

**Stage 3 Site-Specific Archaeological Assessment of
Historic Site DgHi-1,
Northland Power – Long Lake Solar Project,
Part Lot 3, Concession 8
Township of Calder
District of Cochrane, Ontario**

FIT Contract # FIT-FE8GSGA



Prepared by

THE ARCHAEOLOGISTS INC.

Licensee: T. Keith Powers
Archaeological Consulting Licence P052
Project Information Number P052-467-2013

REVISED Report
Report Filed: January 7, 2014

EXECUTIVE SUMMARY

The Archaeologists Inc. was contracted to conduct Stage 3 site-specific archaeological assessments of historic site DgHi-1, Long Lake Solar Project, Part Lot 3, Concession 8, Township of Calder, District of Cochrane. The assessment was conducted in advance of development related to a Renewal Energy Approval project IT-FE8GSGA, under Ontario Regulation 359/09 of the Green Energy Act, s. 20 (1) and s. 21.

Site DgHi-1 was discovered by pedestrian survey during a Stage 1-2 assessment of the subject property by Archaeological Research Associates Ltd. (ARA 2012). The site was identified as a late 19th century to 20th century Euro-Canadian homestead scatter. The site was identified as a potentially significant archaeological resources and was recommended for Stage 3 site-specific archaeological assessment should protection and avoidance of the site not be possible.

The Stage 3 assessment strategy was consistent with that outlined in the 2011 Standards and Guidelines for Consultant Archaeologists for small post contact sites where it is not yet evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 mitigation. The Stage 3 assessment consisted of the excavation of one-metre square test units at 5 metre intervals followed by an additional 20% of the initial grid unit total focusing on areas of interest within the site extent.

The Stage 3 assessment of the site resulted in the excavation of 48 test units and the recovery of 182 artifacts. The controlled surface pick-up (CSP) resulted in the recovery of 52 artifacts. Artifact density is considered low and the majority of the diagnostic artifacts post-date 1870. No specific artifact patterning was noted and no middens were identified. Given that most of the time span of occupation of the archaeological site appears to date after 1870, it is recommended that site DgHi-1 has no further cultural heritage value or interest, and should not be subject to Stage 4 mitigation.

TABLE OF CONTENTS

Executive Summary	i
Table of Contents	iii
Project Personnel	iv
1.0 Project Context	1
1.1 Development Context	1
1.2 Historical Context	2
1.3 Archaeological Context	4
2.0 Field Methods	6
3.0 Record of Finds	9
4.0 Analysis and Conclusions	12
5.0 Recommendations	14
6.0 Advice on Compliance with Legislation	15
7.0 Bibliography and Sources	16
8.0 Images	18
9.0 Maps	22
APPENDIX A	28

PROJECT PERSONNEL

Project and Field Director:	Mr. T. Keith Powers (P052)
Field Archaeologists	Mr. Misha Stecyk Mr. Barclay Powers Mr. Sam Filipe Mr. John Ellis Mr. T. Keith Powers Mrs. Karen Powers
Report Preparation:	Mr. Norbert Stanchly (R149) Mr. Keith Powers (P052)
Graphics	Mrs. Karen Powers Mr. T. Keith Power

INTRODUCTION

The *Ontario Heritage Act*, R.S.O. 1990 c. O.18, requires anyone wishing to carry out archaeological fieldwork in Ontario to have a license from the Ministry of Tourism and Culture (MTC). All licensees are to file a report with the MTC containing details of the fieldwork that has been done for each project. Following standards and guidelines set out by the MTC is a condition of a licence to conduct archaeological fieldwork in Ontario. *The Archaeologists Inc.* confirms that this report meets ministry report requirements as set out in the *2011 Standards and Guidelines for Consultant Archaeologists*, and is filed in fulfillment of the terms and conditions an archaeological license.

1.0 PROJECT CONTEXT (Section 7.5.5)

This section of the report will provide the context for the archaeological fieldwork, including the development, historical and archaeological context.

1.1 Development Context (Section 7.5.6, Standards 1-3)

Section 7.5.6, Standard 1

The Archaeologists Inc. was contracted to conduct Stage 3 site-specific archaeological assessments of historic site DgHi-1, Long Lake Solar Project, Part Lot 3, Concession 8, Township of Calder, District of Cochrane. The assessments was conducted in advance of development related to a Renewal Energy Approval project FIT-FE8GSGA, under Ontario Regulation 359/09 of the Green Energy Act, s. 20 (1) and s. 21.

Northland Power Solar is proposing to develop a 10-megawatt (MW) solar photovoltaic (Solar PV) facility in the District of Cochrane for the Long Lake Solar Project. Northland is commencing with the Renewable Energy Approval (REA) process as required and described in Ontario Regulation 359/09 under the Environmental Protection Act. The proposed Projects are renewable energy generation facilities, which will use solar photovoltaic technology. Electricity generated by solar photovoltaic panels will be converted from dc to ac by an inverter, and subsequently stepped-up (via transformer) to 115 kV prior to being connected to the transmission system.

The project is seeking a Renewable Energy Approval according to Ontario Regulation 359/09 issued under the Environmental Protection Act, Sections 20, 21 and 22. The projects have been awarded Feed-in-Tariff (FIT) contract number FIT Contract # FIT-FE8GSGA.

Section 7.5.6, Standard 2

There is no additional development-related information relevant to understanding the choice of fieldwork strategy or recommendations made in the report.

Section 7.5.6, Standard 3

Permission to access the study area to conduct all required archaeological fieldwork activities, including the recovery of artifacts was given by the landowner and their representative.

1.2 Historical Context (Section 7.5.7, Standards 1-2)

Section 7.5.7, Standard 1

In advance of the Stage 3 assessment, a Stage 1 background study of the subject property and Stage 2 archaeological assessment was conducted in order to document the property archaeological and land use history and present condition.

In advance of the Stage 3 assessment, a Stage 1 background study of the subject property and Stage 2 archaeological assessment was conducted by Archaeological Research Associates Ltd. in order to document the property archaeological and land use history and present condition. According to their report:

“Based on the location, drainage, topography and land-use modelling it seems clear that the study area would, in its pristine state, have a high potential for the presence of both Pre-Contact and Historic-era sites. The potential for PreContact sites is high due to the presence of an unnamed creek to the west (a tributary of the Frederick House River). The potential for historic Euro-Canadian sites is similarly high due to the study area’s proximity to Calder Concession Road 8-9, a historically-surveyed thoroughfare. The lack of development in the study area for infrastructural, residential or commercial purposes has preserved its archaeological potential. In sum, the study area has the potential to yield sites which span Ontario’s entire archaeological history” (ARA 2012)

Their detailed historical research indicated the following:

Cochrane District was largely unsettled early in the Euro-Canadian era, and most turn-of-the-20th-century folk knew little of the vast expanse of northern Ontario beyond the Canadian Pacific Railway (Marwick 1950:3). Here the Districts of Algoma and Nipissing extended across the great expanse of northern Ontario to the southern shores of James Bay, parts of which would later be rearranged into the Districts of Sudbury (1894), Timiskaming (1912), and finally, Cochrane (1921). The earliest pioneers began to arrive in this area in the 1880s, and the majority settled at the head of Lake Temiskaming (Marwick 1950:3; Dodds 1978:5). These early settlers cleared the land, built homes and planted crops, but they were largely isolated from the rest of Ontario and had few means in the way of communication. Their transportation routes were limited to the waterways, primarily Lake Temiskaming itself and the Ottawa River.

