnostic artifacts.
 - In test pit survey, within a 10 m x 10 m area:
 - at least one diagnostic artifact from combined test pit and test unit excavations; or
 - at least five non-diagnostic artifacts from combined test pit and test unit excavations.
- Single examples of archaeological resources of special interest:
 - Aboriginal ceramics;
 - Exotic or period-specific cherts; and
 - An isolated Palaeo-Indian or Early Archaic diagnostic artifact;
- Post-contact archaeological sites containing at least 20 artifacts that date the period of use to before 1900;
- 20th century archaeological sites where background documentation or archaeological features indicate possible cultural heritage value or interest;
- The presence of human remains.

The 2011 *Standards and Guidelines for Consultant Archaeologists* do allow for some flexibility to recommend Stage 3 assessment for archaeological sites that do not meet these criteria above based on the professional judgment of the consultant archaeologist. Given that artifact locations were recorded using a handheld GPS that had an average accuracy error of between 3-5 m at any given time some allowances have been made in determining sites that are not entirely within the designated 10 x 10 m area.

Borden numbers were requested from the Ministry of Tourism, Culture and Sport for only those archaeological sites documented that meet criteria as defined in Section 7.12 of the 2011 *Standards and Guidelines for Consultant Archaeologists*. These criteria are not the same as those used to determine if Stage 3 assessment is required for an archaeological site documented during a Stage 2 assessment. Borden numbers are an alpha-numeric numbering system for archaeological sites that is used throughout Canada. A Borden Block is composed of four letters, two major (UPPER CASE) and two minor (lower case), each letter of which represents a major and minor subdivision within the block. In the case of site AfGv-132, for instance, **A** is the major South-North locator. Each major block represents 2 degrees of Latitude from south to north (using letters A - U); **f** is the minor South-North Locator, with each minor block representing 10 minutes of Latitude from south to north (using letters a-l). **G** is the major East-West Locator, with each major block representing 4 degrees of longitude from east to west (letters A - W); **v** is the minor East-West Locator, with each minor block representing 10 minutes of longitude from east to west (letters a - x). Within each of these blocks sites are numbered consecutively as they are registered, and each site gets a unique number. In the case of site AfGv-132 this is the 132nd site found within Borden block AfGv.

4.0 Record of Finds

The documentary record generated in the field during the Stage 2 AA includes: field notes (in field books), 383 electronic photographs, and GPS points and tracks. This information is housed at the Stantec office in Ottawa. The total collection of artifacts collected from the stage 2 AA occupies one standard 38 x 20 x 25 cm (15 x 12 x 10 inch) Bankers Box. Artifacts and other records associated with the Stage 2 AA will be curated at the Stantec office in Ottawa, Ontario.

The Stage 2 AA completed by Stantec in 2012 resulted in the identification and recording of several hundred pre-contact period artifacts and several hundred historic period artifacts. All Artifacts collected during the Stage 2 AA have been processed and catalogued (Appendix B).

The majority of artifacts located were flakes or chips of stone that are the results of stone tool making. Lithic flakes exhibit different characteristics, depending on when in the tool making process they were produced. In general tool stone making follows four general stages. The following are descriptions of the stages defined and used by Stantec, based on general methodologies discussed in Joukowsky (1980) and Sharer and Ashmore (1979). Lithic analysis of more detailed macroscopic lithic characteristics (*e.g.*, identification of utilized flakes, flake retouch) is based on Andrefsky, 1998. Identification of chert types is based on information in Eley and von Bitter, 1989 and Fox, 2009.

Once a piece of lithic material has been chosen *primary reduction* of the material begins. This stage typically involves the removal of the outside, or cortex, of the stone so that a rough tool shape is produced. The product of this stage is referred to as a primary blank, which can be further modified into a wide array of formal tools. The flakes produced at this stage are often rectangular and blocky and exhibit a large amount of cortex on the flakes.

Secondary reduction occurs when a primary blank is further reduced through the removal of material from both sides of the piece, referred to as bifacial thinning. The product of this work, the secondary blank, can be used as a tool itself, or can be further refined into more formal tools. Flakes produced in this stage of reduction show some flake scarring (the marks left when flakes are removed from a piece of stone), have reduced striking platforms (the spot where percussion is applied to remove the flake), have no, or very little, cortex, and are less blocky.

The further reduction of secondary blanks into formal tool shapes is referred to as *tertiary reduction*. The same basic processes are used here as in secondary reduction, although there is the addition of more precise flake removal through pressure flaking, where the maker applies direct pressure onto a specific part of the tool in order to facilitate flake removal. Pressure flaking generally produces smaller, thinner flakes than does percussion flaking. These tertiary flakes also exhibit many more flake scars.

The fourth stage of reduction involves the sharpening, or retouching, of tool edges after the final tool shape has been achieved. These *retouch* flakes are also produced as tools are resharpened after they wear down and become dull. Retouch flakes are produced by careful pressure flaking and produce very small, narrow, and thin flakes.

Projectile point types are important in archaeological analysis as they can provide a method of assigning a date, time period or archaeological culture affiliation to a site. Projectile points identified to type in this report were analysed with reference to Ellis and Ferris, 1990, Justice, 1987 and LCOAS, n.d..

The following descriptions of field work completed and sites recorded are arranged according to Project derived SE numbers (*e.g.* SE37, SE29-4, SE27 (18C)). SE numbers were provided by the proponent and are the method by which participating landowners and properties were identified for the overall Project. In many instances several participating properties and SE numbers are shown on one figure. Record of Finds text that follows will refer specifically and only to survey and results for the SE numbers listed at the start of each SE section. Adjoining properties with different SE numbers will be discussed separately and with reference to their own figures in this report and the Supplemental Documentation.

It should also be noted that Project components are sometimes shown as extending beyond the limits of a participating property. In these instances the project components extend into existing public roadways which have been previously disturbed and were not subject to Stage 2 survey.

4.1 SE 91 (T79 & T80)

The access road and pads for SE 91 are located in Lots 1, 2 and 3, Concession 6, Gainsborough Township, on the west side of Victoria Avenue/Highway 24 (Figure 3) (Supplemental Figure 1). There are two turbine pads associated with SE 91 and one access road common to both. Both pads and access road were surveyed on June 4, 2012. The topography of this area is relatively level for the entire surveyed area. One seasonal watercourse runs parallel to and north of the access road, and another runs south of the access road and through the southernmost pad. At the time of the Stage 2 AA the channels were dry and all parts of the pad were assessed. The project area is in close proximity to the Upper Sixteen Mile Creek Wetland Complex, which borders the turbines to the east, and Upper Sixteen Mile Creek is located just north of the surveyed area (Photos 1, 2 and 3).

There were no sites requiring Stage 3 AA on SE 91. There were three (3) artifact clusters (CL-23, CL-24 and CL-25) and four Isolated Findspots (IF 46 – 49) identified during the Stage 2 AA of SE 91. No further work is recommended for SE 91.

4.1.1 SE 91 Artifact Clusters

4.1.1.1 Artifact Cluster 23 (AgGu - 219)

CL-23 is composed of three pieces of Onondaga chert lithic debitage in a 5 x 10 m area. Of the three pieces, only one (utilized flake) was kept for further analysis. The artifacts were located northeast of the proposed turbine T80. The artifacts are of indeterminate age or cultural affiliation. This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment

and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.1.1.2 Artifact Cluster 24

CL-24 is composed of three pieces of Onondaga chert lithic debitage in an area measuring 10 x 15 m. The artifacts were located east of the proposed turbine T79 and west of the tree line. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.1.1.3 Artifact Cluster 25

CL-25 is composed of four pieces of Onondaga chert lithic debitage in an area measuring 20 x 15 m. The artifacts were located east of the proposed turbine T80 along the proposed access road. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.1.2 SE 91 Isolated Findspots

4.1.2.1 Isolated Findspot 46 (Point 49)

IF-46 is composed of a single projectile point (Point 49). The projectile point was located north of the proposed turbine T80, and was collected. Point 49 is the tip of a projectile point of indeterminate age or cultural affiliation manufactured from Onondaga chert. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.1.2.2 Isolated Findspot 47

IF-47 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located north of the proposed turbine T80, and was not collected. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.1.2.3 Isolated Findspot 48

IF-48 is composed of a single utilized flake of Onondaga chert that has been heat altered. The artifact was located southeast of the proposed turbine T79, and was collected. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.1.2.4 Isolated Findspot 49

IF-49 is composed of a single Onondaga chert biface. The biface was located east of the proposed turbine along the eastern end of the proposed access road assessment area, and was collected. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.2 SE 101 (T88 & T83)

The access road and pads for SE 101 are located in Lot 38, Concession 6, Gainsborough Township, at the southern extent of Woods Road (Figure 4) (Supp. 2). There are two turbine pads associated with SE 101 and one access road common to both. Both pads and access road were surveyed on June 4, 2012. The topography of this area is level for the entire surveyed area. A series of shallow drainage features cross the area from east to west. Another crossed into the pads from the east and then changed course to the south, passing through the turbine pad areas. The drainage features are associated with the Lower Twenty Mile Creek Wetland Complex which surrounds the project area. At the time of the Stage 2 AA the channels were dry and all parts of the two pads and the part of the access road not within existing Woods Road were assessed (Photos 4 and 5).

There was one site recorded on SE 101, Isolated Findspot IF 15. No further work is recommended for SE 101.

4.2.1 SE 101 Isolated Findspot

4.2.1.1 Isolated Findspot 15 (Point 8)

IF-15 is composed of a single projectile point (Point 8). The projectile point was located east of the proposed turbine T83, and was collected. Point 8 is the basal portion of a projectile point of indeterminate age or cultural affiliation manufactured from Onondaga chert. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.3 SE 107 (T93)

The access road and pad for SE 107 are located on Lot 6, Concession 4, Gainsborough Township, on the south side of Concession 4 Road (Figure 5) (Supp.3). There is one turbine pad and one access road associated with SE 10. Pad and access road were surveyed on June 21, 2012. The topography of this area is level for the entire surveyed area. A series of shallow drainage features cross the area north to south, one crossing through the access road near the entrance at Concession 4. Another runs just to the south of the pad. The Bismark North West Slough Forest Wetland Complex abuts the southern limit of the pad. At the time of the Stage 2 AA the channels were dry and all parts of the access road were assessed (Photos 6 and 7).

One site composed of lithic debitage and one Early Woodland projectile point was located at the midpoint of the access road. The site was registered as AgGv-124. Three artifact clusters (CL-27-29), and five (5) Isolated Findspots (IF 60-64) were also identified during the Stage 2 AA of SE 107. AgGv-124 requires Stage 3 AA assessment, and further work is recommended for SE 107.

4.3.1 SE 107 Sites

4.3.1.1 NRWC-39 (AgGv-124) (Point 30)

NRWC-39 (AgGv-124) is composed of one projectile point of Onondaga chert (Point 30), a biface of Onondaga chert, and approximately 35 pieces of Onondaga chert lithic debitage. Only the projectile point and biface were collected. Point 30 is an Early Woodland (c 2950-2400 B.P.) Meadowood projectile point type with a broken base (Plate 4). The artifacts were located approximately halfway along the proposed access road north of the turbine T93 in an area approximately 20 m x 30 m.

This site meets the criteria for Stage 3 assessment as it consists of a diagnostic artifact and two or more non-diagnostic in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.3.2 SE 107 Artifact Clusters

4.3.2.1 Artifact Cluster 27

CL-27 is composed of two pieces of Onondaga chert lithic debitage in an area measuring 15 x 15 m, not collected. The cluster of artifacts was located northeast of the proposed turbine T98 location, between CL-28 and CL-29. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.3.2.2 Artifact Cluster 28

CL-28 is composed of an Onondaga chert biface and two pieces of Onondaga chert lithic debitage within a 20 x 10 m area. The cluster of artifacts was located northeast of the proposed turbine within the northeast corner of the assessment area and west of a small watercourse. The artifacts are of indeterminate age or cultural affiliation. Only the biface was collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.3.2.3 Artifact Cluster 29

CL-29 is composed of one Haldimand chert biface and one piece of Onondaga chert lithic debitage in a 10 x 15 m area. The cluster of artifacts was located east of the proposed turbine T98, north of the tree line. The artifacts are of indeterminate age or cultural affiliation. Only the biface was collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and,

as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.3.3 SE 107 Isolated Findspots

4.3.3.1 Isolated Findspot 60

IF-60 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located at the proposed turbine location. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.3.3.2 Isolated Findspot 61

IF-61 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed turbine location within the proposed laydown area. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.3.3.3 Isolated Findspot 62

IF-62 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located north of the proposed turbine location within the proposed laydown area. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.3.3.4 Isolated Findspot 63

IF-63 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located along the proposed access road, north of site NRWC-39 and west of a small watercourse. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.3.3.5 Isolated Findspot 64

IF-64 is composed of a single Onondaga chert biface. The biface was located along the proposed turbine access road, north of NRWC-39. The artifact is of indeterminate age or cultural affiliation and was collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.4 SE 106, SE D AND SE 94 1 (T66, T85 AND T94)

The turbine for SE 106 (T94) and the two turbines for SE 94 1 (T85 and T66) are both accessed from Minor Road, a seasonal usage road, on the south side of Sixteen Road, that runs parallel to SE 94 1. The project area is located on Lots 30 and 31, Concession 5, Gainsborough Township, on the south side of Sixteen Road. An access road and transmission line runs EW from SE 94 1 through SE D to connect with SE 106. The collector line continues south from T 66 to Concession 4 (Figure 6) (Supp. 4). A portion of the collector and fibre optic line that passes through the wood lot south of SE D (will be constructed through directional drilling) was not surveyed due to standing water (Photos 8 and 9). The entire area was surveyed between December 4 and 11, 2012. The topography of this area is relatively level for the entire survey area (Photos 10 and 11). At the time of the Stage 2 AA all parts of the access roads and pads were dry and assessed.

Two (2) isolated findspots (IF 99 and IF 100) were identified and recorded during the Stage 2 AA. No further work is recommended for SE 106, SE D and SE 94 1.

4.4.1 SE 106, SE D and SE 941 Isolated Findspots

4.4.1.1 Isolated Findspot 99

IF-99 is composed of a single Onondaga chert flake. The flake was located within the southeast portion of the turbine pad for turbine T85. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2. The artifact was not collected.

4.4.1.2 Isolated Findspot 100

IF-100 is composed of a single Onondaga chert biface. The biface was located along the northern edge of the access road to turbine T94, was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

4.5 SE 57 (T57)

The access roads and pad for SE 57 are located on Lots 16 and 17, Concession 5, Gainsborough Township, on the west side of Book Road (Figure 7) (Supp. 5). One turbine pad and two (2) access roads are associated with SE 57. The northernmost access road runs just south of and parallel to train tracks. Both pad and access roads were surveyed between June 4 and 5, 2012. The topography of this area is relatively level for the entire survey area (Photo 12). A shallow drainage feature crosses the area from north-east to south-west, and bifurcates between the two access roads. The drainage feature runs through both access roads and pad. At the time of the Stage 2 AA the channels were dry and all parts of the access roads and pad were assessed.

No sites were identified on SE 57. There were two (2) Isolated Findspots recorded (IF 69 and IF 70) during the Stage 2 AA. No further work is recommended for SE 57.

4.5.1 SE 57 Isolated Findspots

4.5.1.1 Isolated Findspot 69

IF-69 is composed of one piece of Onondaga chert lithic debitage. The artifact was located between the proposed turbine location and Book Road, and south of the proposed access road. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.5.1.2 Isolated Findspot 70

IF-70 is composed of one piece of Onondaga chert lithic debitage. The artifact was located east the proposed turbine location within the turbine pad assessment area. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.6 SE 52 (T56)

The access road and turbine pad for SE 52 are located on Lot 12, Concession 5, Gainsborough Township, at the eastern extent, and on the south side of Fifteen Road (Figure 8) (Supp. 6). There is one turbine pad and one access road associated with SE 52. Both pad and access road were surveyed May 23, 2012. There were no watercourses or bodies of water noted during the survey or identified in mapping. At the time of the Stage 2 AA all parts of the access road and pad were dry (Photo 13).

One site composed entirely of lithic debitage was located on the turbine pad during the survey. The site was registered as AgGu-198. One (1) isolated lithic flake (IF 28) was also located during the Stage 2 AA of SE 52. AgGu-198 requires Stage 3 AA assessment and further work is recommended.

4.6.1 SE 52 Sites

4.6.1.1 NRWC-26 (AgGu-198)

NRWC-26 (AgGu-198) is composed of over 20 pieces of Onondaga chert lithic debitage in an area measuring 10 x 15 m. Only one tertiary flake and a core were collected. The artifacts are located in the southeast corner of the proposed turbine pad lay down area. This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.6.2 SE 52 Isolated Findspots

4.6.2.1 Isolated Findspot 28

IF-28 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located at the northern end and western side of the proposed access road, next to an existing outbuilding. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.7 SE 36 (T04)

The access road and turbine pad for SE 36 are located on Lot 21, Concession 4, Gainsborough Township, on the south side of Concession 4 Road and at the southern extent of Hodgkins Road (Figure 9) (Supp. 7). There is one turbine pad and one access road associated with SE 36. Both pad and access road were surveyed May 16, 2012. The topography of the area is relatively level for the entire surveyed area (Photo 14). A shallow drainage feature enters the property from the north, abruptly turns to the west and runs out of the project area. The shallow feature does not cross on to the access road or pad. At the time of the Stage 2 AA all parts of the access road and pad were dry.

One site composed entirely of Onondaga chert lithic debitage was located near the midpoint of the pad close to the eastern extent. The site was registered as AgGu-195. There were also two (2) isolated artifacts (IF 56 and IF 57), including a projectile point of indeterminate age and cultural affiliation (IF 57) (Photo 15) located during the survey of SE 36. AgGu-195 requires Stage 3 AA assessment and further work is recommended.

4.7.1 SE 36 Sites

4.7.1.1 NRWC-16 (AgGu-195)

NRWC-16 (AgGu-195) is composed of over 10 pieces of Onondaga chert lithic debitage. A sample was collected consisting of 3 tertiary and 2 secondary flakes. The artifacts are located east of the proposed turbine within the proposed laydown area. The artifacts are located on a sandy rise in an area approximately 10 m x 10 m. This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.7.2 SE 36 Isolated Findspots

4.7.2.1 Isolated Findspot 56

IF-56 is composed of a single broken Onondaga chert biface, and was collected. The artifact was located north of the proposed turbine location along the western edge of the proposed access road right of way. The artifact is of indeterminate age or cultural affiliation. The artifact

does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.7.2.2 Isolated Findspot 57 (Point 29)

IF-57 is composed of a single broken Onondaga chert projectile point, and was collected. Point 29 was located north of the proposed turbine location along the western edge of the proposed access road right of way. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.8 SE 37 (T58)

The access road for SE 37 is located on Lots 22 and 23, while the pad is located completely in Lot 22, Concession 4, Gainsborough Township, on the south side of Concession 4 (Figure 10) (Supp. 8). The northern half of the access road is an existing gravel road on the property. There are one turbine pad and one access road associated with SE 37. The majority of the pad and the complete access road were surveyed May 16, 2012. Due to project changes the access road (within the ploughed field) was shifted from its original position running N-S at the east edge of the participating property, to running parallel to the existing farm fence line running E-W just north of the pad (Photo 17). Sections of the pad not ploughed on May 16 were surveyed on June 7, 2012, and the new access road on November 29, 2012 after ploughing and weathering. The result of Project adjustments in this area have resulted in an L-shaped area not surveyed within the ploughed field. No Project components or activities will occur in this unsurveyed area. A shallow drainage feature or creek crosses east to west immediately south of the turbine pad. The shallow feature or creek does not cross onto the pad. At the time of the Stage 2 AA all parts of the access road and pad were dry. The topography of the area is relatively level for the entire surveyed area (Photo 3), but slopes slightly down to the south, toward the creek.

One large multi-component site, consisting of historic artifacts associated with an early European homestead as well as lithic debitage was located on the access road (Photo 16). The site was registered as AgGu-184. There were also two (2) artifact clusters, CL-6 (AgGu-208) and CL-7 and four (4) Isolated Findspots (IF 16-19) (Photo 4) recorded during the Stage 2 AA.

4.8.1 SE 37 Sites

4.8.1.1 NRWC-4 (AgGu-184) (Point 50)

NRWC-4 (AgGu-184) is composed of over 150 historic and pre-contact lithic artifacts. Pre-contact artifacts were comprised of one projectile point (Point 50), two drills, a biface and lithic debitage (5 secondary, 16 tertiary and 1 core) all manufactured from Onondaga chert.

The historic artifacts consisted of glass fragments, ceramic fragments, clay pipe fragments, square nails, buttons, and a 1974 quarter (Plate 6). A sample of the historic period artifacts was

retained for further analysis and included samples of all artifact types and categories, including ceramic types that would allow for accurate dating of the site. Enough historic artifacts were left *in situ* to ensure the re-identification of the site for further work. The historic artifacts date between the early 19th century and the late 20th century. The artifacts were located along the proposed access road (old project component, no longer a constructible area) east of the proposed turbine location. The site is approximately 85 m x 50 m. Each artifact class is discussed in greater detail below. Table 5 provides a summary of the Stage 2 recovered historic artifacts.

The pre-contact artifacts were distributed across the site area, with the projectile point located along the south edge of the site. Point 50 is the mid-section of an indeterminate projectile point type. All pre-contact artifacts were collected from the surface scatter to document this component of the site.

The number and distribution of historic period artifacts at this site meet the criteria for Stage 3 assessment as it consists of at least 20 artifacts that date the period of use to before 1900 (Section 2.2 Standard 1.c). Although the distribution of pre-contact artifacts was widespread the number of formal tools identified are sufficient to meet Section 2.2, Guideline 2 and the pre-contact component of the site is considered to have sufficient cultural heritage value or interest that Stage 3 assessment would also have been recommended without reference to the extensive historic period component.

AgGu-184 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer, and a 50 m monitoring buffer (70 m total) will be erected around the site and no construction or disturbance will occur within the 70 m area (Supplemental Figure A).

Table 5: NRWC-4 (AgGu-184) Stage 2 Historic Artifact Summary

Artifact	Frequency	Percentage %
Domestic	53	84.13
Personal	8	12.69
Structural	1	1.59
Recent Material	1	1.59
Total	63	100.00

4.8.1.1.1 Domestic Artifacts

A total of 53 domestic related artifacts were recovered during the Stage 2 assessment of NRWC-4 including 40 ceramic artifacts and 13 glass artifacts.

4.8.1.1.1.1 Ceramic Artifacts

A total of 40 pieces of ceramics were recovered during the Stage 2 assessment of NRWC-4. This total includes 32 pieces of whiteware, three pieces of porcelain, two pieces of semi-porcelain, and one piece each of ironstone, redware and yellowware. Table 6 provides a breakdown of the ceramic assemblage by ware type; Table 7 provides a breakdown by decorative type.

Table 6: NRWC-4 (AgGu-184) Stage 2 Ceramic Assemblage by Ware Type

Artifact	Frequency	Percentage %
Whiteware	32	80.00
Porcelain	3	7.50
Semi-Porcelain	2	5.00
Ironstone	1	2.50
Red Earthenware	1	2.50
Yellowware	1	2.50
Total	40	100.00

Table 7: NRWC-4 (AgGu-184) Stage 2 Ceramic Assemblage by Decorative Type

Artifact	Frequency	Percentage %
Whiteware, transfer printed	22	55.00
Whiteware, painted	9	22.50
Porcelain, painted	2	5.00
Whiteware, edged	1	2.50
Porcelain, plain	1	2.50
Semi-porcelain, transfer printed	1	2.50
Semi-porcelain, plain	1	2.50
Ironstone, plain	1	2.50
Earthenware, red	1	2.50
Yellowware	1	2.50
Total	40	100.00

White ware

Whiteware is a variety of refined earthenware with a near-colourless glaze. By the 1830's it had replaced earlier, near-white ceramics such as pearlware and creamware. Early whiteware paste tends to be porous, but becomes more vitrified later in the 19th century (Adams, 1994). A total of 32 pieces of whiteware were recovered from NRWC-4 (AgGu-184).

Of the 32 pieces of whiteware, 22 were transfer printed. Early transfer printed whiteware often has thicker lines because of the paper used during the transfer of pattern from paper to ceramic. Later transfer printed whiteware was decorated using tissue paper which allowed for shading and finer line details. Oil and a sheet of glue were also used to create a design with little dots (Stelle, 2001). Transfer printing was popular throughout the 19th century. Before the 1830s blue was the most common colour used. During the 1830's and 40s other colours, such as brown, black, red, green and purple, became popular. Between 1850 and 1890 only

blue, black and brown were popular, with a variety of colours becoming popular again in the late 19th century (Adams, 1994).

Nine pieces of hand painted whiteware were recovered during the Stage 2 assessment of NRWC-4 (AgGu-184). Painted whiteware pieces are typically painted to cover the majority of the vessel with very little white showing through with blue and black being the dominant colours during the first quarter of the 19th century (Stelle, 2001). Miller suggests that polychrome patterns were most popular from 1830 to 1850 while Esary considers the peak of popularity to be from 1840-1860 (Esary, 1982; Miller 1987).

One piece of edged whiteware was recovered from NRWC-4 (AgGu-184). Edged wares are created by moulding the rim then applying colour over top (Adams 1994). Edged whiteware was produced from 1825-1891 and was at its peak from 1841 -1857 (Miller, 1987).

Ironstone

Ironstone also known as white granite and stone china was manufactured c.1815 - 1900 onward. It was used for tablewares, kitchenwares as well as toiletwares and was manufactured in large quantities in the late 19th century. Undecorated ironstone was at its peak of popularity after 1850 (Saint Mary's University, n.d.). Ironstone is a ceramic classified between earthenware and porcelain with thick vitrified white paste, a background colour of white to bluish gray tint and has a thick clear glasslike glaze (FLMNH, n.d.). One piece of ironstone was recovered from this site. The piece had no decoration. A partial maker's mark was identified as Wood & Sons Ltd, a pottery Burlsem, Staffordshire, England, in operation from 1865 to present (Godden, 1964). The specific mark on this artifact dates the artifact to 1910 or after (Godden, 1964)

Porcelain

Porcelain wares are produced with very high firing temperatures, which result in a partial vitrification of the paste. Vessel bodies tend to be translucent and can be very thin. Because of its prohibitive cost, porcelain is extremely rare on 19th century sites in Ontario but becomes relatively common by the 20th century as less expensive production techniques were developed in Europe. Three pieces of porcelain were collected from NRWC-4. Two of the pieces were hand painted and the other undecorated.

Semi-Porcelain

Semi-porcelain wares were developed by English potters during the first half of the 19th century in an attempt to replicate imported porcelain. This refined earthenware was relatively thick-bodied, with a hard opaque paste. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware quickly became widespread throughout North America. Decoration with hand-painted lustrous gold overglazes or "gilding" became popular in the 1880s and persisted until the 1940s (Hughes, 1961). Two piece of semi-porcelain were collected from NRWC-4. One of the pieces was transfer printed with a green bamboo and bird pattern.

Red Earthenware

From the late 18th through to the late 19th century unrefined earthenwares with red or yellow paste were the most common type of utilitarian vessels. Stoneware vessels with harder, more vitrified pastes were also produced throughout the 19th century and became more refined over time (Adams, 1994). One piece of glazed red earthenware was recovered during the Stage 2 assessment of this location.

Yellowware

Yellowware is partially vitrified earthenware used mostly for food preparation, storage and toiletwares. It is made from naturally buff coloured clay and generally has a clear glaze (Sussman 1997). Yellowware was manufactured circa 1840 to present and was at its peak from 1870-1900 (Saint Mary's University, n.d.). One piece of yellowware was recovered during the Stage 2 assessment of this location.

4.8.1.1.2 Glass Artifacts

Thirteen glass artifacts were recovered from NRWC-4 (AgGu-184). This includes four aqua, three brown, three manganese, two colourless, and two blue. One of the brown pieces is stamped with "B4D" in a diamond. Of the aqua, one base piece is embossed with "LTON ON" and another fragment is embossed with a flower pattern. One of the colourless pieces is a fragmentary base with a cross hatching decoration embossed on it.

4.8.1.1.2 Personal Artifacts

Eight personal artifacts were recovered from NRWC-4. Six of the artifacts were pieces of white clay smoking pipes, including four stem fragments and 2 bowl fragments. Two of the stems were stamped with "Glasgow" and one was stamped with "c". One of the bowl fragments was stamped with "T D". White clay pipes were quite popular in the 19th century with a decline in the last 20 years due to the popularity of cigarettes (Adams, 1994). The Glasgow pipe industry was active throughout the 19th century with many manufacturers (Walker, 1983; Kenyon, 1984). TD pipes in Canada and elsewhere were based on an original 18th century precursor but were manufactured throughout North America and Europe by various companies throughout the 19th century and into the 20th century (Kenyon, 1982a, and 1982b; Walker, 1983).

There were also two shell buttons collected, both of which have four sew-through holes.

4.8.1.1.3 Structural Artifacts

One structural artifact was recovered from NRWC-4, a machine cut nail. Machine cut nails were cut from a flat sheet of iron and as a result their shanks have a rectangular cross-section. The head is usually rectangular and was often welded into place. Invented c. 1790, cut nails saw common use from the 1830s until the 1890s (Adams, 1994).

4.8.2 SE 37 Artifact Cluster

4.8.2.1 Artifact Cluster 6 (AgGu -208)

CL-6 is composed of eight pieces of Onondaga chert lithic debitage in an area measuring 20 x 15 m. The artifacts are located adjacent to the western side of the proposed turbine within the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation. None were collected. This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.8.2.2 Artifact Cluster 7

CL-7 is composed of one Onondaga chert biface and one piece of Onondaga chert lithic debitage in a 5 x 5 m area. The artifacts are located along the eastern edge of the proposed access road along the existing property boundary. The artifacts are of indeterminate age or cultural affiliation. Only the biface was collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.8.3 SE 37 Isolated Findspots

4.8.3.1 Isolated Findspot 16

IF-16 is composed of one Onondaga chert preform. The artifact is located to the east of the proposed turbine and at the south end of the original proposed access road. The artifact is of indeterminate age or cultural affiliation and was collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.8.3.2 Isolated Findspot 17

IF-17 is composed of one piece of Onondaga chert lithic debitage. The artifact is located to the northwest of the proposed turbine along the western edge of the assessment area. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.8.3.3 Isolated Findspot 18

IF-18 is composed of one piece of Onondaga chert lithic debitage. The artifact is located to the northwest of the proposed turbine. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and,

as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.8.3.4 Isolated Findspot 19

IF-19 is composed of one piece of Onondaga chert lithic debitage. The artifact is located to the northeast of the proposed turbine. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.9 SE 62 (T59 & T60)

The access road and pads for SE 62 are located on Lots 24 and 25, Concession 4, Gainsborough Township, on the south side of Concession 4 Road (Figure 11) (Supp. 9). One access road and a large pad with two turbines were assessed on June 5, 2012. A small section of the access road just north of the turbine pad was not ploughed on June 5, and was assessed July 11, 2012, after ploughing and weathering had occurred. The access road from Concession 4 Road, is no longer part of the project, and will not be constructed. An alternative access road from Rosedene Road was surveyed on December 5, 2012. The topography of the area is relatively flat, with slight undulations near Rosedene Road (Photo 18). There were no watercourses, or bodies of water noted during the survey. At the time of the Stage 2 AA all parts of the access roads and pads were dry. The constructible area is wholly located within the ploughed agricultural fields that were assessed. No portions of the project will encroach into the small treed areas located along either side of the north access road, which were not assessed. Similarly, there will be no encroachment into the wooded area east of the turbine pad.

Two (2) sites composed exclusively of lithic debitage, were identified on the turbine pads. The sites are registered as AgGu-196 and AgGu-197. There were also two (2) artifact clusters (CL-26 and CL-40) and three (3) Isolated Findspots (IF 50-52) identified during the Stage 2 AA of SE 62. AgGu-196 and AgGu-197 require Stage 3 AA assessment and more work is recommended for SE 62.

4.9.1 SE 62 Sites

4.9.1.1 NRWC-17 (AgGu-196)

NRWC-17 (AgGu-196) is composed of one scraper (Plate 11) manufactured from an unknown chert and over 20 pieces of Onondaga chert lithic debitage. Only the scraper was collected. The artifacts were located approximately halfway between proposed turbines T59 and T60 along a proposed laydown area in the middle of the assessment area. The site is approximately 30 m x 30 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.9.1.2 NRWC-18 (AgGu-197)

NRWC-18 is composed of approximately 15 pieces of Onondaga chert lithic debitage. The artifacts were located southeast of proposed turbine T59 along a proposed lay down area. None were collected. The site is approximately 30 m x 20 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.9.2 SE 62 Artifact Clusters

4.9.2.1 Artifact Cluster 26

CL-26 is composed of four pieces of Onondaga chert lithic debitage in a 15 x 30 m area. The cluster of artifacts was located south of the proposed turbine T60 location within the eastern side of the assessment area and west of IF-52. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.9.2.2 Artifact Cluster 40

CL-40 is composed of two Onondaga chert flakes. The cluster of artifacts was located in an open field in an area approximately 10 m x 15 m, where the access road joins the turbine pad. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.9.3 SE Isolated Findspots

4.9.3.1 Isolated Findspot 50

IF-50 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located on the north of access road to T59 and T60 locations and south of Concession 4. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.9.3.2 Isolated Findspot 51

IF-51 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located north of the proposed turbine locations and south of Concession 4. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.9.3.3 Isolated Findspot 52

IF-52 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed turbine location, along the tree line that runs along the eastern edge of the assessment area. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.10 SE 51 (T18)

The access road and pad for SE 51 are located on Lot 25, Concession 3, Gainsborough Township, on the south side of Regional Road 20 (Figure 12) (Supp. 10). SE 51 consists of one access road and one turbine pad. The pad is situated immediately north of train tracks running across the property, project disturbance will only occur within the portions of the ploughed field that were subject to pedestrian survey. The constructible area is wholly located within the ploughed agricultural field that was assessed. No portions of the project will encroach into the wooded areas located along the eastern edge of the access road and pad, which was not assessed. The southern half of the access road and the pad were surveyed on May 16, 2012. The northern half of the access road was under crop at that time and was completed June 4, 2012 after it was harvested, ploughed and left to weather. The topography of the area is relatively flat, for the entire surveyed area (Photo 19). There were no watercourses, or bodies of water noted during the survey or present on the mapping. At the time of the Stage 2 AA all parts of the access road and pad were dry.

There were no artifacts of any kind identified on the access road or turbine during the Stage 2 AA of SE 51. No further work is recommended for SE 51.

4.11 SE 39 (T06)

The access road and pad for SE 39 are located on Lot 13, Concession 4, Gainsborough Township, on the north side of Regional Road 20 (Figure 13) (Supp. 11). SE 39 consists of one access road and one turbine pad. Both access roads and pad were surveyed on June 4, 2012. The topography of this area is characterized by gently sloping grade, rising to the north (Photo 20). There was a drainage channel noted during the survey, running east west through the access road. At the time of the Stage 2 AA all parts of the pad and access roads were dry.

There were two (2) sites identified on the turbine pad during the stage 2 AA. One of the sites consisted of a Late Palaeo-Indian projectile point (Photo 21). The other was a large lithic scatter with an associated Late Archaic projectile point. The sites are registered as AgGu-192 and AgGu-193. There was one artifact cluster identified (CL-8) as well as four (4) isolated finds (IF 8, 9 and IF 22, 23). AgGu-192 and AgGu-193 require Stage 3 AA assessment and further work is recommended.

4.11.1 SE 39 Sites

4.11.1.1 NRWC-13 (AgGu-192) (Point 5)

NRWC-13 (AgGu-192) is composed of one projectile point (Point 5), two bifaces and over 25 pieces of lithic debitage, all manufactured from Onondaga chert. Point 5 is a Late Archaic (c. 4,500-3,100 BP) Innes type projectile point manufactured from Onondaga chert (Plate 2). The point and bifaces were collected, as was a sample of the lithic debitage, including 2 secondary, 2 tertiary, and 2 utilized flakes. The artifacts were located northwest of the proposed turbine. The site is approximately 35 m x 20 m and situated on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a diagnostic and several non-diagnostic artifacts (2 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.).

4.11.1.2 NRWC-14 (AgGu-193) (Point 4)

NRWC-14 (AgGu-193) is composed of a single projectile point (Point 4) located northeast of the proposed turbine T06 within the proposed lay down area. Point 4 is a Late Palaeo-Indian (c. 10,000 - 9,500 B.P.) Madina Plano projectile point type manufactured from Collingwood chert (Plate 1).

This site meets the criteria for Stage 3 assessment as it consists of an artifact of special interest (Section 2.2 Standard 1b.iii).

4.11.2 SE 39 Artifact Cluster

4.11.2.1 Artifact Cluster 8

CL-8 is composed of three pieces of Onondaga chert lithic debitage in a 20 x 20 m area. The cluster of artifacts was located south of the proposed turbine location along the western side of the proposed access road. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.11.3 SE 39 Isolated Findspots

4.11.3.1 Isolated Findspot 8 (AgGu-209) (Point 3)

IF-8 (AgGu-209) is composed of a single projectile point (Point 3) located north of the proposed turbine and approximately halfway between a relic watercourse and the existing property boundary. Point 3 is a Middle Archaic (8,000-4,500 B.P.) Thebes type projectile point manufactured from Onondaga chert that appears to have been reworked on its lateral edges (Plate 1). The identification of the type was based on the squared side notches, convex base and single re-worked serrated edge (Justice, 1987; LCOAS, n.d).

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.11.3.2 Isolated Findspot 9 (Point 38)

IF-9 is composed of a single projectile point (Point 38) located west of the proposed access road. Point 38 is an indeterminate projectile point type with a broken tip manufactured from Onondaga chert, and was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.11.3.3 Isolated Findspot 22

IF-22 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located east of the proposed access road, along the eastern boundary of the assessment area, and southeast of a small ephemeral watercourse. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.11.3.4 Isolated Findspot 23 (Point 39)

IF-23 is composed of a single projectile point (Point 39) located south of the proposed turbine located along the eastern edge of the proposed access assessment area. Point 39 is the medial section of an indeterminate projectile point type manufactured from Onondaga chert, and was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.12 SE 83

Collector and fibre optic lines run N-S through SE 83, located in Lot 12, Concession 3, Gainsborough Township, connecting T01 at SE 16 (5E), through SE 35 (10H), to Silver Street, where the lines run within the roadway. A portion of the lines run through a woodlot, at the southern extent of the property. The lines will be directionally drilled through the woodlot (Figure 14) (Supp. 12). The constructible areas of the project area were all ploughed (Photo 22) with the exception of the woodlot which was subject to test pit survey. The survey was conducted on December 12, 2012. The Stage 2 survey was completed through pedestrian and test pit survey (Photo 49). At the time of the survey all parts of the project area were dry and fully assessed.