With the arrival of the railway in 1908 and the subsequent founding of Cochrane itself, Euro-Canadian settlement of the area began to increase exponentially (see Figure 17). The area was divided up into 160 acre farm lots which sold for \$80

each. Only a quarter of the full price was required initially, with the balance to be paid in three yearly payments plus 6% interest. After four years, the settler could then obtain the patent to the lot (Marwick 1950:129). The first settlers began to arrive in 1909, taking the 22 to 24 hour ride from Toronto that could amount to \$500 if livestock and furniture was also shipped (Dodds 1978:15). Upon arrival, each man obtained the number to his lot and was given directions to find the stakes. These settlers then set out, forcing their way through the bush with their provisions, axes and saws. Some went east towards the Abitibi River, following old tote roads, while others struck out into the unsettled north (Marwick 1950:129). Cochrane received its charter in January, 1910, and soon after it experienced its first disaster when its business sector burned to the ground in August of that same year (Gibson 1970).

In anticipation of the great influx of settlers, the government began surveying the townships of the area in 1904. Typically, as fast as they were opened, the townships filled up (Dodds 1978:17). In the vicinity of what would become the Town of Cochrane, four townships were opened for settlement by 1910. To the north were Glackmeyer Township and Chute Township, while Lamarche Township and Fournier Township were situated to the south (Marwick 1950:141). Further to the west, Calder Township, Colquhoun Township and Leitch Township would later be opened for settlement. In less than 30 years, roughly 200 organized townships were created in northern Ontario (Dodds 1978:17). Aside from the community at Cochrane itself, the French Canadian settlement of Genier developed around Dora Lake to the north (Marwick 1950:141), while Hunta grew up in the vicinity of Hydro Lake to the west (See Figures 18-19). The very first settlers settled in Glackmeyer Township, with the other townships developing at a slower pace (Marwick 1950:141). These settlers were unfortunately misled in many cases, as promotional ‘settlement literature’ was geared towards distorting the truth to encourage settlement. Winters were called ‘mild and equable’, ‘healthful and dry’, while the summers were ‘warm with plenty of rain’. The winters were bitter, and the rains perhaps much too plentiful, especially around harvest time (rather than in the spring when it was needed). The absence of ‘crop diseases’ manifested itself in the form of frequent blights. The potatoes were sometimes “no bigger when they were harvested as when they were planted” (Dodds 1978:22). Still, settlement continued and the north developed. The town of Cochrane was made the seat of the Judicial District of Cochrane in 1922, and it came to house several headquarters of provincial government branches (Gibson 1970).

Lot 3, Concession 8 (Parcel 1525) was first patented to Howard Francis on October 4, 1930. On July 12, 1948 the title was transferred from Howard to Douglas Farquhar, for a consideration of \$500. Later, on May 18, 1962, Lot 3 passed into the hands of Harold James Farquhar and his wife Eileen, for a consideration of \$1. On October 23, 1969, Eli Landis became the new owner of the property, and on October 16, 1973 Robert R. Landis and Esther Landis took possession of Lot 3 as well.” (ARA 2012).

To summarize, the historical background records indicates that the site may be related to the occupation of Lot 3, Concession 8 by the Howard Francis family, the first documented owner of Lot 3, Concession 8. The ARA Stage 2 findings support this interpretation. The site may represent one of the earliest homesteads within the Cochrane area or a structure not mentioned in the archival record.

Section 7.5.7, Standard 2

The ARA Stage 1 and 2 assessment report did not make any specific recommendations for Stage 3 excavation strategies other than to recommend that the site be subject to Stage 3 assessment if it could not be protected. Given that the proponent decided to undertake additional development related to the project and the site could not be protected, it was necessary to subject the site to a Stage 3 site-specific assessment. We followed the Stage 3 site-specific archaeological assessment standards set out in Sections 3.2.1, 3.2.2 and 3.2.3 of the *2011 Standards and Guidelines for Consultant Archaeologists*. Given the nature of the sites, it was recommended that the Stage 3 test unit excavations follow the strategy as outlined in Table 3.1 for small post-contact sites where it is not yet evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4.

1.3 Archaeological Context (Section 7.5.8, Standards 1-7)

Section 7.5.8, Standard 1

Information on the known archaeological sites in the vicinity of the study area was obtained from the Ministry of Tourism and Culture site database. Prior to the discovery of the sites, no registered archaeological sites within a minimum one km distance from the project limits were known.

Section 7.5.8, Standard 2

Site DgHi-1 (Findspot 1) is located on fairly level tableland within an agricultural field approximately 30 m south of Calder Concession Road 8-9.

Physiographically, the study area lies within the Superior Province of the Precambrian Canadian Shield (Davidson 1989). The soils in the study area belong to the Gleysolic soil order. These are heavy, wet non-saturating and non-organic soils that typically have dark surface horizons and gray subsoils. Orthic Gleysols are dominant in the vicinity of the Town of Cochrane. These are characterized by dark-coloured A-horizons less than 10 cm thick (Hoffman 1989).

Section 7.5.8, Standard 3

The Stage 3 fieldwork was undertaken September 26 through 30, 2013.

Section 7.5.8, Standards 4 and 5

Site DgHi-1 was originally identified during a Stage 1 and 2 assessment of the subject property by Archaeological Research Associates Ltd. (ARA 2010). The Stage 1 background study concluded that the property exhibits archaeological potential. A Stage 2 property assessment was conducted to document all archaeological resources on the

property, to determine whether the property contains archaeological resources requiring further assessment, and to recommend next steps. The characteristics of the property dictated that the Stage 2 survey be conducted by both pedestrian survey and test pit survey.

The site was identified during a pedestrian survey of the subject property. The site is located on fairly level tableland and consisted of an artifact scatter within the plough zone of approximately 100 artifacts distributed over an area of approximately 25 metres by 35 metres. These included glass, ceramics, metal and leather objects (ARA 2010). Of these, a total of 35 were collected for analysis and included green stamped whitewares, blue transfer printed whiteware, green transfer printed whiteware, decalcomania whiteware, albany slip coarse earthenware and a wire nail (ARA 2010). The site was identified as a late 19th to early 20th century Euro-Canadian site. Unfortunately the ARA Stage 1&2 report does not provide information as to the location of specific findspots for those artifacts collected during the Stage 2 assessment, nor does the mapping provide any detail as to the extent of the scatter.