There were no artifacts or features of cultural value identified during the Stage 2 AA. No further work is recommended for SE 83.

4.13 SE 90 (T81)

The access road and pad for SE 90 are located on Lot 2, Concession 4, Gainsborough Township, on the south side of Concession 4 Road (Figure 15) (Supp. 13). SE 90 consists of a single turbine pad and one access road. Both the pad and the access road were surveyed on May 23, 2012. The topography of the area is relatively flat, with only slight undulations (Photo 23). There were no watercourses noted during the survey or present on the mapping, within the surveyed area. At the time of the Stage 2 AA all parts of the pad and access road were dry.

There were no sites identified during the Stage 2 AA. There were two artifact clusters (CL-11 and CL-12) and one Isolated Findspot (IF 27) located during the survey of SE 90. No further work is recommended for SE 90.

4.13.1 SE 90 Artifact Clusters

4.13.1.1 Artifact Cluster 11

CL-11 is composed of two pieces of Onondaga chert lithic debitage within a 15 x 10 m area. Only one utilized flake was collected. The artifacts were located southwest of the proposed turbine within the southwest corner of the assessment area. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.13.1.2 Artifact Cluster 12

CL-12 is composed of one Kettle Point chert biface, one piece of Onondaga chert lithic debitage and one historic artifact in a 10 x 20 m area. The historic artifact is a fragment of a Bakelite pipe stem dating after 1907. The biface and bakelite pipe stem were collected. The lithic artifacts are of indeterminate age or cultural affiliation. The artifacts were located north of the proposed turbine at the southern end of the proposed access road. The artifacts do not meet minimum

criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.13.2 SE 90 Isolated Findspot

4.13.2.1 Isolated Findspot 27

IF-27 is composed of one piece of Onondaga chert lithic debitage located in the northern end of the survey area, along the eastern side of the proposed access road. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.14 SE 117 (T97)

The access road and pad for SE 117 are located on Lots 3 and 4, Concession 3, Gainsborough Township, on the south side of Silver Street (Figure 16) (Supp. 14). SE 117 consists of a single turbine pad and access road. The Stage 2 AA of the turbine occurred on June 4, June 8, and July 11, 2012. The topography of the area is relatively flat, with only slight undulations (Photo 24). There were no watercourses or bodies of water noted during the survey. The pad abuts the Beaver Creek Wetland Complex to the south. At the time of the Stage 2 AA all parts of the pad and access road were dry.

There were no sites identified during the Stage 2 AA. There was one (1) artifact cluster (CL18), and one (1) Isolated Findspot (IF 21) identified during the surveys of SE 117. No further work is recommended for SE 117.

4.14.1 SE 117 Artifact Clusters

4.14.1.1 Artifact Cluster 18

CL-18 is composed of two pieces of Onondaga chert lithic debitage in a 10 x 10 m area. The cluster of artifacts was located at the northern end of the proposed access road. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.14.2 SE 117 Isolated Findspots

4.14.2.1 Isolated Findspot 21

IF-21 is composed of a single Onondaga chert preform located on level ground at the northern end of the proposed access road. The artifact is of indeterminate age or cultural affiliation, and was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.15 SE 26 (T38)

The access road and pad for SE 26 are located on Lot 9, Concession 3, Gainsborough, south of Silver Street. SE 26 consists of a single turbine pad and access road (Figure 17) (Supp. 15). The field was surveyed on June 4, 2012. The topography of the area is relatively flat for the entire area surveyed. A series of shallow drainage channels run through the survey area. At the time of the Stage 2 AA all parts of the pad and access road were dry and completely surveyed. A small portion of collector and fibre optic line runs south from T38 through SE 48 to Vaughan Road. The woodlot is low lying and wet with standing water (Photo 32), and as such was not subject to Stage 2 assessment.

One (1) site was identified on SE 26, and registered as AgGv-120. Two (2) Isolated Findspots were also identified (IF 66 and IF 67). AgGv-120 requires Stage 3 AA assessment and further work is recommended for SE 26.

4.15.1 SE 26 Sites

4.15.1.1 NRWC-30 (AgGv-120)

NRWC-30 (AgGv-120) is composed of two broken Onondaga chert bifaces (collected) and over 40 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of two cores, one secondary flake and four tertiary flakes were collected. The artifacts were located on the northwest side of the proposed T38 within the proposed laydown area. The site is approximately 25 m x 75 m in area.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.15.2 SE 26 Isolated Findspots

4.15.2.1 Isolated Findspot 66

IF-66 is composed of a single Onondaga chert tertiary flake. The artifact was located north of the proposed turbine and west of the proposed access road. The flake is of indeterminate age or cultural affiliation and was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.15.2.2 Isolated Findspot 67

IF-67 is composed of a single Onondaga chert flake. The artifact was located north of the proposed turbine, west of the proposed access road, and south of a small watercourse. The flake is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16 SE 24 (T33 & T02)

SE 24 has two turbine pads and is located on Lot 20, Concession 3, Gainsborough Township, on the east side of Gee Road (Figure 18) (Supp. 16). The Stage 2 AA for SE 24 was conducted over May 17 and 18, 2012. The topography for the area is slightly undulating, with sites located on gentle rises across the cultivated field. A series of shallow seasonal drainage features run across the project area. The pads are bounded to the north and east by the Silverdale Wetland Complex. At the time of the Stage 2 AA all parts of the project area were dry and survey was conducted across the entire area (Photo 27).

Four (4) sites were identified on SE 24. All four are pre-contact sites, consisting predominantly of lithic debitage. The sites were registered at AgGu-185, AgGu-186, AgGu-187 and AgGu-188. One (1) artifact cluster was also identified (CL-21). Ten (10) isolated finds were identified, 8 projectile points (Photo 28), one biface and one flake (Photo 29). AgGu-185, AgGu-186, AgGu-187 and AgGu-188 require Stage 3 AA assessment and further work is recommended for SE 24.

4.16.1 SE 24 Sites

4.16.1.1 NRWC-5 (AgGu-185) (Point 17)

NRWC-5 (AgGu-185) is composed of one projectile point (Point 17), and approximately 20 pieces of Onondaga chert lithic debitage. Point 17 is an indeterminate projectile point type manufactured from an unknown chert. Of the debitage, a sample of one secondary and 4 tertiary flakes was collected. The artifacts are located east of the proposed turbine and along the eastern edge of the assessment area. The site is approximately 20 m x 40 m and situated on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGu-185 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site. (Supp. Figure B).

4.16.1.2 NRWC-6 (AgGu-186)

NRWC-6 (AgGu-186) is composed of over 25 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of 2 shatter, one primary, 3 secondary, and 5 tertiary flakes was collected. The artifacts are located west of the proposed turbines within the proposed laydown area. The site is approximately 75 m x 50 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.16.1.3 NRWC-7 (AgGu-187)

NRWC-7 (AgGu-187) is composed of two Onondaga chert bifaces and over 20 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of 2 utilized, 2 secondary, and 2 tertiary flakes was collected. The artifacts are located approximately halfway between the proposed turbines, along the proposed access road. The site is approximately 35 m x 15 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.16.1.4 NRWC-8 (AgGu-188)

NRWC-8 (AgGu-188) is composed of two Onondaga chert scrapers (Plate 11) and over 40 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of 2 utilized, 5 secondary, and 18 tertiary flakes was collected. The artifacts were located south of the proposed turbine laydown area along the eastern edge of the assessment area. The site is approximately 40 m x 25 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.16.2 SE 24 Artifact Clusters

4.16.2.1 Artifact Cluster 21

CL-21 is composed of one Haldimand chert biface and three pieces of Onondaga chert lithic debitage. The debitage consisted of one secondary and 2 tertiary flakes, all of which were collected. The artifacts are of indeterminate age or cultural affiliation. The artifacts are located between sites NRWC-7 and NRWC-6 in an area approximately 15 m x 20 m area. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16.3 SE 24 Isolated Findspots

4.16.3.1 Isolated Find 1 (AgGu-204) (Point 19)

IF-1 (AgGu-204) is composed of a single projectile point (Point 19) located southeast of the proposed turbines along the southern boundary of the assessment area. Point 19 is a Late Archaic (c. 4,500 – 3,100 B.P.) Innes type projectile point manufactured from Haldimand chert (Plate 2). This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3

assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16.3.2 Isolated Find 2 (Point 20)

IF-2 is composed of a single projectile point (Point 20). Point 20 is the distal portion of an indeterminate projectile point manufactured from Onondaga chert, and was collected. The projectile point is located southeast of the proposed turbines along the southern boundary of the assessment area. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16.3.3 Isolated Find 3 (Point 21) (AgGu-206)

IF-3 (AgGu-206) is composed of a single projectile point (Point 21). Point 21 is a Late Woodland (c. 1,100 – 350 B.P.) Naticoke Notched projectile point type manufactured from Onondaga chert, and was collected (Plate 5). The projectile point is located southeast of the proposed turbines north of IF-1 (Photo 6). This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16.3.4 Isolated Find 4 (Point 22) (AgGu-207)

IF-4 (AgGu-207) is composed of a single projectile point (Point 22) located south east of T02 along the southern boundary of the assessment area, and was collected. Point 22 is a Late Archaic (c. 4,500 – 3,100 B.P.) Crawford Knoll projectile point type manufactured from Onondaga chert (Plate 2). This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16.3.5 Isolated Find 5 (Point 23)

IF-5 is composed of a single projectile point (Point 23). Point 23 is an indeterminate type projectile point manufactured from Bois Blanc Formation chert and missing its base, and was collected. The projectile point was located west of proposed turbines, between sites NRWC6 and NRWC7. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16.3.6 Isolated Find 42

IF-42 is composed of a single drill tip manufactured from Onondaga chert. The artifact was located southwest of proposed turbines and east of IF-1, and IF-3 along the southern boundary of the assessment area, and was collected. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16.3.7 Isolated Find 43

IF# 43 is composed of the single Onondaga chert lithic debitage (secondary flake) located northeast of proposed turbines along the northern boundary of the assessment area and south of a tree line, and was collected. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16.3.8 Isolated Find 44 (Point 18)

IF-44 is composed of a single projectile point (Point 18) located northwest of proposed turbines north of site NRWC-6, and south of a tree line, and was collected. Point 18 is an indeterminate projectile point type manufactured from Burlington chert. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16.3.9 Isolated Find 79 (Point 24) (AgGu-236)

IF-79 is composed of a single projectile point (Point 24). Point 24 is a medial section of a Middle Archaic (c. 8,000 - 4,500 B.P.) Stanley/Neville projectile point type with a serrated edge and manufactured from Onondaga chert, and was collected (Plate 9). Although serrated edges are most often associated with Early Archaic point forms, especially Nettling type points in Ontario, later Middle Archaic point types, including Stanley/Neville points also occasionally have serrated edges. In the case of Point 24 an assignment of a Middle Archaic point type was based on the form of the blade, which is straight or only very slightly convex as opposed to the more pronounced convex Nettling shape and that Stanley/Neville points are most commonly made of Onondaga chert, as opposed to Nettling points which are more often manufactured on non-local cherts. The small part of the notching that is left is inconclusive with respect to whether the point is corner notched or side notched, or potentially stemmed.

The projectile point is located southwest of the proposed turbine and site NRWC-6 along the southern edge of the assessment area. IF-79 does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

This diagnostic artifact was registered with the MTCS and received a Borden number as per 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12, Standard 1.c.

However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.16.3.10 Isolated Find 80 (Point 25) (AgGu-224)

Point 25 is a Lake Archaic (c. 4,500 – 3,100 B.P.) Crawford Knoll type projectile point (collected) manufactured from Onondaga chert (Plate 2). The point is largely complete, having a missing tip. The point was located southwest of the proposed turbine and site NRWC-6 along the southern edge of the assessment area.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.17 SE 45 (T78)

The access road and turbine pad for SE 45 is located on Lot 23, Concession 2, Gainsborough Township, on the south side of Vaughan Road (Figure 19) (Supp. 17). The Stage 2 AA survey for SE 45 was completed on June 5, 2012. The overall topography for the turbine is relatively flat with only slight undulations (Photos 30 and 31). There were several ditches dug to promote the drainage of the cultivated field, as well a series of shallow seasonal drainage courses that run through SE 45. The Highway 20 and 24 Wetland Complex borders the turbine to the east. All parts of the project area were dry and completely surveyed. A portion of the collector and fibre optic line runs south from T78 to connect through SE 29-5 to Elcho Road. The line will be directionally drilled to pass through the wood lot. The wood lot was subject to test pit survey, there were no artifacts recovered during the test pit survey.

One (1) pre-contact site was identified on the pad, and registered as AgGu-194. One (1) artifact cluster was recorded on the access road; a projectile point associated with the cluster can be dated to the Late Archaic and was registered as AgGu-211. AgGu-194 requires Stage 3 AA assessment and further work is recommended for SE 45.

4.17.1 SE 45 Sites

4.17.1.1 NRWC-15 (AgGu-194) (Point 27)

NRWC-15 (AgGu-194) is composed of one projectile point (Point 27), one biface, one piece of Kettle Point chert lithic debitage, one piece of indeterminate lithic debitage, and 6 pieces of Onondaga chert lithic debitage. Point 27 is an indeterminate projectile point type with a missing base, manufactured from Onondaga chert. The point, biface, one indeterminate chert core and one Kettle Point chert secondary flake were collected from the assemblage. The artifacts were

located north of the proposed turbine T78 along the northern end of the turbine pad assessment area. The site is approximately 15 m x 10 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.17.2 SE 45 Artifact Clusters

4.17.2.1 Artifact Cluster 1 (AgGu-211) (Point 26)

CL-1 is composed of one projectile point (Point 26) and one piece of Onondaga chert lithic debitage. Only the projectile point was collected. Point 26 is a Late Archaic (c.4,500 - 3,100 B.P.) Genesee projectile point type, manufactured from Onondaga chert and missing its tip (Plate 3). The projectile point was located along the proposed access road, approximately halfway between the proposed turbine and Vaughan Road.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.18 SE 29-4 (T03)

The pad and access road for SE 29-4 is located on Lot 26, Concession 1, Gainsborough Township, on the south site of Concession 1 Road (Figure 20) (Supp. 18). SE 29-4 consists of one turbine pad and access road. Survey of the area was completed on May 25, 2012. The topography of the area was level for the entire area surveyed (Photo 32). Field conditions for the survey were overcast and windy. There were no watercourses or bodies of water noted during the survey within the project area. At the time of the Stage 2 AA all areas of the pad and access road were dry and completely assessed.

One (1) large multi-component site was identified near the north extent of the access road (Photo 33). The site was registered at AgGu-189. One (1) artifact cluster (CL-20), and one (1) isolated biface (IF 41) were also recorded during the Stage 2 AA of SE 29-4.

4.18.1 SE 29-4 Sites

4.18.1.1 NRWC-9 (AgGu-189) (Point 14)

NRWC-9 (AgGu-189) is composed of over 100 pieces of historic and pre-contact artifacts. Pre-contact artifacts were comprised of one projectile point (Point 14) and several pieces of Onondaga chert debitage. Of the debitage, only a utilized flake was collected. Point 14 is a notched base fragment of an indeterminate projectile point type manufactured from Onondaga chert. The collected historic artifacts consisted of ceramics, square nails, buttons, and glass that date the initial occupation of the site approximately to the 1830s or 1840s (Plate 7). Artifacts left

in the field include: approximately 20 pieces of non-diagnostic or extremely fragmentary ceramics; approximately 30 pieces of structural artifacts including cut nails and extremely fragmentary red brick samples; fewer than 10 pieces of white clay smoking pipe, which were both extremely fragmentary and non-diagnostic; and approximately 20 pieces of glass, too fragmentary to describe as either bottle or window, with no diagnostic traits. The artifacts were located along Concession 1 at the north end of the proposed access road. The site is approximately 50 m x 50 m. Each artifact class is discussed in greater detail below. Table 8 provides a summary of the Stage 2 recovered historic artifacts.

This site meets the criteria for Stage 3 assessment as it consists of at least 20 artifacts that date the period of use to before 1900 (Section 2.2 Standard 1.c).

Table 8: NRWC-9 (AgGu-189) Stage 2 Historic Artifact Summary

Artifact	Frequency	Percentage %
Domestic	21	77.78
Structural	4	14.81
Personal	2	7.41
Total	27	100.00

4.18.1.1.1 Domestic Artifacts

A total of 21 domestic related artifacts were recovered during the Stage 2 assessment of NRWC-4 including 16 ceramic artifacts and five glass artifacts.

4.18.1.1.1.1 Ceramic Artifacts

A total of 16 pieces of ceramics were recovered during the Stage 2 assessment of NRWC-4. This total includes 12 pieces of whiteware, three pieces of pearlware, and one piece of red earthenware. Table 9 provides a breakdown of the ceramic assemblage by ware type, Table 10 provides a breakdown by decorative type.

Table 9: NRWC-9 (AgGu-189) Stage 2 Ceramic Assemblage by Ware Type

Artifact	Frequency	Percentage %
Whiteware	12	75.00
Pearlware	3	18.75
Utilitarian Earthenware	1	6.25
Total	16	100.00

Table 10: NRWC-9 (AgGu-189) Stage 2 Ceramic Assemblage by Decorative Type

Artifact	Frequency	Percentage %
Whiteware, plain	7	43.75
Whiteware, transfer printed	4	25.00
Pearlware, plain	3	18.75
Whiteware, painted	1	6.25
Earthenware, red	1	6.25

Table 9: NRWC-9 (AgGu-189) Stage 2 Ceramic Assemblage by Ware Type

Artifact	Frequency	Percentage %
Total	16	100.00

Whiteware

A total of 12 pieces of whiteware were recovered from NRWC-9 (AgGu-189). Of the 12 pieces of whiteware, seven were undecorated and five were transfer printed, four with a blue transfer print and one with a flow blue pattern. One piece of hand painted whiteware was recovered during the Stage 2 assessment of NRWC-9 (AgGu-189).

Pearlware

Three pieces of pearlware were collected from NRWC-9 (AgGu-189) during the Stage 2 assessment. Pearlware is considered the most common table ware found on nineteenth century sites in Canada. It can be easily identified by a bluish glaze that appears along footring crevices. The most common type of Pearlware is the “shell-edged” type which first appeared in 1780 and persisted until 1840. The painted blue or green feathered decoration on the rim resembled the edge of a shell and was most commonly found on flatware (Adams, 1994).

Utilitarian Earthenware

One piece of glazed red earthenware was recovered during the Stage 2 assessment of this location.

4.18.1.1.1.2 Glass Artifacts

Five non-window glass artifacts were recovered from NRWC-9 (AgGu-189). This includes two aqua, one brown, one blue and one black. Generally, colour is not a good temporal indicator except in specific cases (Lindsey, 2013). However, black glass can typically be dated prior to 1860 when the addition of iron when making glass ceased. The common practice of adding iron during glassmaking produced dark amber or olive glass which became known as black glass (Kendrick, 1974).