The artifact assemblage collected during the Stage 2 assessment suggests that the site (identified as Findspot 1 by ARA) was once the location of a house situated on top of a knoll, roughly 30m south of Calder Concession Road 8-9.

The Stage 3 assessment of the site follows the standards as per in Sections 3.2.1, 3.2.2 and 3.2.3 of the *2011 Standards and Guidelines for Consultant Archaeologists*. The Stage 1&2 assessment by ARA recommended that the site be subject to a Stage 3 site specific assessment if it could not be protected. It was determined by the proponent that additional space within their development property area was needed that would ultimately impact the archaeological site. As such, it was determined that protection and avoidance was not an option and The Archaeologists Inc. was contracted to conduct a Stage 3 site-specific assessment of the site in order to determine its cultural heritage value and assess potential for Stage 4 mitigation.

Section 7.5.8, Standard 6

There are no unusual physical features that may have affected fieldwork strategy decisions or the identification of artifacts or cultural features.

Section 7.5.8, Standard 7

There is no additional archaeological information that may be relevant to understanding the choice of fieldwork techniques or the recommendations of this report other than that provided above.

2.0 FIELD METHODS (Section 7.9.1, Standards 1-5)

This section of the report addresses Section 7.9.1 of the *2011 Standards and Guidelines for Consultant Archaeologists*.

Section 7.9.1, Standard 1

All Stage 3 fieldwork was conducted according to the archaeological fieldwork standards and guidelines as per Sections 3.2, 3.2.1, 3.2.2, and 3.2.3 of the *2011 Standards and Guidelines for Consultant Archaeologists*.

Section 3.2, S1 - All relevant reports of previous fieldwork within the property were reviewed prior to the Stage 3 assessment. The relevant Stage 1 and 2 archaeological assessment report (ARA 2012) is discussed in greater detail above.

- Section 3.2, S2 - The archaeological site assessment was conducted when weather and lighting conditions permitted good visibility of all parts of the archaeological site. No fieldwork was carried out when weather and lighting conditions (e.g., snow cover, frozen ground, excessive rain or drought, heavy fog) reduced the ability to identify and document any part of the archaeological site.
- Section 3.2, S3a&b – The Global Positioning System (GPS) was used to record the locations of a central fixed point within the archaeological site and a permanent datum that can be tied to a development map. The GPS readings are provided below. GPS MAKE AND MODEL: Magellan Explorist 610
- Section 3.2, S4 – Representative photographs of all field conditions have been provided in the Images section of this report.
- Section 3.2.1, S1 – As ground surface visibility had decreased in the time between the Stage 2 survey and the Stage 3 CSP, it was necessary to re-cultivate the land.
- Section 3.2.1, S2 – All artifacts on the ground surface were accurately mapped using a total station, and recorded and catalogued by their mapped location. The map was tied to the general site GPS readings by recording a central point in the scatter.
- Section 3.2.1, S4 – The CSP was conducted to ensure that a balance was struck between gathering enough artifacts to document the archaeological site and leaving enough in place to relocate the site if required. Given that Stage 4 is not required, we mapped and collected all surface finds.
- Section 3.2.1, S5 – All formal artifact types and diagnostic categories, including, all refined ceramic sherds, were collected during the CSP.
- Section 3.2.1, S6 – All non-diagnostic artifacts were collected taking into consideration the archaeological site type, type and frequency of non-diagnostic artifacts, and that further fieldwork will not be required.
- Section 3.2.2, S1 – Test unit excavation was conducted systematically to document the presence and extent of buried artifacts, structures, stratigraphy and cultural features, and to collect a representative sample of artifacts, across the entire archaeological site. All test units measured 1 m square.

- Section 3.2.2, S2 – The placement of test units followed an established grid on the site based on the permanent datum to at least the accuracy of transit and tape measurements. No test units were placed in unmeasured, estimated locations.
- Section 3.2.2, S3 – All test units were excavated by hand.
- Section 3.2.2, S4 – Test units were excavated by standardized systematic levels.
- Section 3.2.2, S5 – Test units were excavated into the first 5 cm of subsoil, unless excavation uncovered a cultural feature. Cultural features were not noted during test unit excavation.
- Section 3.2.2, S7 – All excavated soils were screened through mesh with an aperture of no greater than 6mm.
- Section 3.2.2, S8 – All artifacts were collected, retained, recorded and catalogued by their corresponding grid unit designation (see Appendix A).
- Section 3.2.3, S1 – The location and number of test units was determined using standards presented in Table 3.1 of the *2011 Standards and Guidelines for Consultant Archaeologists*. The objectives of the test unit placement strategy was to provide a uniform level of data collection from across the site, focus testing on key areas (as deemed appropriate based on professional judgment), gather a representative artifact sample from across the site, determine the nature of subsurface deposits, and determine the extent of the archaeological site, in order to support the recommendations for Stage 4 mitigation strategies. The test unit strategy employed followed that for small post-contact sites where it is not yet evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4. We placed and excavated 1 m square test units in a 5m grid across the site and placed and excavated additional test units, amounting to at least 20% of the grid unit total, also along a grid beyond the extent of the artifact producing units in order to accurately delineate the extent of the site.

Section 7.9.1, Standard 2

This standard is not applicable as no alternative methods acceptable through guidelines or special conditions was used for the Stage 3 assessment.

Section 7.9.1, Standard 3

See Table 1 below for GPS co-ordinates.

Table 1: SITE DgHi-1 – GPS READINGS			
NAD 83	CENTRE/DATUM	E478972	N5443643
GRID 17T	NORTH	E478977	N5443661
	WEST	E478960	N5443643
	SOUTH	E478972	N5443633
	EAST	E478988	N5443644
Permanent Datum	NW corner of Building	E479253	N5443427

Section 7.9.1, Standard 4

The controlled surface pick-up met the applicable standards for archaeological fieldwork as per Section 3.2.1 of the *2011 Standards and Guidelines for Consultant Archaeologists*, as detailed above. In addition, the CSP was conducted at 1 metre intervals for a radius of 20 metres beyond the limits of the surface scatter to ensure that the entire site was delineated. All diagnostic artifacts and all refined ceramic sherds were collected during the CSP.

Section 7.9.1, Standard 5a

Test unit excavation met the applicable standards for archaeological fieldwork as per Section 3.2.2 of the *2011 Standards and Guidelines for Consultant Archaeologists*, as detailed above.

Section 7.9.1, Standard 5b

The test unit grid was established in a systematic 5-metre grid pattern in relation to a fixed permanent datum. The datum is located at 500N-200E. Unit designations are assigned based on the southwest corner of the unit. The grid strategy was based on the standards most appropriate to the type of site based on Table 3.1 of the *2011 Standards and Guidelines for Consultant Archaeologists* as described in above. A total of 48 test units was excavated (40 at 5-metre intervals and an additional 8 infill units). Infill units were excavated in an area of higher artifact concentration based on the CSP and initial grid test units. The objectives of the test unit placement were to provide a uniform level of data collection from across the site, gather a representative artifact sample from across the site, determine the nature of subsurface deposits, to determine the extent of the archaeological site, and to support recommendations for Stage 4 mitigation strategies.

Section 7.9.1, Standard 5c

Ploughzone depths averaged 18cm and ranged from between 11cm to 24cm in depth. There was relatively little variation in soil depths across the test units. The variation is due to natural variation in topography. Ploughzone consists of a single level of stratigraphy.

3.0 RECORD OF FINDS (Section 7.9.2, Standards 1-5)

Section 7.9.2, Standard 1

No discernable features or feature soil was uncovered during the test unit excavations.

Section 7.9.2, Standard 2

The controlled surface pick-up (CSP) resulted in the recovery of 52 artifacts. The excavation of 48 test units produced 182 artifacts. Artifact density is considered low, and the majority of the diagnostic artifacts post-date 1870. No specific artifact patterning was noted and no middens were identified. Artifact frequencies in test units are provided in Table 2.

Table 2: Site BgFq-15 - Stage 3 Test Unit Artifact Frequency	
Test Unit	Artifact Frequency
490-185	0
490-190	0
490-195	0
490-200	1
490-205	0
490-210	1
490-215	0
490-220	0
494-200	9
495-185	0
495-190	3
495-195	1
495-199	16
495-200	26
495-201	14
495-205	11
495-210	0
495-215	5
495-220	1
496-200	11
499-205	12
500-185	0
500-190	1
500-195	2
500-200	5
500-204	8
500-205	21
500-206	11
500-210	7
500-215	3
500-220	0
501-205	4
505-185	0
505-190	0
505-195	3
505-200	0
505-205	1

Table 2: Site BgFq-15 - Stage 3 Test Unit Artifact Frequency

Test Unit	Artifact Frequency
505-210	2
505-215	2
505-220	1
510-185	0
510-190	0
510-195	0
510-200	0
510-205	0
510-210	0
510-215	0
510-220	0
Total	182

Section 7.9.2, Standard 3

The types of artifacts identified during the Stage 3 assessment include diagnostics that fit into a date range within the late 19th century to mid 20th century (i.e. 1880-1940). This is based on the recovery of coarse red earthenware and stoneware, decalomania, ironstone, porcelain, green and blue transferprint, yellowware and brown transferprint. The majority of the diagnostic ceramics are vitrified white earthenwares (i.e. ironstone). Bottle glass was also recovered, although in minimal amounts. These included brown, green and clear bottle fragments. Metal items included wire nails and scrap. No animal bone was noted.

The majority of the artifact assemblage is composed of ceramic tableware. Please see Appendix A for a complete catalogue of all retained artifacts. The catalogue and artifact description below follow the requirements regarding artifact analysis and description as per Section 6.0 – *Artifact Documentation and Analysis, 2011 Standards and Guidelines for Consultant Archaeologists*.

- Section 6, Standard 1 - Formal artifact typologies follow the "Classification System for Historical Collections" (Canadian Parks Service 1992), *The Parks Canada Glass Glossary* (Jones and Sullivan 1989), and articles by Ian Kenyon (1980, 1995) and J.K. Jouppien (1980). Citations are provided in report Section 7.0.
- Section 6, Standard 4 – There were no unstable artifacts.
- Section 6, Standard 5 – There were no large assemblages of unstable artifacts.
- Section 6, Standard 6 - see Appendix A for the artifact catalogue. The catalogue conforms to Standards 6a-6d.
- Section 6, Standard 7 - The packed collection consists of a single banker box of artifacts. The long-term curation plan is to store the artifacts at the laboratory facilities of The Archaeologists Inc.
- Section 6, Standard 8 - Sampling was not conducted.

Section 7.9.2, Standard 4

There were no unusual or unexpected findings.

Section 7.9.2, Standard 5

Table 3 below provides an inventory of the documentary record generated in the field during the Stage 3 assessment.

Table 3: Inventory of Documentary Record	
Document Type	Description
Field Notes	<ul style="list-style-type: none">• 3 pages of written field notes detailing daily weather conditions, excavation results, artifact yields per test unit; field crew
Photographs	<ul style="list-style-type: none">• 9 digital photos
Maps	<ul style="list-style-type: none">• 2 hand drawn grid maps on graph paper detailing placement of test units, CSP in relation to 500-200 datum and mapping included in this report

4.0 ANALYSIS AND CONCLUSIONS (Section 7.9.3, Standards 1-4)

Section 7.9.3, Standard 1

The results of Stage 3 assessment of the site indicates that the site represents a Euro-Canadian artifact scatter with an occupation date ranging mainly post-1870s based on the artifact types recovered. As detailed in Section 3.0 of this report, these include coarse red earthenware and stoneware, decalcomania, ironstone, porcelain, green and blue transferprint, yellowware and brown transferprint. The majority of the diagnostic ceramics are vitrified white earthenwares (i.e. ironstone). Bottle glass was also recovered, although in minimal amounts. These included brown, green and clear bottle fragments. Metal items included wire nails and scrap. No animal bone was noted.

Section 7.9.3, Standard 2

The Stage 3 archaeological findings indicate that the site is likely a discrete scatter associated with the occupation of a late 19th century house, likely timber-framed as indicated by ARA in their Stage 1&2 report. Given the lack of features or feature soil noted during the test unit excavations, low artifact density, it may represent a short-term occupation related to the late 19th century occupation of the house.

Section 7.9.3, Standard 3

The analysis of the artifact types, frequency, and distribution all indicate that the site is likely a short-term late 19th century scatter, possibly related to the occupation of the timber-framed homestead of the Howard Francis family as documented in the archival research undertaken by ARA. Given the lack of features noted, it is difficult to compare this site to other sites of a similar nature. Although the site may be associated with the earliest occupation of the subject property, the low density of artifacts and lack of cultural features indicates that the site retains little original integrity, possibly due to impacts from ploughing, given the generally shallow soil profiles.