4.18.1.1.2 Personal Artifacts

Two personal artifacts were collected from the site. Both artifacts were white glass buttons, with 4 hole sew-through on both.

4.18.1.1.3 Structural Artifacts

Four structural artifacts were recovered from NRWC-9, one machine cut nail, and three pieces of window glass.

Window glass can be temporally diagnostic in a very limited manner, but only if at least 10 specimens are available. In the 1840s window glass thickness changed dramatically. This was in large part due to the lifting of the English import tax on window glass in 1845, which taxed glass by weight and encouraged manufacturers to produce thin panes. Most window glass manufactured before 1845 tends to be thinner, while later glass is thicker (Kenyon, 1980).

However, because window glass thickness varied even within a single pane an assemblage of 10 specimens is required to provide an adequately high stack of glass fragments to be measured accurately. Only 3 pieces of window glass were recovered from the site and therefore these artifacts are insufficient for measurement and cannot be used to aid in determining a date of occupation at NRWC-9.

4.18.2 SE 29-4 Artifact Clusters

4.18.2.1 Artifact Cluster 20

CL-20 is composed of two pieces of Onondaga chert lithic debitage in a 5 x 5 m area. The cluster of artifacts was located north of the proposed turbine location along the western side of the proposed access road and southwest of site NRWC-9. The artifacts are of indeterminate age or cultural affiliation and were not collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.18.3 SE 29-4 Isolated Findspots

4.18.3.1 Isolated Findspot 41

IF-41 is composed of a single Onondaga chert biface located along the western edge of the initial proposed access road, and north of the proposed turbine location. The artifact is of indeterminate age or cultural affiliation, and was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.19 SE 29-5

The project components of SE 29-5 are located in Lots 23 and 24, Concession 2, Gainsborough Township and consist of a collector and fibre optic line running N-S. The collector line runs south from T78 at SE 45, through SE 29-5 to connect with a junction box at Elcho Road (Figure 21) (Supp. 19). The Stage 2 AA took place on November 28, 2012, and completed entirely through pedestrian survey (Photo 34). The topography of the project area is generally flat and all areas were dry and completely assessed at the time of the survey.

One (1) isolated findspot (IF 90) was recorded during the Stage 2 AA. No further work is recommended for SE 29-5.

4.19.1 SE 29-5 Isolated Findspot

4.19.1.1 Isolated Findspot 90

IF-90 is composed of a single Onondaga chert flake located along the eastern property boundary just north of Elcho Road. The single artifact does not meet minimum criteria for a

Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2. The artifact was not collected.

4.20 SE 14 (T29)

SE 14 is located on Lot 23, Concession 1, Gainsborough Township, on the south side of Canborough Road (Figure 22) (Supp. 20). It consists of one turbine pad and access road. The Stage 2 AA survey of SE 14 was completed over three visits on May 15, June 5, and June 19, 2012. The topography of the area is varied. The topography of the access road is generally flat (Photo 35) and the pad is undulating (Photo 36) with a gradual slope from the center down to the Sucker Creek Wetland Complex at the eastern boundary of the pad. At the southern extent of the access road there is a tree line. An access through the tree line was ploughed and surveyed. All areas of the pad and access road were assessed during the Stage 2 AA.

One (1) site was registered with the MTCS as AgGu-190 (Photo 36). One (1) artifact cluster was also registered as AgGu-210, and two (2) isolated findspots were also recorded during the Stage 2 AA.

4.20.1.1 NRWC-10 (AgGu-190)

NRWC-10 (AgGu-190) is composed of two Onondaga chert scrapers (Plate 11) and over 100 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of 3 cores, one primary, 3 secondary, 6 tertiary, 2 retouched, and 3 utilized flakes were collected. The artifacts were located northeast of the proposed turbine, on the east side of the turbine pad assessment area. The site is approximately 85 m x 25 m along the edge of a tree line.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGu-190 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer and a 50 m monitoring buffer (70 m total) will be erected around the site (Supp. Figure C). No ground disturbance will occur within the total 70 m buffer around the site.

4.20.2 SE 14 Artifact Clusters

4.20.2.1 Artifact Cluster 13 (AgGu - 210)

CL-13 (AgGu-210) is composed of five pieces of Onondaga chert lithic debitage in an area 15 m x 5 m. The cluster of artifacts was located along the proposed access road approximately halfway between the proposed turbine location and Canaborough Road. The artifacts are of indeterminate age or cultural affiliation. None were collected.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However,

the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.20.3 SE 14 Isolated Findspots

4.20.3.1 Isolated Findspot 29

IF-29 is composed of a single piece of Onondaga chert lithic debitage located south of the proposed turbine. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.20.3.2 Isolated Findspot 30

IF-30 is composed of a single piece of Onondaga chert lithic debitage located south of the proposed turbine and north of IF-29. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.21 SE 92, SE 45 2 AND SE 1

SE 92, SE 45 2 and SE 1 are located on three corners at the junction of Gee Road and Vaughan Road on Lots 20 and 21, Concession 2 and Lot 20, Concession 3, Gainsborough Township (Figure 23) (Supp. 21). The three small areas are required for the installation of the fibre optic line, which runs through the roadway throughout the project area (Photo 37). SE 1 was assessed by pedestrian survey as the area was completely within an agricultural field. SE 92 and SE 45 2 were assessed utilizing a test pit survey strategy as the area was within a manicured lawn that included the municipal road allowances. The survey was conducted on November 27, 2012. The topography of the area is relatively flat. There were no water courses or wet areas noted during the survey and all areas were dry and completely surveyed.

No artifacts were recorded during the Stage 2 AA. No further work is recommended for SE 92, SE 45 2 and SE 1.

4.22 SE 55 (T35)

SE 55 is located on Lot 21, Concession 2, Gainsborough Township, on the east side of Gee Road (Figure 24) (Supp. 22). The pad is accessed directly off of Gee Road and there is no access road associated with the turbine. The survey was conducted on May 23, 2012. The topography of the area is slightly undulating (Photo 39). There were no water courses or bodies of water noted during the survey and at the time of the survey all areas of the pad were dry and completely surveyed.

No artifacts were recorded during the Stage 2 AA of SE 55. No further work is recommended for SE 55.

4.23 SE 13 (T34)

The access road and pad for SE 13 are located on Lot 20, Concession 2, Gainsborough Township, on the north side of Elcho Road (Figure 25) (Supp. 23). The access road and turbine pad were assessed on May 8, 2012. The topography of the area is generally level (Photo 38), with some slight undulations. There were no watercourses or bodies of water noted during the survey and all portions of the turbine were assessed.

Two (2) pre-contact sites were identified, and registered as AgGu-199 and AgGu-200. Two (2) artifact clusters (CL-35 and CL-36) and two (2) isolated finds were also recorded. AgGu-199 and AgGu-200 require Stage 3 AA assessment.

4.23.1 SE 13 Sites

4.23.1.1 NRWC-27 (AgGu-199)

NRWC-27 (AgGu-199) is composed of 11 pieces of Onondaga chert lithic debitage located northeast of the proposed turbine along the northern edge of the assessment area. The artifacts are in an area approximately 25 m x 15 m. None of the artifacts were collected in order to allow for ready relocation of the site for further archaeological assessment..

This site meets the criteria for Stage 3 assessment as it consists of 10 or more artifacts in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGu-199 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site (Supp. Figure D).

4.23.1.2 NRWC-28 (AgGu-200)

NRWC-28 (AgGu-200) is composed of over 80 pieces of Onondaga chert lithic debitage and three bifacially worked tools (all collected). Of the debitage, a sample of 9 secondary flakes was collected. The artifacts are located east of the proposed turbine within the proposed laydown area. The artifacts are on a sandy rise in an area approximately 125 m x 50 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.23.2 SE 13 Artifact Clusters

4.23.2.1 Artifact Cluster 35 (AgGu-222)

CL-35 is composed of four pieces of Onondaga chert lithic debitage in an area measuring 15 x 10 m. The cluster of artifacts was located south of the proposed turbine location at the southern end of turbine pad assessment area. The artifacts are of indeterminate age or cultural affiliation. None were collected.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.23.2.2 Artifact Cluster 36

CL-36 is composed of three pieces of Onondaga chert lithic debitage in an area measuring 20 x 10 m. The cluster of artifacts was located south of the proposed turbine location along the proposed access road. The artifacts are of indeterminate age or cultural affiliation and were not collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.23.3 SE 13 Isolated Findspots

4.23.3.1 Isolated Findspot 75 (Point 37) (AgGu-227)

IF-75 (AgGu-227) is composed of a single projectile point (Point 37). Point 37 is a Late Archaic (4,500-3,100 B.P.) Crawford Knoll point type (collected) manufactured from Onondaga chert (Plate 9). The artifact was located south of the proposed turbine, along the southern edge of the proposed turbine pad assessment area.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.23.3.2 Isolated Findspot 76 (Point 52) (AgGu-228)

IF-76 (AgGu-228) is composed of a single projectile point (Point 52). Point 52 is an Early Woodland (2,950-2,400 B.P.) Meadowood style point type (collected) made of Onondaga chert (Plate 9). The point was located along the proposed access road approximately halfway between the proposed turbine location and Elcho Road.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.24 SE 2 AND SE 27

SE 2 and SE 27 are located at the junction of Gee Road and Elcho Road on Lots 20 and 21, Concession 2, Gainsborough Township (Figure 26) (Supp. 24). SE 2 is located north of Elcho Road and east of Gee Road and SE 27 is located north of Elcho Road and east of Gee Road. Both properties will be used for the fibre optic line. A test pit survey methodology (Photo 40) was utilized for both properties as both areas are manicured lawns; the survey was conducted on November 27, 2012. The topography of the area is relatively flat. At the time of the survey no water courses or wet areas were noted. Both properties were dry and completely assessed.

No artifacts were recovered during the Stage 2 AA. No further work is recommended for SE 2 and SE 27.

4.25 SE 26 (7A) (T32)

The access road and pad for SE 26 (7A) is located on Lot 17, Concession 2, Gainsborough Township, on the north side of Elcho Road (Figure 27) (Supp. 25). Part of the survey was conducted on May 25, 2012, and the remainder of the pad and access road were re-ploughed allowed to weather and assessed on September 14, 2012. On both days the weather was overcast and cool. The topography of the area is generally undulating (Photo 42) and the area is bordered to the north by the Beaver Creek Wetland Complex. A watercourse was noted running north/south through the pad and could not be surveyed (Photo 41).

One (1) multi-component site and 3 pre-contact sites were identified and registered. One Artifact Cluster and 10 Isolated Findspots were also recorded. AgGu-191, AgGu-216, AgGu-217, and AgGu-218 require Stage 3 AA assessment and further work is recommended for SE 26 (7A)

4.25.1 SE 26 (7A) Sites

4.25.1.1 NRWC-11 (AgGu-191)

NRWC-11 (AgGu-191) is composed of two glass scrapers (Plate 10) (collected), one Onondaga chert tool (collected) and over 50 pieces of Onondaga chert lithic debitage. The artifacts were located along the southern end of the proposed access road and along the property boundary. One of the glass scrapers is manufactured from solarized glass, dating to the end of the 19th or early 20th century. The Onondaga chert tool has been heat altered and exhibits a scraper edge, a utilized edge, and a drill. None of the debitage was collected. The site is approximately 60 m x 50 m in area.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3) and also due to the presence of artifacts of special interest (Section 2.2 Standard 1b.iii).

4.25.1.2 NRWC-45 (AgGu-216) (Point 46)

NRWC-45 (AgGu-216) is composed of one projectile point and two pieces of Onondaga chert lithic debitage. Point 46 is a Late Archaic (c. 4,500-3,100 BP) Crawford Knoll type projectile point manufactured from Onondaga chert (Plate 3). None of the debitage was collected. The artifacts were located on the turbine pad, west of the stream running NS through the pad. The site is approximately 10 m x 10 m.

This site meets the criteria for Stage 3 assessment as it consists of a diagnostic and several non-diagnostic artifacts (2 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.1).

4.25.1.3 NRWC-46 (AgGu-217)

NRWC-46 (AgGu-217) is composed of one preform, one biface and 10 pieces of Onondaga chert lithic debitage. The site is of indeterminate age or cultural affiliation; all artifacts are manufactured from Onondaga chert. None of the debitage was collected. The artifacts were located on the turbine pad, west of the stream running NS through the pad. The site is approximately 15 m x 10 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGu-217 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site (Supp. Figure E).

4.25.1.4 NRWC-47 (AgGu-218)

NRWC-47 (AgGu-218) is composed of over 50 historic artifacts. The historic artifacts consisted of ceramics and glass. The limited number of dateable artifacts suggests the initial occupation of the site dates to approximately the mid-19th century (Plate 8). The artifacts were located along the north end of the proposed access road. Artifacts left in the field include: approximately 20 pieces of non-diagnostic or extremely fragmentary ceramics; approximately 10 pieces of structural artifacts including extremely fragmentary red brick samples; fewer than 5 pieces of white clay pipes, which were both extremely fragmentary and non-diagnostic; and approximately 5 pieces of glass, too fragmentary to describe as either bottle or window, with no diagnostic traits. The site is approximately 40 m x 15 m. Each artifact class is discussed in greater detail below. Table 11 provides a summary of the Stage 2 recovered historic artifacts.

This site meets the criteria for Stage 3 assessment as it consists of at least 20 artifacts that date the period of use to before 1900 (Section 2.2 Standard 1.c).

Table 11: NRWC-47 (AgGu-218) Stage 2 Historic Artifact Summary

Artifact	Frequency	Percentage %
Domestic	11	84.62
Structural	2	15.38
Total	13	100.00

4.25.1.4.1 Domestic Artifacts

A total of 11 domestic related artifacts were recovered during the Stage 2 assessment of NRWC-47 including 10 ceramic artifacts and one glass artifact.

4.25.1.4.1.1 Ceramic Artifacts

A total of 16 pieces of ceramics were recovered during the Stage 2 assessment of NRWC-47. This total includes 9 pieces of whiteware and one piece of redware. Table 12 provides a breakdown of the ceramic assemblage by ware type, Table 13 provides a breakdown by decorative type.

Table 12: NRWC-47 (AgGu-218) Stage 2 Ceramic Assemblage by Ware Type

Artifact	Frequency	Percentage %
Whiteware	5	50.00
Pearlware	2	20.00
Utilitarian Earthenware	3	30.00
Total	10	100.00

Table 13: NRWC-47 (AgGu-218) Stage 2 Ceramic Assemblage by Decorative Type

Artifact	Frequency	Percentage %
Whiteware, transfer printed	4	40.00
Shell-edged, blue paint	2	20.00
Earthenware, red	3	30.00
Whiteware, plain	1	10.00
Total	10	100.00

Whiteware

A total of 10 pieces of whiteware were recovered from NRWC-47 (AgGu-218).

Of the five pieces of whiteware, four were transfer printed and one was undecorated. Two of the decorated sherds have purple transfer print, one has flow blue transfer print and the fourth has blue print.

Pearlware

Two pieces of pearlware were collected from NRWC-47 (AgGu-218) during the Stage 2 assessment. Both pieces have blue painted decoration along the rim.

Utilitarian Earthenware

Three pieces of undecorated glazed red earthenware were recovered during the Stage 2 assessment of this location.

4.25.1.4.1.2 Glass Artifacts

One non-window glass artifact was recovered from NRWC-47 (AgGu-218). The artifact was a fragment of an aqua bottle stamped on the side with “..ATE..”.

4.25.1.4.2 Structural Artifacts

Two structural artifacts were recovered from NRWC-47, one piece of window glass, and one red brick fragment.

4.25.2 SE 26 (7A) Artifact Clusters

4.25.2.1 Artifact Cluster 38 (AgGu-223)

CL-38 is composed of three pieces of Onondaga chert lithic debitage. The cluster of artifacts was located at the northwestern extent of the access road and the southeast origin of the turbine pad. The artifacts are of indeterminate age or cultural affiliation within a 10 x 10 m area. None were collected.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.25.3 SE 26 (7A) Isolated Findspot

4.25.3.1 Isolated Findspot 45

IF-45 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located along the proposed access road approximately halfway between the proposed turbine and Elcho Road. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.25.3.2 Isolated Findspot 81 (AgGu-225) (Point 47)

IF-81 (AgGu-225) is composed of one projectile point. Point 47 (Plate 5) was located at the northern extent of the proposed turbine pad immediately west of the stream running NS thorough the pad. AgGu-225 is a Late Woodland (1,100 – 700 B.P.) Naticoke Notched type projectile point manufactured from Onondaga chert.

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.25.3.3 Isolated Find 82

IF-82 is composed of one Onondaga chert biface fragment. The biface was located along the east boundary of the access road just east of NRWC- 47. The artifact is of indeterminate age or cultural affiliation, and was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.25.3.4 Isolated Find 83

IF-83 is composed of one Onondaga chert biface fragment with notch. The biface was located along the east boundary of the access road just south of NRWC- 47. The artifact is of indeterminate age or cultural affiliation, and was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.25.3.5 Isolated Find 84 (AgGu-226) (Point 48)

IF-84 (AgGu-226) is composed of one projectile point (Point 48). Point 48 was located east of the stream running N-S through the pad. The point is a Late Archaic (2,500 – 1,000 B.P.) Genesee type projectile point (collected) manufactured from Onondaga chert (Plate 3).

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.25.3.6 Isolated Find 85

IF-85 is composed of one Onondaga chert biface fragment. The biface was located within the pad area just west of the stream running NS through the pad. The artifact is of indeterminate age or cultural affiliation, and was collected. The single artifact does not meet minimum criteria

for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.25.3.7 Isolated Find 86

IF-86 is composed of one very small Onondaga chert biface fragment. The biface fragment was located within the pad area east of the stream running N-S through the pad. The artifact is of indeterminate age or cultural affiliation, and was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.25.3.8 Isolated Find 87

IF-87 is composed of one piece of Onondaga chert lithic debitage. The artifact was located on the proposed turbine pad east of the stream running NS through the pad. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.25.3.9 Isolated Find 88

IF-88 is composed of one piece of Onondaga chert lithic debitage. The artifact was located at the northern extent proposed turbine pad and east of the stream running N-S through the pad. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.25.3.10 Isolated Find 89

IF-89 is composed of one piece of Onondaga chert lithic debitage. The artifact was located at the southern extent of proposed turbine pad and east of the stream running N-S through the pad. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.26 SE 4 (T31)

The access road and pad for SE 4 is located on Lot 17, Concession 3, Gainsborough Township, on the north side of Vaughan Road (Figure 28) (Supp. 26). One turbine pad, an access road and a large construction laydown area are associated with SE 4. The Stage 2 AA for the project area was conducted on May 17, 2012 (Photo 43) and on November 28, 2012. An existing farm access road and disturbed gravel pad for a barn are within the limits of the western edge of the constructible area. These were not assessed due to previous and extensive disturbance. The topography of the area is generally level, with some slight undulations concentrated on the pad closer to the Beaver Creek Wetland Complex. There were no watercourses or bodies of water

noted during the survey and all portions of the pad, access road and construction laydown area were assessed.

One (1) pre-contact site was identified and registered as AgGu-183. Two artifact clusters, CL-5 and CL39, registered as AgGu-205 and AgGu-229 respectively, was also identified on the access road and construction laydown area.