Section 7.9.3, Standard 4

The evaluation of the level of cultural heritage value or interest of the site is based on the Stage 3 assessment findings in relation to Table 3.2 of the *2011 Standards and Guidelines for Consultant Archaeologists*. Indicators showing cultural heritage value or interest include the sites 1) information value, 2) value to a community, and 3) value as a public resource. Each of these is determined by a set of criteria. The information value is defined as how the archaeological site contributes to local, regional, provincial or national archaeological history. The community value is defined as the archaeological site's intrinsic value to a particular community or group. The value as a public resource is defined as how the site contributes to enhancing the public's understanding and appreciation of Ontario's past. The site is evaluated against set criteria outlined by Table 3.2 of the *2011 Standards and Guidelines for Consultant Archaeologists* in Table 4 below:

Table 4: Indicators Showing Cultural Heritage Value or Interest	
Information Value	
Criteria	Indicators
<ul style="list-style-type: none"> Cultural historical value 	<ul style="list-style-type: none"> Information from the site has no potential to advance our understanding of the cultural history of the township Information from the site has low to potential to advance our understanding of past human social organization at the family and household level
<ul style="list-style-type: none"> Historical value 	<ul style="list-style-type: none"> The site may be associated with the earliest settlement of the township
<ul style="list-style-type: none"> Integrity 	<ul style="list-style-type: none"> The site retains a low degree of original material
Value to a community	
Criteria	Indicators
<ul style="list-style-type: none"> The site has traditional, social or religious value 	<ul style="list-style-type: none"> No indicators
Value as a public resource	
Criteria	Indicators
<ul style="list-style-type: none"> The site has potential for public use for education, recreation or tourism 	<ul style="list-style-type: none"> The site has no potential for public use for education, recreation or tourism

Table 4 indicates that Site DgHi-1 has no indicators supporting criteria for the site to contribute to local and provincial archaeological history. The site has been evaluated to possess no cultural heritage value or interest.

5.0 RECOMMENDATIONS (Section 7.9.4, Standards 1-5)

Section 7.9.4, Standard 1 – n/a

Section 7.9.4, Standard 2 – n/a

Section 7.9.4, Standard 3 – n/a

Section 7.9.4, Standard 4 – n/a

Section 7.9.4, Standard 5

Site DgHi-1 has no further cultural heritage value or interest and **it is recommended that Stage 4 mitigation of impacts is not required for this site.**

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION (Section 7.5.9, Standards 1-2)

Section 7.5.9, Standard 1a

This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism and Culture, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

Section 7.5.9, Standard 1b

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Section 7.5.9, Standard 1c

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

Section 7.5.9, Standard 1d

The *Cemeteries Act*, R.S.O, 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

Section 7.5.9, Standard 2 –n/a

7.0 BIBLIOGRAPHY AND SOURCES (Section 7.5.10, Standards 1)

Archaeological Research Associates Ltd.

- 2010 Stage 1 and 2 Archaeological Assessment Long Lake Solar Project (FIT-FE8GSGA), Part Lots 2 & 3, Concession 8, Township of Calder, District of Cochrane, Ontario (PIF# P007-280-2010).

Canadian Parks Service

- 1992 *Classification System for Historical Collections*. National Historic Sites, Canadian Parks Service, Ottawa.

Davidson, R.J.

- 1989 Foundations of the Land Bedrock Geology. In *The Natural History of Ontario*, edited by J.B. Theberge, pp. 36-47. Toronto: McClelland and Stewart Inc.

Hatch Ltd.

- 2011 Long Lake Solar Project – Draft Project Description Report. Prepared for Northland Power.

Hoffman, D.

- 1989 Earthen Blanket: The Soils of Ontario. In *The Natural History of Ontario*, edited by J.B. Theberge, pp. 67-75. Toronto: McClelland and Stewart Inc.

Jones, O. and C. Sullivan

- 1989 *The Parks Canada Glass Glossary*. Minister of Supply and Services Canada, Hull.

Juppien, J.K.

- 1980 The Application of South's Mean Ceramic Formula to Ontario Historic Sites. *Arch Notes* 1980(3):24-28.

Kenyon, I.

- 1980 Some General Notes on 19th Century Ceramics. *Kewa* 80-3.
1995 A History of Ceramic Tableware in Ontario: 1780-1910. Paper presented at Table Talks Lecture Series, Montgomery's Inn, Toronto.

Marwick, A.

- 1950 Northland Post: The Story of the Town of Cochrane. Cochrane: N.p.

Ministry of Tourism and Culture

- 2011 Standards and Guidelines for Consultant Archaeologists.

The Archaeologists Inc

2013a Stage 1 and 2 Archaeological Assessment for Long Lake Solar Project – Solar Switching Station Part of Lot 1 & 28, Concessions 8 & 9, Town of Calder, District of Cochrane, Ontario (PIF# P052-453-2013).

2013b Stage 1 and 2 Archaeological Assessment for Long Lake Solar Project (Additional Lands) – Solar Switching Station, Part of Lot 2 & 3, Concessions 8, Town of Calder, District of Cochrane, Ontario(PIF# P052-0525-2013).

8.0 IMAGES (Sections 7.5.11, 7.9.6)



Plate 1: Shows conditions for CSP.



Plate 2: Establishing grid for Stage 3 assessment.



Plate 3: Stage 3 CSP.



Plate 4: Stage 3 test unit excavation.



Plate 5: Stage 3 test unit excavation.



Plate 6: Representative ceramic artifacts recovered during Stage 3 assessment of DgHi-1.



Plate 7: Representative metal and glass artifacts.

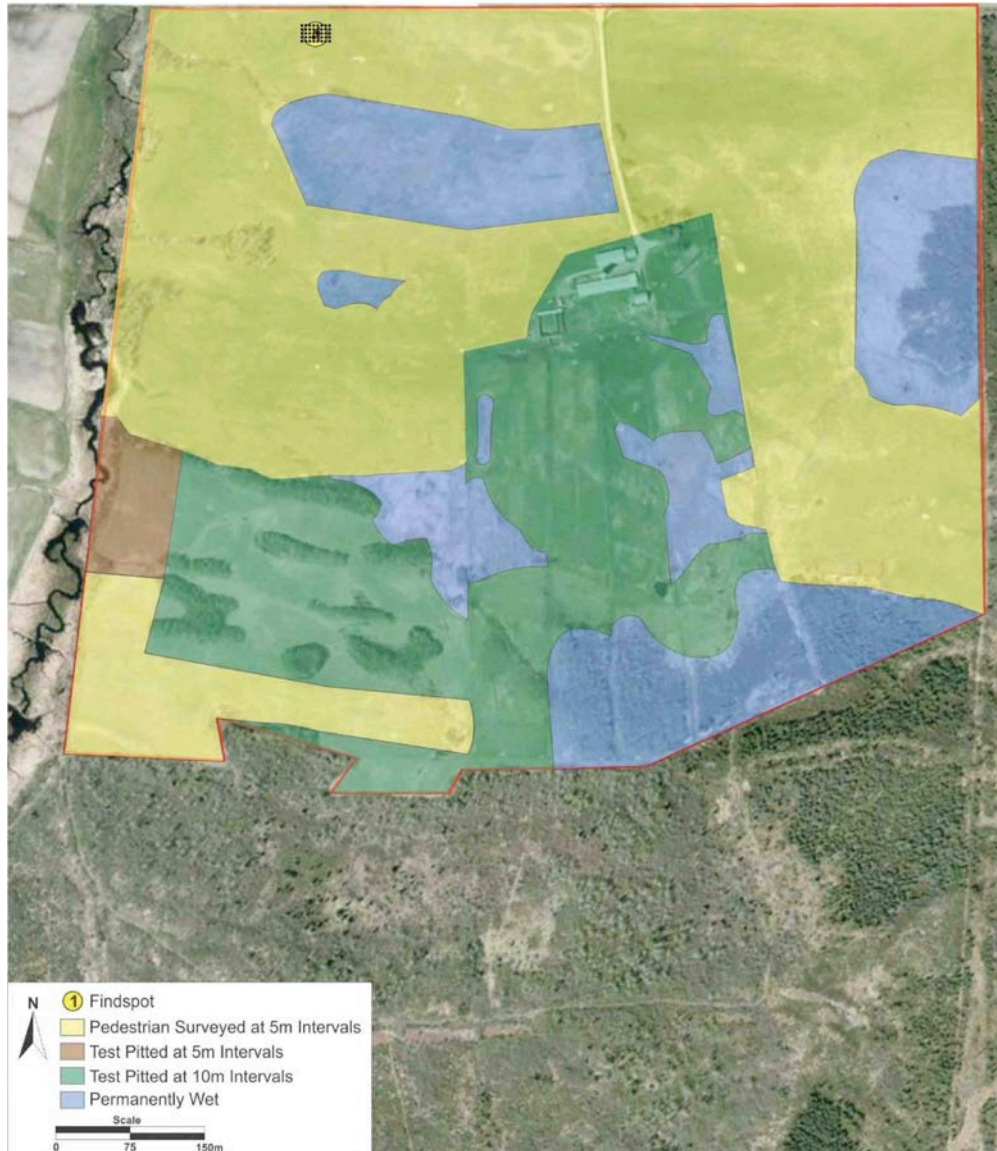


Plate 8: Shows representative photo of single level of ploughzone stratigraphy for all units.