4.26.1 SE 4 Sites

4.26.1.1 NRWC-3 (AgGu-183)

NRWC-3 (AgGu-183) is composed of one scraper (Plate 11), one biface, one spokeshave, and over 100 pieces of lithic debitage all of Onondaga chert. Of the debitage, a sample of one shatter, 2 core fragments, 8 secondary, 18 tertiary, 1 retouched, and 4 utilized flakes was collected. All of the secondary and a majority of the tertiary flakes recovered show evidence of heat alteration. The artifacts are located on level ground south of the proposed turbine pad, along the east side of an existing pig barn. The site is approximately 20 m x 20 m in area.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.26.2 SE 4 Artifact Clusters

4.26.2.1 Artifact Cluster 5 (AgGu-205)

CL-5 (AgGu-205) is composed of three Onondaga chert tertiary flakes (collected). The artifacts were located on level ground approximately halfway along the eastern edge of the proposed access road. The flakes are in an area approximately 10 m x 5 m.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.26.2.2 Artifact Cluster 39 (AgGu-229)

CL-39 (AgGu-229) is composed of three Onondaga chert flakes. The cluster of artifacts was located in the laydown area in an area approximately 10 m x 10 m, east of the residential home and between the barn and Vaughan Road. The artifacts are of indeterminate age or cultural affiliation. None were collected.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.27 SE 16 (5E) (T01)

The access road and pad for SE 16 (5E) is located on Lot 13, Concession 3, Gainsborough Township, on the north side of Vaughan Road (Figure 29) (Supp. 27). There is one pad and access road associated with SE 16 (5E). The constructible area is wholly located within the ploughed agricultural field that was assessed. No portions of the project will encroach into the small treed area located along the eastern edge of the access road and pad, which was not assessed. Field work for the Stage 2 AA pedestrian survey was conducted on May 25, 2012 and June 21, 2012. The topography of the area is generally level with some slight undulations (Photo 44). The pad is bounded on the north and west by the Beaver Creek Wetland Complex. During the survey there were no watercourses or bodies of water observed and all portions of the access road and pad were assessed.

One (1) site was identified on SE 16 (5E). The site consists of a single Late Palaeo-Indian projectile point. One (1) artifact cluster (CL-9) and three (3) isolated finds (IF 13, 20, and 24) were also recorded during the Stage 2 AA of SE 16 (5E). AgGu-203 requires Stage 3 AA assessment and further work is recommended for SE 16 (5E).

4.27.1 SE 16 (5E) Sites

4.27.1.1 NRWC-40 (AgGu-203) (Point 2)

NRWC-40 (AgGu-203) is composed of one projectile point (Point 2). Point 2 is a Late Palaeo-Indian (c. 10,000-9,500 B.P.) Madina Plano projectile point type manufactured from Collingwood chert (Plate 1). The projectile point was located along the western edge of the proposed access road and north of a relict watercourse.

This site meets the criteria for Stage 3 assessment as it consists of an artifact of special interest (Section 2.2 Standard 1b.iii).

4.27.2 SE 16 (5E) Artifact Clusters

4.27.2.1 Artifact Cluster 9

CL-9 is composed of two pieces of Onondaga chert lithic debitage in a 5 x 5 m area. The cluster of artifacts was located northwest of the proposed turbine location within the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation and were not collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.27.3 SE 16 (5E) Isolated Findspots

4.27.3.1 Isolated Findspot 13 (AgGu-212) (Point 1)

IF-13 (AgGu-212) is composed of one projectile point (Point 1). The projectile point was located southeast of the proposed turbine within a proposed laydown area and east of a relict

watercourse. Point 1 is an Early Woodland (2,950 – 2,400 B.P.) Kramer type projectile point (collected) manufactured from Selkirk chert (Plate 4).

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.27.3.2 Isolated Findspot 20

IF-20 is composed of one Onondaga chert biface fragment. The artifact was located south of the proposed turbine location along the proposed access road, and north of site NRWC-40. The artifact is of indeterminate age or cultural affiliation, and was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.27.3.3 Isolated Findspot 24

IF-24 is composed of one piece of Onondaga chert lithic debitage. The artifact was located northeast of the proposed turbine along the existing property boundary. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.28 SE 16 (5D) (T76)

The access road and pad for SE 16 (5D) are located on Lot 14, Concession 3, Gainsborough Township, on the north side of Vaughan Road (Figure 30) (Supp. 28). There is one pad and access road associated with SE 16 (5D). The Stage 2 AA survey of the property was conducted between June 4 and 5, 2012. The topography of the area is generally level across the entire surveyed area (Photo 45). The pad is bounded to the north by the Beaver Creek Wetland Complex. During the survey there were no watercourses or bodies of water observed and all portions of the access road and pad were assessed.

Two (2) sites were identified during the survey and registered as AgGu-201 and AgGu-202. The sites consisted predominantly of lithic debitage. A gorget was collected and is associated with AgGu-202. There were also two (2) artifact clusters (CL-30 and CL-31), as well as one isolated flake (IF 68) identified. AgGu-201 and AgGu-202 require Stage 3 AA assessment and further work is recommended for SE 16 (5D).

4.28.1 SE 16 (5D) Sites

4.28.1.1 NRWC-31 (AgGu-201)

NRWC-31 (AgGu-201) is composed of 22 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of one primary, one secondary, and 3 tertiary flakes was collected. The artifacts are of indeterminate age or cultural affiliation. The artifacts were located northeast of the proposed turbine within the turbine pad, along the edge of a tree line in an area approximately 20 m x 15 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.28.1.2 NRWC-32 (AgGu-202)

NRWC-32 (AgGu-202) is composed of one slate gorget (Plate 9) and three pieces of Onondaga chert debitage. The debitage consisted of one utilized and 2 tertiary flakes. The artifacts were located west of the proposed turbine within a proposed laydown area along the western edge of the property boundary. The site is approximately 10 m x 10 m. Gorgets are found in both Archaic and Woodland contexts and the fragmentary nature of the specimen at AgGu-202 does not allow for more detailed identification as to date or cultural affiliation.

This site meets the criteria for Stage 3 assessment as it consists of an artifact of special interest (Section 2.2 Standard 1b).

4.28.2 SE 16 (5D) Artifact Clusters

4.28.2.1 Artifact Cluster 30 (AgGu-220) (Point 31)

CL-30 (AgGu-220) is composed of one projectile point (Point 31) and one piece of Onondaga chert lithic debitage, both collected. The debitage consisted of one secondary flake. Point 31 is the medial section of a possible Early Woodland (2,950 – 2,400 B.P.) Meadowood projectile point type manufactured from Onondaga chert (Plate 4). The artifacts were located south of the proposed turbine within the proposed turbine pad in an area approximately 10 m x 15 m.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.28.2.2 Artifact Cluster 31

CL-31 is composed of two pieces of Onondaga chert lithic debitage in a 10 x 10 m area. The cluster of artifacts was located south of the proposed turbine location within the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation. None were collected.

The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.28.3 SE 16 (5D) Isolated Findspots

4.28.3.1 Isolated Findspot 68

IF-68 is composed of one piece of Onondaga chert lithic debitage. The artifact was located north of the proposed turbine within the proposed laydown area. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.29 SE 16 (5A,B,C) (T55)

The access road and pad associated with SE 16 (5A,B,C) are located on Lot 15, Concession 2, Gainsborough Township, on the south side of Vaughan Road (Figure 31) (Supp. 29). The Stage 2 AA survey of the property was conducted on May 25 and June 21, 2012 (Photo 46). The topography of the area is generally level across the entire area surveyed. The pad is bounded to the east and west by the Beaver Creek Wetland Complex. A transmission line running from Elcho Road north to meet the pad, as well as a small portion of the property approximately 100 m E-W and 15 m N-S for fibre optic line running parallel to Vaughan Road were surveyed December 6, 2012 (Photo 47). The collector line is within a ploughed field and was subject to pedestrian survey. The fibre optic line, which passes through a grass area at the north end of the property and immediately to the south of Vaughan Road, was subject to a test pit survey. At the time of the surveys there were no watercourses or bodies of water observed and all portions of the access road, pad, collector line and fibre optic line were assessed.

No sites were recorded during the Stage 2 AA. One (1) artifact cluster (CL-10) and two (2) isolated flakes (IF 25 and IF 26) were observed and recorded. No further work is recommended for SE 16 (5A,B,C)

4.29.1 SE 16 (5A,B,C) Artifact Clusters

4.29.1.1 Artifact Cluster 10

CL-10 is composed of two pieces of Onondaga chert lithic debitage in a 5 x 10 m area. The cluster of artifacts was located northeast of the proposed turbine location within the turbine pad assessment area. The artifacts are of indeterminate age or cultural affiliation and were not collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.29.2 SE 16 (5A,B,C) Isolated Findspots

4.29.2.1 Isolated Findspot 25

IF-25 is composed of one piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed turbine. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.29.2.2 Isolated Findspot 26

IF-26 is composed of one piece of Onondaga chert lithic debitage. The artifact was located along the proposed access road approximately halfway between Vaughan Road and the south end of the proposed access road. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.30 SE 11 (12B)

SE 11 (12B) consists of collector and fibre optic line, running between T76 at SE 16 (5D) and T01 at SE 16 (5E). The line runs east/west at the northern extent of the property line. The property is located on Lot 14, Concession 3, Gainsborough Township (Figure 32) (Supp. 30). A small portion of the property area could not be assessed due to a stream which runs north south through the property (Photo 48). The pedestrian survey was conducted on December 4, 2012. The topography of the area is relatively flat.

No artifacts were recovered during the Stage 2 AA. No further work is recommended for SE 11 (12B).

4.31 SE 35 (10H)

SE 35 (10H) consisted of collector and fibre optic line running between T01 at SE 16 (5E) and then north through a woodlot via directional drilling to connect with SE 83. The property is located on Lot 13, Concession 3, Gainsborough Township (Figure 33) (Supp. 31). The pedestrian survey was conducted on December 4, 2012. The topography of the area is relatively flat. The woodlot was subject to test pit survey (Photo 49).

No artifacts were recovered during the Stage 2 AA. No further work is recommended for SE 35 (10 H).

4.32 SE 23

SE 23 consists of a fibre optic line, which runs with the collector line along Vaughan Road. The fibre optic line moved onto the property to meet a junction box. SE 23 consists of a fibre optic line, which runs with the collector line along Vaughan Road. The fibre optic line moved onto the property to meet a junction box. The property is located on Lot 15, Concession 3, Gainsborough Township (Figure 34) (Supp. 32). The project area is within a manicured lawn and the survey was conducted utilizing a test pit survey method (Photo 50) on December 11, 2012. The topography of the area is relatively flat.

No artifacts were recovered during the Stage 2 AA. No further work is recommended for SE 23.

4.33 SE 48 AND SE 19

SE 48 and SE 19 consist of a collector line, which runs north from Elcho Road to T38 on SE 26. The property is located on Lots 9 and 10, Concession 3, Gainsborough Township and was surveyed on December 11, 2012 (Figure 35) (Supp. 33). SE 19 survey, in the extreme SW of the property along Vaughan Road, was assessed through test pit as it was in grass and SE 48 was assessed entirely through pedestrian survey (Photo 51). At the northern edge of the property the lines run through a woodlot which was not subject to survey due to standing water visible on the ground surface (Photo 25). The topography of the area is relatively flat.

No artifacts were recovered during the Stage 2 AA. No further work is recommended for SE 48 and SE 19.

4.34 SE 17 (T75) AND SE 27 (18B)

The access road and pad associated with SE 17 are located on Lot 11, Concession 2, Gainsborough Township, on the south side of Vaughan road (Figure 36) (Supp. 34). The Stage 2 AA survey of the property was conducted on May 16 (Photos 52 and 53), June 21, December 11, and completed on December 20, 2012. The topography of the area is generally level, with slight undulations (Photo 9). To the south of the pad abuts the Beaver Creek Wetland Complex. A portion of the transmission line on SE 27 (18B) runs through a wooded area which was subject to test pit survey (Photo 54), with the exception of a stream (Photo 55), which was not assessed.

No sites were recorded during the Stage 2 AA. One isolated projectile point (IF 55) was recorded. No further work is recommended for SE 17 and SE 27 (18B).

4.34.1 SE 17 Isolated Findspots

4.34.1.1 Isolated Findspot 55 (Point 28)

IF-55 is composed of one projectile point tip (Point 28). Point 28 (collected) is the tip of an indeterminate projectile point type manufactured from Onondaga chert. The projectile point was located along the eastern edge of the proposed access road. The single artifact does not meet

minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.35 SE 27 (18C) (T54)

The access road and pad associated with SE 27 are located on Lot 8, Concession 3, Gainsborough Township, on the north side of Vaughan Road (Figure 37) (Supp. 35). The survey of SE 27 was conducted on May 23, 2012. The topography of the area is generally level, with slight undulations on the pad (Photo 56). The north limit of the pad abuts the Beaver Creek Wetland Complex. At the time of the survey there were no watercourses observed and all areas of the pad and access road were completed. The west side of the access road at its takeoff from Vaughan Road abuts the east boundary of a non-participating property. The access road Project limit expands to the west past the north edge of the non-participating property. The proposed fibre optic line and turn-in at the extreme south-west end of the access road will lie in the west edge of the surveyed area.

There were no sites identified on SE 27. There were two (2) isolated finds (IF 10 and IF 38) recorded on the pad near the north eastern corner. IF 10 is an Early Woodland projectile point registered as AgGv-125. No further work is recommended for SE 27 (18C).

4.35.1 SE 27 Isolated Findspots

4.35.1.1 Isolated Findspot 10 (AgGv-125) (Point 13)

IF-10 (AgGv-125) is composed of a single projectile point (Point 13). The projectile point (collected) was located northeast of the proposed turbine within the proposed laydown area. Point 13 is the tip of an Early Woodland (2,950-2,400 B.P.) Meadowood projectile point type manufactured from Haldimand chert (Plate 4).

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12

Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.35.1.2 Isolated Findspot 38

IF-38 is composed of a single Onondaga chert uniface. The artifact was located northeast of the proposed turbine within the proposed laydown area and along the northern boundary of the assessment area. The artifact is of indeterminate age or cultural affiliation, and was collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.36 SE 11 (12C) (T39)

The access road and pad for SE 11 are located on Lot 4, Concession 2, Gainsborough Township, on the south side of Vaughan Road (Figure 38) (Supp. 36). The survey of the turbine was conducted on May 16 and June 4, 2012. The topography of the area is generally undulating (Photo 57). The pad abuts the Beaver Creek Wetland Complex to the west. There were no watercourses recorded during the survey. All portions of the access road and pad were surveyed.

There was one (1) isolated projectile point (IF 14) recorded during the Stage 2 AA of SE 11. No further work is recommended for SE 11 (12C).

4.36.1 SE 11 Isolated Findspot

4.36.1.1 Isolated Findspot 14 (Point 7)

IF-14 is composed of one projectile point (Point 7) of unknown chert located north of the proposed turbine along the northern edge of the proposed turbine pad assessment area. Point 7 (collected) is an indeterminate projectile point type missing its tip. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.37 SE 60 (T09) AND SE 59 (T51)

SE 60 and SE 59 are located on Lot 3, Concession 1, Gainsborough Township, on the south side of Elcho Road (Figure 39) (Supp. 37). The access road is common to both turbine pads. The survey of the turbines was conducted on May 16, May 29 and November 28, 2012. The topography of the area is generally level, with slight undulations. The majority of the SE 60 pad and a small area (approximately 50 m x 50 m) south of the SE 59 pad were ploughed and surveyed November 28, 2012 (Photo 58). Both SE 59 and SE 60 pads border the Port Davidson Slough Forest Wetland Complex to the south.

One (1) site was recorded on SE 59, a Late Palaeo-Indian projectile point, registered as AgGv-118. One (1) artifact cluster (CL-19) and two (2) Isolated Findspots (IF 39 and IF 40). AgGv-118 requires Stage 3 AA assessment and further work is recommended.

4.37.1 SE 60 and 59 Sites

4.37.1.1 NRWC-12 (AgGv-118) (Point 40)

NRWC-12 (AgGv-118) is composed of a single projectile point (Point 40). Point 40 is a Late Palaeo-Indian (c. 10,000-9,500 B.P.) Madina Plano projectile point type with a broken tip, manufactured from Onondaga chert (Plate 1). The projectile point was located along the eastern edge of the proposed access road approximately halfway between Elcho Road and the proposed turbine T51 pad.

This site meets the criteria for Stage 3 assessment as it consists of an artifact of special interest (Section 2.2 Standard 1b,iii).

4.37.2 SE 60 and 59 Artifact Clusters

4.37.2.1 Artifact Cluster 19

CL-19 is composed of three pieces of Onondaga chert lithic debitage in an area measuring 15 x 20 m. The cluster of artifacts was located north of the proposed turbine locations along the eastern side of the proposed access road and north of site NRWC-12. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.37.3 SE 60 and 59 Isolated Findspots

4.37.3.1 Isolated Findspot 39

IF-39 is composed of a single Onondaga chert biface. The artifact was located southwest of the proposed turbine T09. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.37.3.2 Isolated Findspot 40

IF-40 is composed of a single Onondaga chert biface. The artifact was located along the proposed access road. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.38 SE 59-2

SE 59-2 consists of a fibre optic line, which runs with the collector line along Elcho Road. The fibre optic line moved onto the property to meet a junction box. The property is located on Lot 4, Concession 1, Gainsborough Township (Figure 40) (Supp. 38). The project area was located within a municipal road allowance and the edge of the property which was manicured lawn so a test pit survey method was utilized (Photo 59). The topography of the property was relatively flat. Survey was conducted on November 28, 2012

No artifacts were recorded during the Stage 2 AA and no further work is recommended for SE 59-2.

4.39 SE 35 (T07)

The access road and pad for SE 35 is located on Lot 6, Concession 2, Gainsborough Township, on the north side of Elcho Road (Figure 41) (Supp. 39). The survey of the turbine was

conducted on June 5, 2012. The topography of the area is generally level across the entire surveyed area (Photo 60). The turbine is bordered by the Beaver Creek Wetland Complex. The Stage 2 AA was completed on all areas of the pad and access road.

One (1) artifact cluster (CL-2) was identified and registered as AgGv-126. No further work is recommended for SE 35.

4.39.1 SE 35 Artifact Clusters

4.39.1.1 Artifact Cluster 2 (AgGv-126)

CL-2 (AgGv-126) is composed of one Onondaga chert biface and four pieces of lithic debitage in a 20 x 20 m area. Only the biface was collected. The artifacts are located northeast of the proposed turbine along the northern edge of the assessment area. The artifacts are of indeterminate age or cultural affiliation.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.40 SE 21 (T77 & T36) AND SE 22

The turbine pads and access roads are located on Lots 11 and 12, Concession 1, Gainsborough, on the south side of Elcho Road (Figure 42) (Supp.40). SE 21 consists of two access roads and two pads. The Project component in SE 22 consists of a small square fibre optic connection point that was surveyed using pedestrian survey methodology. The survey of the turbines access roads and fibre optic connection was completed on June 6, 2012 and December 20, 2012 (Photo 61). The access road to the turbines from Elcho Road utilizes, in part, an existing disturbed seasonal access road (Baldwin Road). The constructible area for the turbines and access roads from Baldwin Road includes only the areas subject to pedestrian survey. The topography of the area is generally level across the entire survey area. The turbines are surrounded by the Beaver Creek Wetland Complex.

Two (2) sites were identified during the Stage 2 AA and registered as AgGv-121 and AgGv-122. A Late Archaic projectile point was identified from AgGv-122. One (1) artifact cluster (CL-32) and one (1) isolated projectile point (IF 71) were also recorded. AgGv-121 and AgGv-122 require Stage 3 AA assessment and further work is recommended.

4.40.1 SE 21 Sites

4.40.1.1 NRWC-33 (AgGv-121)

NRWC-33 (AgGv-121) is composed of one preform, one biface and over 40 pieces of lithic debitage all manufactured of Onondaga chert. Of the debitage, a sample of one utilized, 2 secondary, and 5 tertiary flakes was collected. The artifacts were located along the proposed

access road to turbine T36. The site is approximately 60 m x 60 m on a sandy rise south of a watercourse.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.40.1.2 NRWC-34 (AgGv-122) (Points 34 and 35)

NRWC-34 (AgGv-122) is composed of two projectile points (Points 34 and 35), and eight pieces of Onondaga chert lithic debitage. Point 34 is an indeterminate type projectile point manufactured from Onondaga chert. Point 35 is a Late Archaic (c. 4,500 – 3,100 B.P.) Crawford Knoll projectile point type manufactured from Kettle Point chert (Plate 3). Of the debitage, a sample of one secondary flake and one tertiary flake was collected. The artifacts were located along the proposed access road, in an area approximately 20 m x 20 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of more than one diagnostic artifact within a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.1).

4.40.2 SE 21 Artifact Clusters

4.40.2.1 Artifact Cluster 32 (AgGu-221) (Point 33)

CL-32 is composed of one projectile point (Point 33) and one piece of lithic debitage (secondary flake) in a 15 x 10 m area. Point 33 is a Late Woodland (c. 1,100 – 350 BP) Nanticoke Triangular projectile point type manufactured from Onondaga chert and missing its tip (Plate 5). The projectile point was located east of the proposed turbine location and along the existing property boundary.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.40.3 SE 21 Isolated Findspots

4.40.3.1 Isolated Findspot 71 (Point 32)

IF-71 is composed of one projectile point (Point 32). Point 32 is of indeterminate type, manufactured from Onondaga chert that shows evidence of heat alteration and missing its tip. The projectile point was located along the proposed access road and west of site NRWC-33. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41 SE 3 (1H) (TRANSFORMER STATION)

SE 3 is a transformer station located on Lots 11 and 12, Concession 1, Gainsborough Township, on the south side of Canborough Road and north and west of Chippewa Creek (Figure 43) (Supp. 41). The topography of the area slopes down to the south toward Chippewa Creek. There were no watercourses recorded within the survey area and at the time of the survey all portions of the station were dry during the survey on June 8, 2012 (Photos 62, 63 and 66). A gravel driveway running N-S through the transformer station was not assessed. The driveway is less than 5 m wide.

Four (4) pre-contact sites were recorded during the Stage 2 AA of SE 3, and registered as AfGv-131, AfGv-132, AfGv-133, AfGv-134. Three (3) artifact clusters and eight (8) Isolated Findspots were also identified. All 4 registered sites require Stage 3 AA assessment and further work is recommended.

4.41.1 SE 3 Sites

4.41.1.1 NRWC-19 (AfGv-131) (Points 9 and 11)

NRWC-19 (AfGv-131) is composed of two projectile points (Points 9 and 11), and eight pieces of lithic debitage. Only the projectile points were collected. Point 9 is broken and of indeterminate type manufactured from Onondaga chert and shows signs of heat alteration. Point 11 is the proximal end of a Late Archaic (4,500 - 3,100 B.P.) Genesee type projectile point manufactured from Onondaga chert (Plate 2). The artifacts were located southeast of the proposed transformer station location along the western edge of the proposed collector cable assessment area. The site is approximately 15 m x 20 m in area and is located on a small sandy rise.

Based on the criterion of a diagnostic artifact and two or more non-diagnostic artifacts this site meets the criteria for a Stage 3 assessment (Section 2.2 Standard 1a.i.1).

4.41.1.2 NRWC-20 (AfGv-132) (Point 10)

NRWC-20 (AfGv-132) is composed of a projectile point with a broken tip and base (Point 10), and approximately 20 pieces of lithic debitage. Only the projectile point was collected. Point 10 is an indeterminate projectile point type manufactured from Onondaga chert. The artifact was located southeast of the proposed transformer station location along the eastern edge of the proposed collector cable assessment area. The site is approximately 15 m x 20 m in area and is located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.41.1.3 NRWC-21 (AfGv-133)

NRWC-21 (AfGv-133) is composed of one uniface, four scrapers (Plate 12), one biface, and approximately 50 pieces of lithic debitage all manufactured from Onondaga chert. Of the debitage, a sample of one shatter, one utilized, and 2 tertiary flakes was collected. The artifacts were located along the northern edge of the proposed transformer station location. The site is approximately 60 m x 40 m in area and is located across two sandy ridges.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.41.1.4 NRWC-22 (AfGv-134)

NRWC-22 (AfGv-134) is composed of over 15 pieces of Onondaga chert lithic debitage. The artifacts were located in the northwestern corner of the proposed transformer station location and southwest of site NRWC-21. The site is approximately 15 m x 10 m in area, on a sandy rise. Due to the limited number of artifacts identified on the surface all were left *in situ* to facilitate relocation of the site for further archaeological assessment.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.41.2 SE 3 Artifact Clusters

4.41.2.1 Artifact Cluster 15

CL-15 is composed of four pieces of Onondaga chert lithic debitage in an area measuring 15 x 10 m. The cluster of artifacts was located southeast of the proposed transformer station location along the proposed collector cable assessment area, and southeast of site NRWC-19. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41.2.2 Artifact Cluster 16 (AfGv-146)

CL-16 is composed of four pieces of Onondaga chert lithic debitage in an area of 10 x 10 m area. The cluster of artifacts was located southeast of the proposed transformer station location along the northern edge of the proposed collector cable assessment area, and southeast of site NRWC-20. The artifacts are of indeterminate age or cultural affiliation. None were collected.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41.2.3 Artifact Cluster 17 (AgGv-128)

CL-17 is composed of eight pieces of Onondaga chert lithic debitage in an area measuring 20 x 25 m. The cluster of artifacts was located north of the proposed transformer station location and site NRW-21. The artifacts are of indeterminate age or cultural affiliation. None were collected.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41.3 SE 3 Isolated Findspots

4.41.3.1 Isolated Findspot 11 (Point 12) (AgGv-129)

IF 11 is composed of a single projectile point (Point 12). The projectile point was located on level ground north of the proposed transformer station location and along the west side of the proposed access road. Point 12 is a side-notched Late Woodland (1,100-350 B.P.) Jack's Reef style projectile point type manufactured from Onondaga Chert (Plate 5).

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41.3.2 Isolated Findspot 31

IF-31 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located on level ground north of the proposed transformer station location and along the west side of the proposed access road. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41.3.3 Isolated Findspot 32

IF-32 is composed of a single scraper reworked from a biface (Plate 12). The scraper was located on level ground along the north edge of the proposed transformer station location. The artifact is manufactured from Onondaga chert and is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41.3.4 Isolated Findspot 33

IF-33 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed transformer station location and east of site NRWC-30. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41.3.5 Isolated Findspot 34

IF-34 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed transformer station location and east of site NRWC-30. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41.3.6 Isolated Findspot 35

IF-35 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located on the west side of the proposed transformer station location near the western boundary of the assessment area. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41.3.7 Isolated Findspot 36

IF-36 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located on the west side of the proposed transformer station location near the western boundary of the assessment area, and south of IF-35. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.41.3.8 Isolated Findspot 37

IF-37 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located to the south of the proposed transformer station, west of the proposed access road, and along the western edge of the assessment area. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.42 SE 20 (14C) (T52 & T53)

The access road and pads are located on Lot 2, Concession 4, Caistor Township, on the north side of Concession 3 Road (Figure 44) (Supp. 42). The access road utilizes part of a gravel farm access road and is common to both turbine pads. The topography of the study area is generally level, with slight undulations. A series of shallow drainage channels was noted during the survey, although at the time of the survey the pads and access road were dry and were completely assessed. The survey was completed on June 5, 2012. To ensure adequate room for construction the pads were extended north, the new area was surveyed on November 30, 2012. During the survey a pond was noted and not surveyed (Photo 64).

There was one (1) site identified during the Stage 2 AA, and registered as AgGv-119.

4.42.1 SE 20 (14C) Sites

4.42.1.1 NRWC-23 (AgGv-119)

NRWC-23 (AgGv-119) is composed of one broken Onondaga chert blade and 12 pieces of lithic debitage. Of the debitage, a sample of one utilized flake was collected. The artifacts were located southwest of proposed turbine T53 and west of the proposed laydown area and proposed access road. The site is approximately 15 m x 15 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGv-119 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site (Supp. Figure F).

4.43 SE 20 (14D) (T08)

The access road and pad are located on Lot 2, Concession 3, Caistor Township, on the south side of Concession 3 Road (Figure 45) (Supp. 43). One pad and access road are associated with SE 20 (14D). The Stage 2 AA survey was completed on June 7 and 8, 2012. The topography of the study area is generally level for the entire access road and pad (Photo 65). A series of shallow drainage channels was noted during the survey, although at the time of the survey the pad and access road were dry and were completely assessed.

One (1) pre-contact site was identified and registered as AgGv-123. There were also two (2) artifact clusters (CL-33 and CL-34) and three (3) Isolated Findspots (IF 72-74) during the Stage 2 AA.

4.43.1 SE 20 (14D) Sites

4.43.1.1 NRWC-35 (AgGv-123)

NRWC-35 (AgGv-123) is composed of 15 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of three tertiary flakes was collected. The artifacts were located along the eastern edge of the proposed access road assessment area, and east of the tree line in an area approximately 20 m x 20 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.43.2 SE 20 (14D) Artifact Clusters

4.43.2.1 Artifact Cluster 33 (AgGv-127)

CL-33 (AgGv-127) is composed of three pieces of Onondaga chert lithic debitage. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts were located northeast of the proposed turbine along the east side of a water course in an area approximately 10 m x 10 m.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.43.2.2 Artifact Cluster 34

CL-34 is composed of two pieces of Onondaga chert lithic debitage in a 10x 10 m area. The cluster of artifacts was located south of the proposed turbine location along the edge of the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation. None were collected. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.43.3 SE 20 (14D) Isolated Findspots

4.43.3.1 Isolated Findspot 72

IF-72 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located along the west side of the proposed access road. The artifact is of indeterminate age or cultural affiliation and was not collected. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.43.3.2 Isolated Findspot 73

IF-73 is composed of a single preform manufactured from Haldimand chert. The artifact is of indeterminate age or cultural affiliation. The artifact was located within a proposed laydown area along the access road. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.43.3.3 Isolated Findspot 74 (Point 36)

IF-74 is composed of one projectile point (Point 36) located northwest of the proposed turbine within the proposed laydown area. The projectile point is of indeterminate age or cultural affiliation, manufactured from Onondaga chert and missing its tip. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.44 SE 112

SE 112 is the southern portion of the transformer station SE 3(1H). It is located on Lot 43, Concession 7, Wainfleet Township, on the north side of Creek Road (Figure 46) (Supp. 44). The topography of the area slopes down to the north toward the Chippewa Creek, and a portion of the project area had a slope >20 degrees and was not assessed (Photo 66). There were no watercourses recorded within the study area and at the time of the survey all portions of the station were dry during the survey on December 5, 2012.

Two (2) sites, AfGu-62 and AfGu-63 and seven (7) isolated Findspots were recorded. AfGu-62 and AfGu-63 require Stage 3 AA assessment and further work is recommended for SE 112.

4.44.1 SE 112 Sites

4.44.1.1 NRWC-49 (AfGu-62)

NRWC-49 (AfGu-62) is composed of over 20 pieces of Onondaga chert lithic debitage. The artifacts were located in an open field between Creek Road and Chippewa Creek. The site is approximately 15 m x 20 m. All surface finds were left *in situ* to facilitate relocation of the site for further archaeological assessment.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.44.1.2 NRWC-50 (AfGu-63)

NRWC-50 (AfGu-63) is composed of over 25 pieces of Onondaga chert lithic debitage thinly distributed over an area approximately 20 m x 55 m. None were collected. The artifacts were located in an open field between Creek Road and Chippewa Creek.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.44.2 SE 112 Isolated Findspots

4.44.2.1 Isolated Findspot 91

IF-91 is composed of a single Onondaga chert flake. The flake was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2. The artifact was not collected.

4.44.2.2 Isolated Findspot 92

IF-92 is composed of a single Onondaga chert flake. The flake was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2. The artifact was not collected.

4.44.2.3 Isolated Findspot 93

IF-93 is composed of a single Onondaga chert flake. The flake was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2. The artifact was not collected.

4.44.2.4 Isolated Findspot 94

IF-94 is composed of a single Onondaga chert biface fragment. The biface was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

4.44.2.5 Isolated Findspot 95

IF-95 is composed of a single Onondaga chert flake. The flake was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2. The artifact was not collected.

4.44.2.6 Isolated Findspot 96

IF-96 is composed of a single Onondaga chert biface fragment. The biface was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

4.44.2.7 Isolated Findspot 97

IF-97 is composed of a single Onondaga chert biface fragment. The biface was located in an area between Creek Road and Chippewa Creek. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2.

4.45 SE 113 (T95)

The access road and pad for SE 113 is located on Lot 42, Concession 7, Wainfleet Township, on the south side of Creek Road (Figure 47) (Supp. 45). The topography of the study area slopes gently down to the north to Chippewa Creek. The Stage 2 AA of SE 113 was conducted on June 15, 2012 (Photo 67). There were no watercourses or bodies of water recorded during the survey, and both the pad and access road were dry and completely assessed during the Stage 2 AA.

One isolated projectile point (IF 12) was collected during the survey. No further work is recommended for SE 113.

4.45.1 SE 113 Isolated Findspots

4.45.1.1 Isolated Findspot 12 (Point 51)

IF-12 is composed of one partial projectile point (Point 51) located on level ground along the western edge of the proposed access road. The projectile point type is of indeterminate age or cultural affiliation and is manufactured from Onondaga chert. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.46 SE 47 (T10 & T37)

SE 47 consists of two turbine pads and a common access road. The property is located on Lot 41, Concession 6, Wainfleet Township, on the south side of Concession 6 Road (Figure 48) (Supp.46). The topography of the survey area is generally flat for the entire area. The turbine is bordered to the east by the Chippewa Creek Slough Forest Wetland Complex. An existing gravel farm access road, a turnaround area north of the eastern pad and the area around the pig barn were not assessed due to disturbance (Photo 68). There were no watercourses identified during the Stage 2 AA and the pads and access road were dry during the survey on June 6, 2012.

There were no artifacts identified during the Stage 2 AA of SE 47. No further work is recommended for the property.

4.47 SE 44 (T41 & T72)

SE 44 consists of a common access road two turbine pads located on Lots 4 and 5, Gore A, Moulton Township, on the east side of Gore A Road (Figure 49) (Supp. 47). The survey of the property was conducted May 16 and 28, 2012. The topography of the survey area is generally level for the entire area (Photo 69). All areas of the pads and access road were surveyed.

Two isolated points were identified during the stage 2 AA, and registered as AfGv-140 and AfGv-141. No further work is recommended for the property.

4.47.1 SE 44 Isolated Findspots

4.47.1.1 Isolated Findspot 6 (AfGv-140) (Point 15)

IF-6 (AfGv-140) is composed of a single projectile point (Point 15) located at the junction of the proposed access road and turbine pad. Point 15 is the basal portion of a Late Woodland (c. 1,100-350 B.P.) Daniels Triangular projectile point type manufactured from Onondaga chert that has been heat altered (Plate 5).

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.47.1.2 Isolated Findspot 7 (AfGv-141) (Point 16)

IF-7 (AfGv-141) is composed of a single projectile point (Point 16) located at the junction of the proposed access road and turbine pad, and northeast of Point 15. Point 16 is an Early Woodland (c. 2,950-2,400 B.P.) Meadowood projectile point type, which is missing a portion of the base, and is manufactured from Onondaga chert (Plate 4).

This diagnostic artifact was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.c. However, the single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.48 SE 18 AND SE 110 (T91, T13, T11 & T12)

SE 18 and SE 110 consist of two access roads common to Four pads, located on Lots 5 and 6, Gore A, Moulton Township, on the east side of Gore A Road, and Lot 4, North of Forks Road, Moulton Township, on the north west side of Highway 3 (Figures 49, 50, 51) (Supp. 47, 48, 49). One pad and access road are associated with SE110, the northernmost turbine on Lot 4, and the gravel access road (not surveyed) from Highway 3. The other access road and remaining three (3) pads are SE 18.

The survey of the properties was undertaken on May 28 and 29, 2012. The topography of the survey area is generally flat, with slight undulations (Photos 70 and 71). Two drainage ditches were noted during the survey of Lot 4, North of Forks Road. One runs parallel to Highway 3, and makes a 90 degree turn to run down the center of the Lot. The other ditch takes a more natural course south of the first and parallel to Highway 3. The two ditches meet at the west edge of the southernmost turbine.

One site was identified on the one turbine associated with SE 110 and is registered as AfGV-136. One isolated core (IF 65) was identified on SE 18. Further work is recommended for SE 110.

4.48.1 SE 18 and SE 110 Sites

4.48.1.1 NRWC-29 (AfGv-136)

NRWC-29 is composed of one scraper (Plate 12) and over 30 pieces of lithic debitage of Onondaga chert. Of the debitage, a sample of one core and 3 tertiary flakes was collected. The artifacts were located northeast of the turbine within the laydown area and south of a tree line. The site is approximately 50 m x 50 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.48.2 SE 18 and SE 110 Isolated Findspots

4.48.2.1 Isolated Findspot 65

IF-65 is composed of one Onondaga chert core. The artifact was located southeast of the proposed turbine within the proposed laydown area. The artifact is of indeterminate age or cultural affiliation. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.49 SE 82 (T19)

SE 82 consists of an access road and pad located on Lot 8, North of Forks Road, Moulton Township, on the east side of Hutchinson Road (Figure 52) (Supp. 50). The survey of the property was conducted on May 15, 2012. The topography of the access road and pad is undulating. All areas of the turbine were surveyed (Photo 72). There were no watercourses or bodies of water identified during the Stage 2 AA.

There were no artifacts identified during the Stage 2 AA of SE 82. No further work is recommended for the property.

4.50 SE 89 (T82)

SE 89 consists of an access road and pad located on Lots 14 and 15, North of Forks Road, Moulton Township, on the north side of Highway 3 (Figure 53) (Supp. 51). The access road utilizes an existing gravel farm road for approximately 150 m from its origin at Highway 3. The topography of the property is generally level, with slight undulations (Photo 73). All areas of the road and pad were assessed with the exception of a drainage ditch running along the southern extent of the pad, and a tree line running approximately north south through the pad. The tree line is less than 5 m wide. Survey of SE 89 occurred on June 6, 2012.

There were no artifacts identified during the Stage 2 AA of SE 89. No further work is recommended for the property.