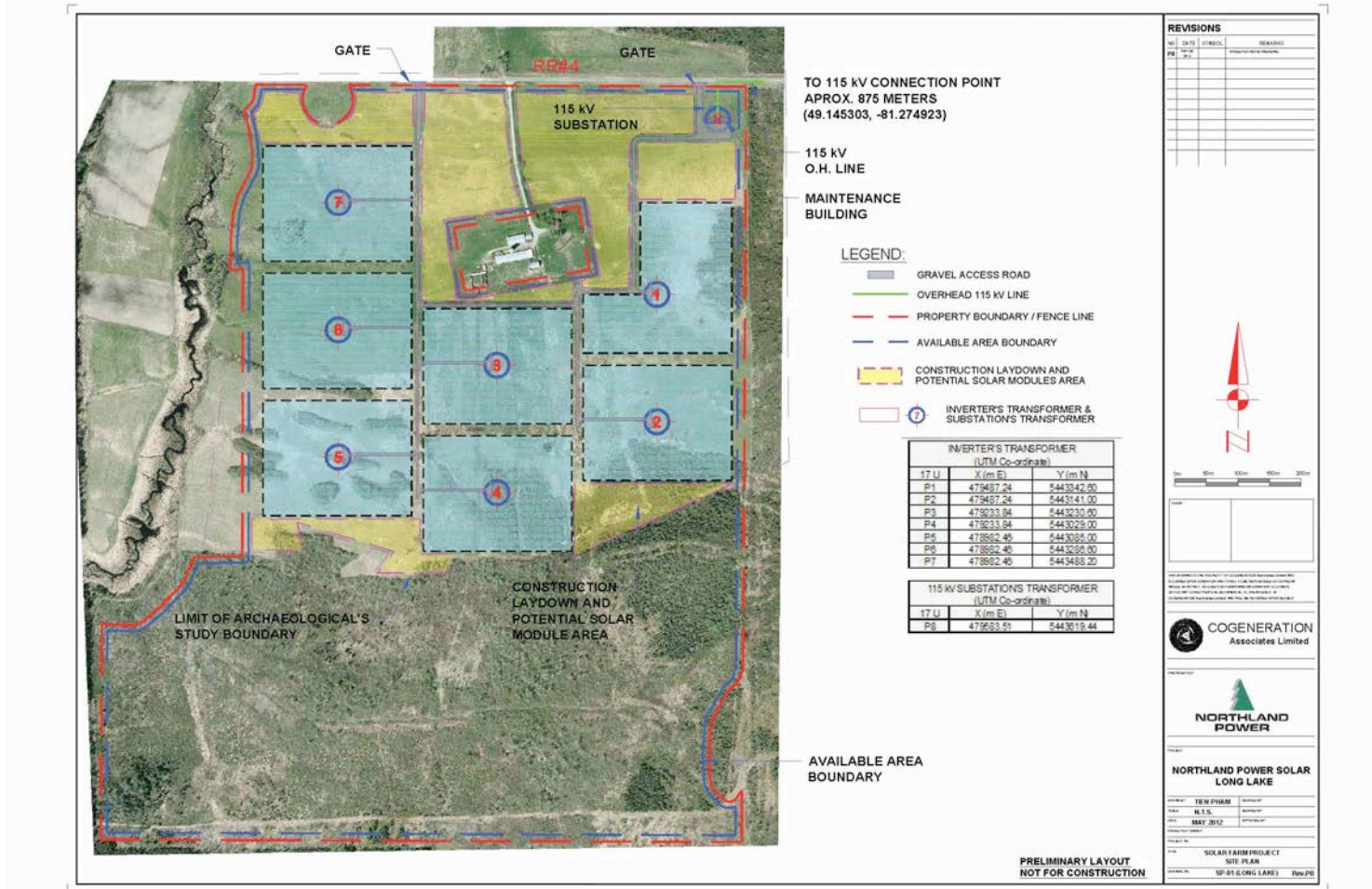
9.0 MAPS



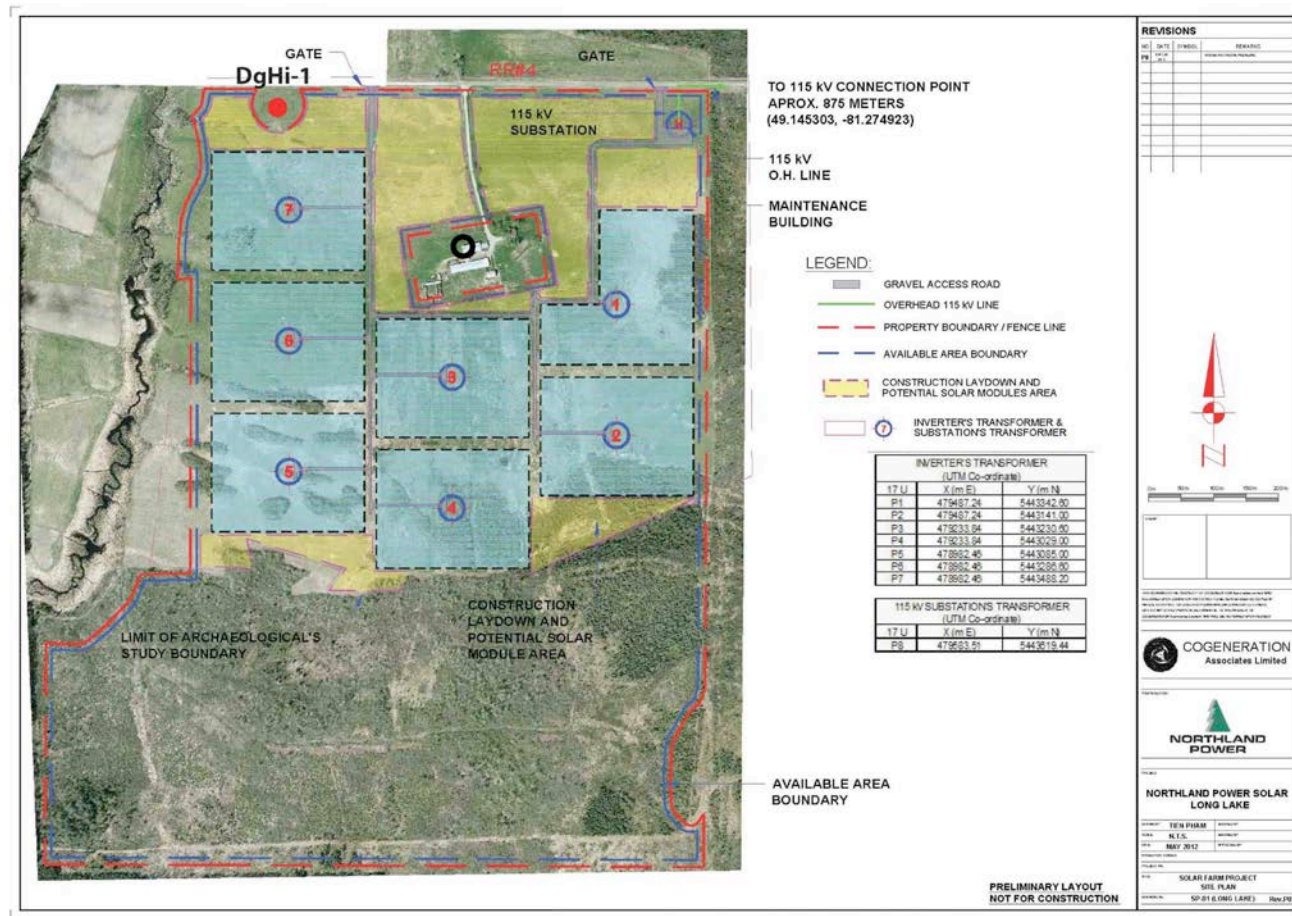
Map 1: General location of Site DgHi-1 on NTS mapping.



Map 2: Results of Stage 3 assessment overlaid on Stage 2 Findspot 1 mapping from ARA 2010. Note: no mapping showing locations of individual findspots provided by ARA in their report.

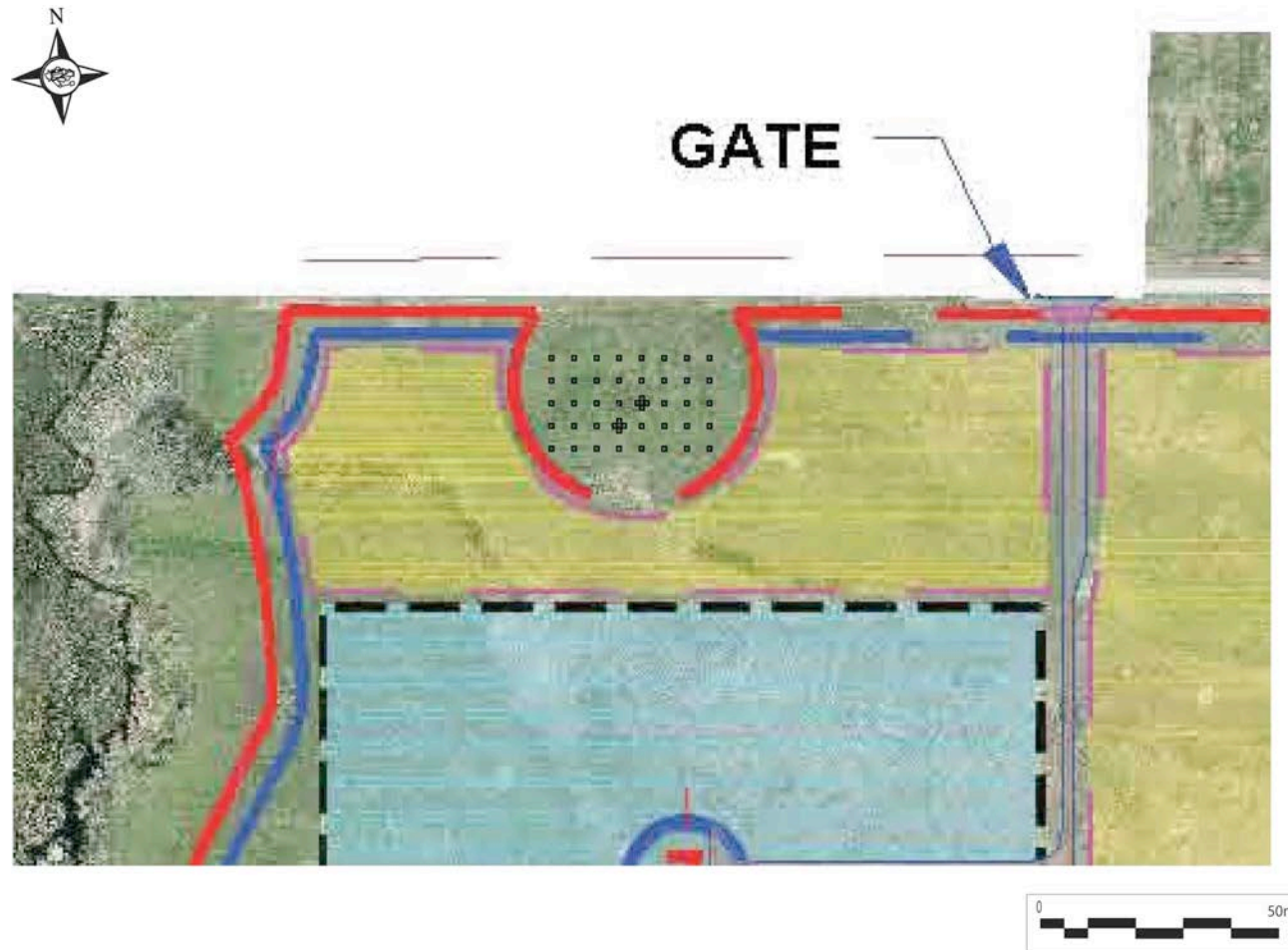


Map 3: Clear copy of development mapping provided by proponent.