4.51 SE 70 (T42)

The access road and pad is located on Lots 13 and 14, South of Forks Road, Moulton Township, on the south side of Highway 3 (Figure 54) (Supp. 52). The topography of the access road (Photo 74) and pad is generally level with slight undulations. The Stage 2 AA survey of the pad and access road was conducted on May 15 and June 5, 2012.

One (1) historic site was identified on the access road near its origin at Highway 3, and registered as AfGv-135. One (1) artifact cluster (CL-14) was also identified during the Stage 2 AA. Further work is recommended for SE 70.

4.51.1 SE 70 Sites

4.51.1.1 NRWC-25 (AfGv-135)

NRWC-25 (AfGv-135) is composed of over 100 historic artifacts. The artifacts consist of glass and ceramic that date the initial occupation of the site approximately to the 1840s (Plate 13). The artifacts were located south of Highway 3 at the north end of the proposed access road. The site is approximately 30 m x 40 m. Artifacts left in the field include, approximately 20 pieces of non-diagnostic or extremely fragmentary ceramics, approximately 30 pieces of extremely fragmentary red brick samples, >10 pieces of white clay pipe, which were both extremely fragmentary and non-diagnostic, approximately 20 pieces of glass, too fragmentary to describe as either bottle or window, and with no diagnostic traits. Each artifact class is discussed in greater detail below. Table 14 provides a summary of the Stage 2 recovered historic artifacts.

This site meets the criteria for Stage 3 assessment as it consists of at least 20 artifacts that date the period of use to before 1900 (Section 2.2 Standard 1.c).

Table 14: NRWC-25 (AfGv-135) Stage 2 Historic Artifact Summary		
Artifact	Frequency	Percentage %
Domestic	13	100.00
Total	13	100.00

4.51.1.1.1 Domestic Artifacts

A total of 13 domestic related artifacts were recovered during the Stage 2 assessment of NRW-25 including eight ceramic artifacts and 5 glass artifacts.

4.51.1.1.1.1 Ceramic Artifacts

A total of eight pieces of ceramics were recovered during the Stage 2 assessment of NRW-25. This total includes five pieces of whiteware, and one piece each of pearlware, red earthenware and yellowware. Table 15 provides a breakdown of the ceramic assemblage by ware type; Table 16 provides a breakdown by decorative type.

Table 15: NRW-25 (AfGv-135) Stage 2 Ceramic Assemblage by Ware Type

Artifact	Frequency	Percentage %
Whiteware	5	62.50
Pearlware	1	12.50
Utilitarian Earthenware	1	12.50
Yellowware	1	12.50
Total	8	100.00

Table 16: NRW-25 (AfGv-135) Stage 2 Ceramic Assemblage by Decorative Type

Artifact	Frequency	Percentage %
Whiteware, transfer printed	2	25.00
Whiteware, plain	2	25.00
Whiteware, painted	1	12.50
Pearlware, painted	1	12.50
Earthenware, red	1	12.50
Yellowware	1	12.50
Total	8	100.00

Whiteware

A total of five pieces of whiteware were recovered from NRW-25 (AfGv-135). Of the five pieces of whiteware, 2 have blue transfer print decoration. One piece of hand painted whiteware was also recovered during the Stage 2 assessment of NRW-25 (AfGv-135).

Pearlware

One piece of shell-edged pearlware with green painted decoration was recovered from AfGv-135.

Utilitarian Earthenware

One piece of glazed red earthenware was recovered during the Stage 2 assessment of this location.

Yellowware

One piece of yellowware was recovered during the Stage 2 assessment of this location. .

4.51.1.1.2 Glass Artifacts

Five glass artifacts were recovered from NRWC-25 (AfGv-135). This includes one piece of manganese “sun-purpled” glass, two pieces of aqua, and two green. One of the aqua pieces is embossed with “S”.

4.51.2 SE 70 Artifact Clusters

4.51.2.1 Artifact Cluster 14

CL-14 is composed of two pieces of Onondaga chert lithic debitage. Of the debitage, a sample of one tertiary flake was collected. The artifacts were located approximately halfway between Highway 3 and the proposed turbine along the eastern side of the proposed access road. The artifacts are of indeterminate age or cultural affiliation. The artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.52 SE 102 7 AND SE 102 1(T65)

The access road and pad for SE 102 7 and SE 102 1 is located on Lots 1, 2, 3 and 4 South of Forks Road, Moulton Township, on the west side of Townline Dunnville Wainfleet Road (Figure 55) (Supp 53). The survey of the property was conducted on May 23, December 6 and December 11, 2012. Survey was completed over all areas of the access road, pad, transmission line and station. The topography of the project property is relatively flat (Photo 75). There were no water courses or wet areas noted during the survey and all areas were completely assessed.

One (1) isolated findspot (IF 98) and one (1) artifact cluster (CL-41) were identified and recovered during the Stage 2 AA of SE 102 7 in December 2012. CL-41 was registered with the MTCS as AfGv-147. No further work is recommended for the property.

4.52.1 SE 102 7 Artifact Clusters

4.52.1.1 Artifact Cluster 41 (AfGv-147)

CL-41 is composed of three Onondaga chert flakes. The cluster of artifacts was located in an open field in an area approximately 10 m x 10 m, just north of where the northern access road turns to the east. The artifacts are of indeterminate age or cultural affiliation. None were collected.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.52.2 SE 102 7 Isolated Findspot

4.52.2.1 Isolated Findspot 98

IF-98 is composed of a single Onondaga chert flake. The flake was located along the northern edge of the midsection of the northern access road. The single artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented as assessed at Stage 2. The artifact was not collected.

4.53 SE 87 (T84)

The access road and pad associated with SE 87 is located on Lot 7, Concession 2 Cross, Moulton Township, on the east side of Hutchinson Road (Figure 56) (Supp. 54). The survey was conducted on May 15, 2012. The topography of the survey area was undulating. The soil on the property is very sandy (Photo 76). There was one dry shallow drainage channel identified during the Stage 2 AA, running approximately E-W through the pad. The survey was completed across all areas of the pad and access road.

Two (2) pre-contact sites were identified and registered as AfGv-129 and AfGv-130. There were also two (2) artifact clusters identified (CL-3 and CL-4). Stage 3 AA assessment is required for AfGv-129 and AfGv-130 and further work is recommended for SE 87.

4.53.1 SE 87 Sites

4.53.1.1 NRWC-1 (AfGv-129)

NRWC-1 (AfGv-129) is composed of approximately 25 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of one core, 2 secondary, and 3 tertiary flakes was collected. The artifacts were located along the southern edge of the proposed access road along the existing property boundary (Photo 76). The site is approximately 15 m x 30 m located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.53.1.2 NRWC-2 (AfGv-130)

NRWC-2 (AfGv-130) is composed of approximately 75 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of one utilized, 2 secondary, and 12 tertiary flakes was collected. The artifacts were located east of proposed turbine T84 within the eastern end of the turbine pad assessment area. The site is approximately 20 m x 80 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.53.2 SE 87 Artifact Clusters

4.53.2.1 Artifact Cluster 3 (AfGv-144)

CL-3 is composed of eight pieces of Onondaga chert lithic debitage in an area measuring 15 x 20 m. The cluster of artifacts was located east of the proposed turbine location within the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation. None were collected.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.53.2.2 Artifact Cluster 4 (AfGv-145)

CL-4 is composed of three pieces of Onondaga chert lithic debitage in an area measuring 10 x 10 m. The cluster of artifacts was located north of the proposed turbine location within the proposed laydown area. The artifacts are of indeterminate age or cultural affiliation. None were collected.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.54 SE 108 (T89)

The access road and pad for SE 108 are located on Lots 5 and 6, Concession 1 Cross, Moulton Township, on the west side of Townline Dunnville Wainfleet Road (Figure 57) (Supp. 55). The survey of SE 108 was conducted on May 15, 2012 (Photo 77). The topography of the area is generally level with slight undulations (Photos 78 and 79). There were no watercourses or bodies of water identified during the Stage 2 AA survey. All areas of the access road and pad were assessed.

No sites were recorded on SE 108. Two (2) Isolated Findspots were recorded on the pad (Photo 16). No further work is recommended for the property.

4.54.1 SE 108 Isolated Findspots

4.54.1.1 Isolated Findspot 53

IF-53 is composed of a single Onondaga chert biface (Photo 80). The biface was located southeast of the proposed turbine along the eastern edge of the assessment area. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.54.1.2 Isolated Findspot 54

IF-54 is composed of a single piece of Onondaga chert lithic debitage. The artifact was located southeast of the proposed turbine along the eastern edge of the assessment area. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.55 SE 102 4 (T62 & T63)

The access road for SE 102 4 is common to two pads, all located on Lot 2, Concession 3 Cross, Moulton Township, on the west site of Hutchinson Road (Figure 46) (Supp. 58). The survey of the pads and access road was conducted on June 7, 2012. The topography of the survey area is generally level with slight undulations. The aerial imagery and maps for the property show a wood lot extending in the center of the ploughed field, through which the access road passes. At the time of the survey this portion of the woodlot had been cut, grubbed and ploughed. All areas of the pads and access road were surveyed (Photo 81).

No artifacts were identified or recorded on SE 102 4 during the Stage 2 AA. No further work is recommended for the property.

4.56 SE 116 (T98)

The access road and pad for SE 116 are located on Lots 18 and 19, Concession South of Forks Road, Moulton Township, on the south side of Highway 3 (Figure 59) (Supp. 57). The survey of SE 116 was conducted on December 6 and December 11, 2012. The portion of the access road immediately south of Highway 3 was manicured lawn and subject to test pit survey (Photo 82). A transmission line and fibre optic cable running from Highway 3 to T98, located at the western edge of the property boundary runs partly through manicured lawn and was also subject to test pit survey. The remainder of the access road and pad were surveyed utilizing a pedestrian survey strategy. The topography of the property is slightly undulating. At the time of the survey all portions of the project area were dry and fully assessed.

No artifacts were recorded during the Stage 2 AA. No further work is recommended for SE 116.

4.57 SE 114 (T20)

The access road and pad for SE 114 are located on Lot 26, Range 1 from Grand River, Moulton, on the east side of Inman Road (Figure 60) (Supp. 58). A collector cable runs from the eastern extent of the pad to the west side of Bird Road. The survey of SE 114 was conducted on June 8, 2012. The topography of the access road, pad and collector cable is generally level (Photo 83). There were no watercourses or bodies of water identified during the Stage 2 AA.

No artifacts were identified or recorded on SE 114 during the Stage 2 AA. No further work is recommended for the property.

4.58 SE 119 (T99)

SE 119 consists of an access road and a pad it is located on Lot 25, Range 1 from Grand River, Moulton Township, on the west side of Inman Road (Figure 61) (Supp. 59). The access road for the turbine utilizes an existing gravel farm road. The Stage 2 AA survey of the property was conducted on June 20, 2012. The topography of the area is generally level (Photo 84). There were no watercourses or bodies of water identified during the Stage 2 AA.

One (1) large pre-contact site was identified during the survey of SE 119, and registered as AfGv-139. The site requires Stage 3 AA assessment and further work is recommended.

4.58.1 SE 119 Sites

4.58.1.1 NRWC-38 (AfGv-139) (Point 6)

NRWC-38 is composed of one projectile point (Point 6), one broken biface and approximately 50 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of one tertiary flake was collected. Point 6 is a projectile point manufactured from Onondaga chert of indeterminate age or cultural affiliation that has been heat altered. The artifacts were located south of the proposed turbine within the proposed turbine pad. The site is approximately 100 m x 100 m and consists of two concentrations of artifacts separated by a relic water course.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.59 SE 115 (T96)

The access road and pad for SE 115 is located on Lot 1, Concession 4 Cross, Moulton Township, on the east side of Bird Road (Figure 62) (Supp. 60). The survey of SE 115 was conducted on May 17, 2012 (Photo 85). The access road for the turbine utilizes an existing gravel farm road which was disturbed and not assessed. All other areas of the pad and access road, including dry drainage channels, were assessed.

No artifacts were identified or recorded on SE 115 during the Stage 2 AA. No further work is recommended for SE 115.

4.60 SE 105 (T05)

The access road and pad for SE 105 is located on Lot 11, Concession 3, Sherbrook and Lots 18 and 19, Concession 2 Fle, Moulton Township (Figure 63) (Supp. 61). The survey of the property was conducted on June 7, 2012. The topography of the access road is generally level, while the pad is slightly undulating (Photo 86). The access road for the turbine runs to the east of an existing farm road. All portions of the access road and pad were completely assessed.

One (1) pre-contact site was recorded and registered as AgGv-143. One (1) artifact cluster (CL-37) and two (2) isolated flakes (IF 77 and IF 78) were also recorded during the Stage 2 AA.

4.60.1 SE 105 Sites

4.60.1.1 NRWC-41 (AfGv-143)

NRWC-41 is composed of over 30 pieces of Onondaga chert lithic debitage. None were collected. The artifacts were located southeast of the proposed turbine, and east of the proposed access road. The site is approximately 25 m x 20 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AfGv-143 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site (Supp Figure G).

4.60.2 SE 105 Artifact Clusters

4.60.2.1 Artifact Cluster 37 (AfGv-142)

CL-37 is composed of six pieces of Onondaga chert lithic debitage in an area measuring 20 x 5 m. The cluster of artifacts was located northeast of the proposed turbine in the northeastern corner of the turbine pad assessment area. The artifacts are of indeterminate age or cultural affiliation. None were collected.

This site was registered with the MTCS and received a Borden number as per the 2011 *Standards and Guidelines for Consultant Archaeologists* Section 7.12 Standard 1.a. However, the artifacts do not meet minimum criteria for a Stage 3 assessment and, as such, their cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.60.3 SE 105 Isolated Findspots

4.60.3.1 Isolated Findspot 77

IF-77 is composed of a single piece of Onondaga chert lithic debitage located south of the proposed turbine location along the southern edge of the assessment area. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.60.3.2 Isolated Findspot 78

IF-78 is composed of a single piece of Onondaga chert lithic debitage located south of the proposed turbine location and east of the proposed access road. The artifact is of indeterminate age or cultural affiliation and was not collected. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.61 SE 49-4 (T45, T46, T47 & T17)

The access road on the east side of Bird Road is common to the four (4) turbines associated with SE 49-4 as well as the five (5) pads associated with SE 49-1 and the three (3) pads for SE 79. SE 49-4 is located on Lots 12, 13 and 14, Concession 2 Fle, Moulton Township (Figure 64) (Supp 62). The survey of the property was conducted on June 6, 2012. The topography of the survey area is flat. The turbines to the south abut the extensive Moulton Wetland West. The wetland extends to the ploughed field to the north-west and covers the two westernmost pads. At the time of the survey the weather was extremely dry; all areas of the pads and access road were dry and assessed. The access road utilizes an existing farm road and a decommissioned train track (repurposed as a farm road). Both roads are graveled and raised. To accommodate the project more areas were added for assessment, which was conducted on November 29, 2012 (Photo 87).

There was one (1) pre-contact site recorded on during the Stage 2 AA and registered as AfGu-60. There were no other artifacts identified or recorded on the property. AfGu-60 requires Stage 3 AA assessment and further work is recommended.

4.61.1 SE 49-4 Sites

4.61.1.1 NRWC-24 (AfGu-60)

NRWC-24 (AfGu-60) is composed of over 40 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of 2 tertiary flakes that exhibit heat alteration was collected. The artifacts are located north of proposed turbine pad T17. The site is approximately 40 m x 80 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.62 SE 49-1 (T14, T16, T43, T44 & T48)

SE 49-1 consists of 5 pads and a section of access road. It is located on Lots 6, 7 and 8, Concession 2 Fle, Moulton Township (Figure 65) (Supp. 63). SE 79 is accessed from SE 49-1. The Stage 2 AA was conducted on June 6, 2012. The access road utilizes a gravel raised former train track that has been repurposed as a farm road. The topography of the property is flat and low. Large drainage ditches are located along the perimeters of the ploughed field to promote drainage. The pads are surrounded by the Moulton Wetland West. At the time of the survey the property was extremely dry and all areas of the property were assessed. A small addition was made to T44 and survey was conducted on November 29, 2012 (Photo 88).

No artifacts were identified or recorded during the Stage 2 AA of SE 49-1. No further work is recommended for the property.

4.63 SE 79 (T21, T22 & T61)

SE 79 consists of three (3) pads located on Lot 8, Concession 1 Fle, Moulton Township, on the north side of North Shore Drive (Figure 66) (Supp. 64). The pads are accessed from the Seitz property to the north and utilize the same access road as SE 49-1 and SE 49-4. The entire constructible area for SE 79 will be located within the surveyed ploughed field and will not impact any of the narrow wooded sections along the eastern and western edges of the property and a wooded finger of land that juts in from the west property edge to east of the collector line route which were not subject to survey. The survey of the property was conducted on June 19, 2012. The topography of the area is generally level, sloping slightly to the south towards Lake Erie. The southern-most pad ends at a drainage channel, running parallel to North Shore Road (Photo 89). At the time of the survey all areas of the pads were dry and assessed.

There were two (2) isolated finds recorded during the Stage 2 AA of SE 79. No further work is recommended for the property.

4.63.1 SE 79 Isolated Findspots

4.63.1.1 Isolated Findspot 58

IF-58 is composed of a single broken biface manufactured from Onondaga chert. The artifact was located northwest of the southernmost turbine along the access road. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.63.1.2 Isolated Findspot 59

IF-59 is composed of a single broken biface manufactured from Onondaga chert. The artifact was located northwest of the turbine along the access road. The artifact is of indeterminate age or cultural affiliation. The artifact does not meet minimum criteria for a Stage 3 assessment and, as such, its cultural heritage value and interest can be considered sufficiently documented and assessed at Stage 2.

4.64 SE 77 (T24)

The access road and pad for SE 77 (T24) are located on Lot 31, Concession 2, Wainfleet Township, on the north side of Concession 1 Road (Figure 67) (Supp. 65). The survey was conducted on June 8, 2012. The topography of the area is generally level (Photo 90). The pad abuts the Moulton East Wetland Complex to the north, there were no other watercourses or bodies of water identified during the stage 2 AA. All areas of the pad and access road were completely assessed.

No artifacts were identified or recorded during the Stage 2 AA. No further work is recommended for the property.

4.65 SE 77 (T23)

The pad and access road for SE 77 (T23) is accessed from the decommissioned train track to the north as well as a seasonal farm road (Etling Road) to the east. The turbine is located on Lot 32, Concession 1, Wainfleet Township, on the west side of Etling Road (Figure 68) (Supp. 66). There were no watercourses or bodies of water identified during the survey of the property on June 6, 2012. The topography of the area is generally flat, sloping gently south toward Lake Erie (Photo 91). All areas of the pad and access road were assessed during the survey.

One (1) pre-contact site was located and registered as AfGv-137. No other artifacts were identified. The site requires Stage 3 AA assessment and further work is recommended.

4.65.1 SE 77 (T23) Sites

4.65.1.1 NRWC-36 (AfGv-137)

NRWC-36 (AfGv-137) is composed of approximately 40 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of one core, one utilized, one retouched, 2 secondary, and 3 tertiary flakes was collected. The artifacts were located south of turbine T23 within the southern end of the assessment area. The site is approximately 30 m x 30 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.66 SE 77 (T49)

The pad and access road for SE 77 (T49) is accessed from the decommissioned train track to the north as well as seasonal farm road (Etling Road) to the east. The turbine is located on Lot 1, Concession 1 Fle, Moulton Township, on the west side of Etling Road (Figure 69) (Supp. 67). The pad and access road are bounded to the east by a watercourse (Photo 92). Another shallow channel runs east-west through the center of the pad and joins the watercourse at the eastern boundary. At the time of survey this channel was dry. The topography of the area is generally flat, sloping gently south toward Lake Erie. All areas of the pad and access road were assessed during the survey, which occurred on June 19, 2012.

One (1) pre-contact site was located and registered as AfGv-138. AfGv-138 requires Stage 3 assessment and further work is recommended.

4.66.1 SE 77 (T49) Sites

4.66.1.1 NRWC-37 (AfGv-138)

NRWC-37 (AfGv-138) is composed of three biface fragments and approximately 20 pieces of Onondaga chert lithic debitage. Only the bifaces were collected. The artifacts were located east of proposed turbine T49 along the eastern boundary of the assessment area. The site is approximately 20 m x 25 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.67 SE 53 (T27 & T28)

The access road and pads for SE 53 Attema are located on Lot 22, Concession 5, Gainsborough Township, on the southern extent of Comfort Road (Figure 70) (Supp. 68). There are two turbine pads (T27 and T28) common to the access road. The topography of the area is

generally flat. All areas of the pad and access road were assessed during the survey, which occurred on August 22, 2012 (Photo 93).

Three (3) pre-contact sites were located and registered as AgGu-213, AgGu-214 and AgGu-215. All three sites require Stage 3 AA assessment and further work is recommended.

4.67.1 SE 53 Sites

4.67.1.1 NRWC-42 (AgGu-213)

NRWC-42 (AgGu-213) is composed of one utilized Onondaga chert core and approximately 15 pieces of Onondaga chert lithic debitage. Of the debitage, a sample of a core and one secondary flake was collected. The artifacts were located at the western edge of proposed turbine T27 along the western boundary of the assessment area. The site is approximately 20 m x 20 m.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

4.67.1.2 NRWC-43 (AgGu-214) (Points 41, 42, 43, and 44)

NRWC-43 (AgGu-214) is composed of four projectile points, one scraper (Plate 12), one biface and approximately 50 pieces of Onondaga chert lithic debitage. Two of the projectile points are identified as Early Woodland (2,950 – 2,400 B.P.) projectile points, including a Meadowood Cache Blade (Point 43) (Plate 4, AgGu:1) and a Meadowood Point (Point 44) (Plate 4, AgGu:2), both of Onondaga chert. A third projectile point is identified as a Late Archaic (4,500 – 2,100 B.P.) Perkiomen type (Point 41) also of Onondaga chert (Plate 3). Point 42 was manufactured of Selkirk chert and was of indeterminate age or cultural affiliation. The scraper and biface were made of Onondaga chert. None of the debitage was collected. The artifacts were located at the northern edge of proposed turbine T27. The site is approximately 75 m x 45 m.

This site meets the criteria for Stage 3 assessment as it consists of at least one diagnostic and two or more non-diagnostic artifacts within a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.1).

4.67.1.3 NRWC-44 (AgGu-215) (Point 45)

NRWC-44 (AgGu-215) is composed of one projectile point base and approximately 10 pieces of Onondaga chert lithic debitage. Only the projectile point was collected. The artifacts were located between proposed turbines T27 and T28. Point 45 was identified with the Early Woodland (2,950-2,400 B.P.) Meadowood type projectile point of Onondaga chert (Plate 4). The site is approximately 13 m x 15 m.

This site meets the criteria for Stage 3 assessment as it consists of at least one diagnostic and two or more non-diagnostic artifacts within a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.1).

4.68 TRANSMISSION LINE TIE-IN

The transmission line Tie-In is located on Lot 21, Concession 1, Clinton Township on the west side of Mountainview Road. The Tie-In location consists of a single access road and area to set up the transmission tie-in (Figure 71) (Supp. 69). The topography of the area is undulating, and drops to the west to meet a stream running approximately N-S through the project property. The property is currently a peach orchard and as such the survey of the Tie-In location was conducted using a test pit survey strategy on August 22, 2012 (Photos 94 and 95).

One (1) pre-contact site was located and registered as AhGx-690. The site requires Stage 3 AA assessment and further work is recommended.

4.68.1 Tie-In Sites

4.68.1.1 NRWC-48 (AhGx-690)

NRWC-48 (AhGx-690) is composed of one Onondaga chert Spokeshave (Plate 9) and approximately 18 pieces of Onondaga chert lithic debitage, a Bois Blanc chert flake and a Selkirk chert flake. The artifacts were located between near the northern extent of the project area. The site was identified through the excavation of ten positive (*i.e.* artifact bearing) test pits on the 5 m testing grid. Eight of these test pits and several supplemental test pits were located in a core site area on the north side of the site area. Two other positive test pits were located peripheral to the core area positive test pits. Artifacts recovered through test pit survey were collected and recorded according to their associated test pit. Three lithic artifacts, including two flakes and a spokeshave, were also recovered on the surface between the peach trees. The positive pits and surface finds provided enough artifacts for the Stage 3 recommendation without digging a 1 x 1 m test unit. The site as identified through the Stage 2 test pit survey is approximately 30 m x 40 m.

This site meets the criteria for Stage 3 assessment as it consists of a minimum of five non-diagnostic artifacts in a minimum 10 m x 10 m test pit survey area (Section 2.2 Standard 1a.ii.2).

5.0 Analysis and Conclusions

Stage 2 AA of the Project to date has resulted in the documentation of 191 archaeological resources, including 50 archaeological sites, 14 Isolated Findspots, and 18 artifact clusters which have been registered with the MTCS and have been assigned Borden numbers. An additional 23 artifact clusters and 86 Isolated Findspots that did not receive Borden numbers have also been documented.

5.1 SITES RECOMMENDED STAGE 3 ARCHAEOLOGICAL ASSESSMENT

Stage 2 AA of the Project to date has resulted in the documentation of 50 registered archaeological sites which will require further archaeological assessment (Table 14). At minimum all 50 sites will require Stage 3 AA in order to determine the extent of each archaeological resource, and to further refine our understanding of the age, cultural association and cultural heritage value of the sites. Stage 3 AA will also determine what appropriate assessment options, such as avoidance or excavation, are available at each site location. Analyses of each location are provided below, determining whether further assessment is recommended. At the end of this section a preliminary indication is provided as to whether any of these sites may require Stage 4 archaeological assessment.

Most of the sites identified through the Stage 2 AA were composed of pieces of lithic debitage, the byproduct of stone tool reduction activities, scattered across the surface of ploughed fields. For the most part these 'lithic scatters' had no dateable formal tools or diagnostic artifacts associated with them. Lithic scatters with no associated diagnostic artifacts are common close to the Onondaga chert outcroppings along the Lake Erie shore. For example, within the Samsung Grand Renewable Energy Park to the west of the current study area, similar lithic scatters were found and similarly are assumed to represent activity resulting from processing chert blanks (Stantec 2012). High levels of activity associated with lithic procurement and processing throughout the pre-contact period in the Niagara Peninsula is also visible at such sites as the Peace Bridge Site (AfGr-9) in Fort Erie to the east of the study area (Williamson and MacDonald 1997). Lithic scatters can be the result of specific activities associated with raw material reduction to produce tool blanks or formal tools, or from tool sharpening, or expedient tool production to exploit a resource in the short term. Site function or type is often difficult to determine solely from surface finds, especially if the surface material is limited in number or spatial distribution. Since tool stone procurement and processing is an activity associated with all pre-contact archaeological cultures placing a date or site function to a specific scatter without diagnostic tool types is difficult at best. Unless otherwise indicated below for a specific site, the pre-contact sites identified through the Stage 2 AA of the NRWP are considered to be lithic scatters of indeterminate age and/or site function. Follow-up Stage 3 AA of these sites should allow for a refinement of our understanding of site function and site date and cultural affiliation.

Table 17: Archaeological Sites Recommended For Further Assessment

Site #	Location	Borden #	# Tools/ Diagnostics	Approximate # Artifacts	Cultural Period	Site Dimensions (m)		MTCS Criterion Met
						N-S	E-W	
1	SE 87	AfGv-129	0	25	Indeterminate	15	30	2.2 (1a.i.3)
2	SE 87	AfGv-130	0	75	Indeterminate	20	80	2.2 (1a.i.3)
3	SE 4	AgGu-183	0	> 100	Indeterminate	20	20	2.2 (1a.i.3)
4	SE 37	AgGu-184	0	> 150	Multi-component	85	50	2.2 (1.c)
5	SE 24	AgGu-185	0	20	Indeterminate	20	40	2.2 (1a.i.3)
6	SE 24	AgGu-186	0	> 25	Indeterminate	75	50	2.2 (1a.i.3)
7	SE 24	AgGu-187	0	> 20	Indeterminate	35	15	2.2 (1a.i.3)
8	SE 24	AgGu-188	0	> 40	Indeterminate	40	25	2.2 (1a.i.3)
9	SE 29-4	AgGu-189	0	> 100	Multi-component	50	50	2.2 (1.c)
10	SE 14	AgGu-190	0	> 100	Indeterminate	25	85	2.2 (1a.i.3)
11	SE 26(7A)	AgGu-191	0	> 50	Multi-component	50	60	2.2 (1a.i.3)
12	SE 59	AgGv-118	1	1	Palaeo-Indian	10	10	2.2 (1b.iii)
13	SE 39	AgGu-192	0	> 25	Late Archaic	35	20	2.2 (1a.i.3)
14	SE 39	AgGu-193	1	1	Palaeo-Indian	10	10	2.2 (1b.iii)
15	SE45	AgGu-194	1	9	Indeterminate	15	10	2.2 (1a.i.3)
16	SE 36	AgGu-195	0	> 10	Indeterminate	10	10	2.2 (1a.i.3)
17	SE 62	AgGu-196	0	> 20	Indeterminate	30	30	2.2 (1a.i.3)
18	SE 62	AgGu-197	0	15	Indeterminate	30	20	2.2 (1a.i.3)
19	SE 3 (1H)	AfGv-131	2	10	Late Archaic	15	20	2.2 (1a.i.1)
20	SE 3 (1H)	AfGv-132	0	20	Indeterminate	15	20	2.2 (1a.i.3)
21	SE 3 (1H)	AfGv-133	0	50	Indeterminate	60	40	2.2 (1a.i.3)
22	SE 3 (1H)	AfGv-134	0	15	Indeterminate	15	10	2.2 (1a.i.3)
23	SE 20 (14C)	AgGv-119	1	13	Indeterminate	15	15	2.2 (1a.i.3)
24	SE 49 -4	AfGu-60	0	> 40	Indeterminate	40	80	2.2 (1a.i.3)
25	SE 70	AfGv-135	0	> 100	Euro-Canadian	30	40	2.2 (1.c)
26	SE 52	AgGu-198	0	20	Indeterminate	10	15	2.2 (1a.i.3)
27	SE 13	AgGu-199	0	11	Indeterminate	25	15	2.2 (1a.i.3)
28	SE 13	AgGu-200	0	> 80	Indeterminate	125	50	2.2 (1a.i.3)
29	SE 18	AfGv-136	0	> 30	Indeterminate	50	50	2.2 (1a.i.3)
30	SE 26	AgGv-120	0	> 40	Indeterminate	25	75	2.2 (1a.i.3)
31	SE 16 (5D)	AgGu-201	0	22	Indeterminate	20	15	2.2 (1a.i.3)
32	SE 16	AgGu-202	1	4	Indeterminate	10	10	2.2 (1.)

Table 17: Archaeological Sites Recommended For Further Assessment

Site #	Location	Borden #	# Tools/ Diagnostics	Approximate # Artifacts	Cultural Period	Site Dimensions (m)		MTCS Criterion Met
						N-S	E-W	
	(5D)							
33	SE 21	AgGv-121	0	> 40	Indeterminate	60	60	2.2 (1a.i.3)
34	SE 21	AgGv-122	2	10	Late Archaic	20	20	2.2 (1a.i.1)
35	SE 20 (14D)	AgGv-123	0	15	Indeterminate	20	20	2.2 (1a.i.3)
36	SE 77 (T23)	AfGv-137	0	40	Indeterminate	30	30	2.2 (1a.i.3)
37	SE 77 (T49)	AfGv-138	0	20	Indeterminate	20	25	2.2 (1a.i.3)
38	SE 119	AfGv-139	0	> 50	Indeterminate	100	100	2.2 (1a.i.3)
39	SE 107	AgGv-124	0	35	Early Woodland	20	30	2.2 (1a.i.3)
40	SE 16 (5E)	AgGu-203	1	1	Late Palaeo-Indian	10	10	2.2 (1b.iii)
41	SE 105	AfGv-143	0	> 30	Indeterminate	25	20	2.2 (1a.i.3)
42	SE 53	AgGu-213	1	15	Indeterminate	20	20	2.2 (1a.i.3)
43	SE 53	AgGu-214	6	50	Late Archaic	75	45	2.2 (1a.i.1)
44	SE 53	AgGu-215	1	10	Early Woodland	13	30	2.2 (1a.i.1)
45	SE 26 (7A)	AgGu-216	1	3	Late Archaic	10	10	2.2 (1a.i.1)
46	SE 26 (7A)	AgGu-217	2	10	Indeterminate	15	20	2.2 (1a.i.3)
47	SE 26 (7A)	AgGu-218	6	>50	Euro-Canadian	40	15	2.2 (1.c)
48	Tie-in	AhGx-690	1	>20	Indeterminate	30	50	2.2 (1a.ii.2)
49	SE 112	AfGu-62	0	>20	Indeterminate	15	20	2.2 (1a.i.3)
50	SE 112	AfGu-63	0	>25	Indeterminate	20	55	2.2 (1a.i.3)
			Total #	> 1685				

NRWC-1

NRWC-1 (AfGv-129), located at SE 87, is a lithic scatter of indeterminate age or cultural affiliation composed of approximately 25 pieces of Onondaga chert lithic debitage. The artifacts were located along the southern edge of the proposed access road along the existing property boundary. The site is approximately 15 m x 30 m located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-2

NRWC-2 (AfGv-130), located at SE 87, is a lithic scatter of indeterminate age or cultural affiliation composed of approximately 75 pieces of Onondaga chert lithic debitage. The artifacts were located east of proposed turbine T84 within the eastern end of the turbine pad assessment area. The site is approximately 20 m x 80 m and located on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-3

NRWC-3 (AgGu-183), located at SE 4, is of indeterminate age or cultural affiliation and composed of one scraper, one biface, one spokeshave, and over 100 pieces of lithic debitage all of Onondaga chert. The artifacts are located on level ground south of the proposed turbine pad, along the east side of an existing pig barn. The site is approximately 20 m x 20 m in area. The number of artifacts, presence of formal tools and limited site area suggest that this may have been a small tool production site, perhaps used for a short period of time.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-4

NRWC-4 (AgGu-184), located at SE 37, is composed of over 150 historic and pre contact lithic artifacts. Pre contact artifacts were comprised of one projectile point (Point 50), two drills, a biface and lithic debitage (5 secondary, 16 tertiary and 1 core) all manufactured from Onondaga chert. Point 50 is the mid-section of an indeterminate projectile point type. The historic artifacts consisted of glass fragments, ceramic fragments, clay pipe fragments, square nails, buttons, and a 1974 quarter. The historic artifacts date between the early 19th century and the late 21st century. The artifacts were located along the proposed access road east of the proposed turbine location. The site is approximately 85 m x 50 m. As identified in the field NRWC-4 is located in close proximity to the residence of Jacob Gee shown on the 1876 historical atlas of Lincoln County (Page, 1876; Stantec, 2012a).

This site meets the criteria for Stage 3 assessment as it consists of at least 20 artifacts that date the period of use to before 1900 (Section 2.2 Standard 1.c). Although the distribution of pre-contact artifacts was widespread the number of formal tools identified are sufficient to meet Section 2.2, Guideline 2 and the pre-contact component of the site is considered to have sufficient cultural heritage value or interest that Stage 3 assessment would also have been recommended without reference to the extensive historic period component.

AgGu-184 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer, and a 50 m monitoring buffer (70 m total) will be erected around the site and no construction or disturbance will occur within the 70 m area. An alternative access road has been planned and subject to Stage 2 AA.

NRWC-5

NRWC-5 (AgGu-185), located at SE 24, is a lithic scatter of indeterminate age or cultural affiliation composed of one projectile point (Point 17), and approximately 20 pieces of Onondaga chert lithic debitage. Point 17 is an indeterminate projectile point type manufactured from an unknown chert. The artifacts are located east of the proposed turbine and along the eastern edge of the assessment area. The site is approximately 20 m x 40 m and situated on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGu-185 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site.

NRWC-6

NRWC-6 (AgGu-186), located at SE 24, is a lithic scatter of indeterminate age or cultural affiliation composed of over 25 pieces of Onondaga chert lithic debitage. The artifacts are located west of the proposed turbines within the proposed laydown area. The site is approximately 75 m x 50 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-7

NRWC-7 (AgGu-187), located at SE 24, is a lithic scatter of indeterminate age or cultural affiliation composed of two Onondaga chert bifaces and over 20 pieces of Onondaga chert lithic debitage. The artifacts are located approximately halfway between the proposed turbines, along the proposed access road. The site is approximately 35 m x 15 m on a sandy rise.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-8

NRWC-8 (AgGu-188), located at SE 24, is a site of indeterminate age or cultural affiliation composed of two Onondaga chert scrapers and over 40 pieces of Onondaga chert lithic debitage. The artifacts were located south of the proposed turbine laydown area along the eastern edge of the assessment area. The site is approximately 40 m x 25 m on a sandy rise. The presence of the scrapers suggests activities associated with hide working and the site may be a campsite.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

NRWC-9

NRWC-9 (AgGu-189), located at SE 29-4, is composed of over 100 pieces of historic and pre contact artifacts. Pre contact artifacts were comprised of one projectile point (Point 14) and several pieces of Onondaga chert debitage. Point 14 is a notched base fragment of an indeterminate projectile point type manufactured from Onondaga chert. The historic artifacts consisted of ceramics, square nails, buttons, and glass that date the initial occupation of the site approximately to the 1830s or 1840s. The artifacts were located along Concession 1 at the north end of the proposed access road. The site is approximately 50 m x 50 m. As identified in the field NRWC-9 is located in close proximity to the residence of Joseph Kennedy shown on the 1876 historical atlas of Lincoln County (Page, 1876; Stantec, 2012a).

This site meets the criteria for Stage 3 assessment as it consists of at least 20 artifacts that date the period of use to before 1900 (Section 2.2 Standard 1.c).

NRWC-10

NRWC-10 (AgGu 190), located at SE 14, is composed of two Onondaga chert scrapers and over 100 pieces of Onondaga chert lithic debitage. The artifacts were located northeast of the proposed turbine, on the east side of the turbine pad assessment area. The site is approximately 85 m x 25 m along the edge of a tree line. The large number of artifacts, large size of the surface finds and presence of scrapers that suggest activities associated with hide working indicate that the site may be a campsite.

This site meets the criteria for Stage 3 assessment as it consists of a large number of non-diagnostic artifacts (10 or more) in a minimum 10 m x 10 m area (Section 2.2 Standard 1a.i.3).

AgGu-190 requires Stage 3 AA assessment; however, avoidance is feasible and recommended. A 20 m protective buffer will be erected around the site, and a further 50 m monitoring buffer (70 m total) delineated around the perimeter of the site.