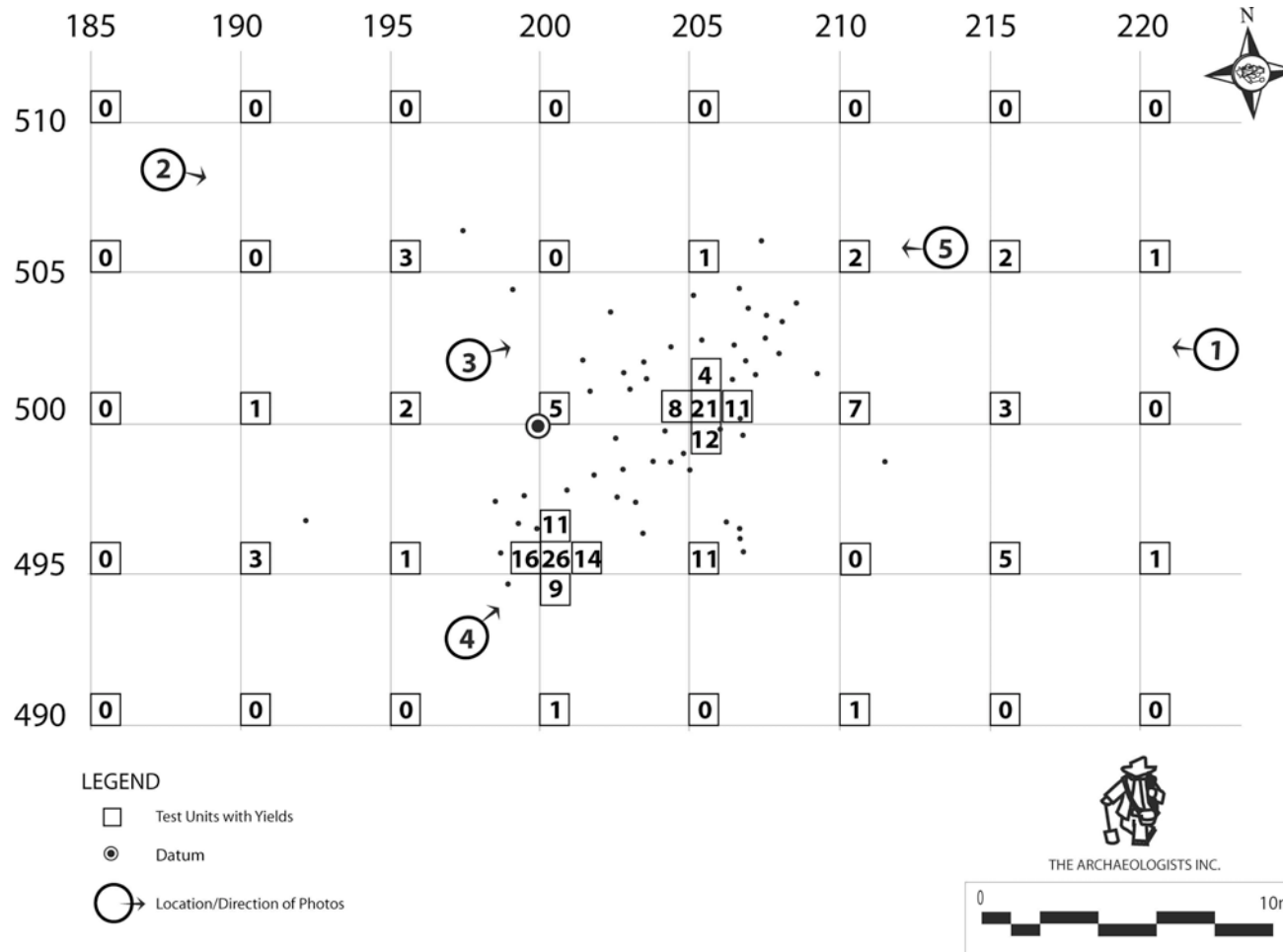


- Central Fixed Site Datum
- Permanent Datum: NW corner of building

Map 4: Approximate location of datum overlaid on development mapping.



Map 5: Stage 3 test units overlaid on development mapping (see Map 6 for detail).



Map 6: Detail of Stage 3 CSP and test unit excavation.

APPENDIX A: ARTIFACT CATALOGUE STAGE 3 – DgHi-1

Cat#	Prov.	Layer	Qty.	Material	Type/Ware	Motif/Technique/Colour	Function/Form	Comments
H1	surface		11	Ceramic	RWE	undecorated	indeterminate	exfoliated fragments
H2	surface		5	Ceramic	RWE	transferprint, brown	flatware	
H3	surface		5	Ceramic	RWE	transferprint, blue	flatware	
H4	surface		6	Ceramic	RWE	undecorated	teas	
H5	surface		3	Ceramic	Semi-porcelain	undecorated	indeterminate	
H6	surface		4	Ceramic	RWE	transferprint, blue	flatware	
H7	surface		8	Ceramic	Ironstone	plain	holloware	
H8	surface		2	Metal	Wire	machine made	indeterminate	
H9	surface		3	Ceramic	RWE	transferrpint, green	indeterminate	
H10	surface		3	Metal	Unidentifiable			scrap
H11	surface		2	Glass	Container, bottle	mould blown	body	dark brown
H12	490-200	PZ	1	Ceramic	Ironstone	plain	holloware	
H13	490-210	PZ	1	Ceramic	Yelloware	undecorated	flatware	
H14	494-200	PZ	2	Metal	Wire	machine made	indeterminate	
H15	494-200	PZ	2	Metal	Unidentifiable			
H16	494-200	PZ	2	Ceramic	RWE	transferprint, brown	flatware	
H17	494-200	PZ	2	Ceramic	Unidentifiable	unidentifiable	indeterminate	exfoliated
H18	494-200	PZ	1	Ceramic	Porecelain	decalcomania	holloware	pink, green
H19	495-190	PZ	1	Ceramic	RWE	decalcomania	flatware	
H20	495-190	PZ	1	Ceramic	RWE	transferprint, brown	flatware	
H21	495-190	PZ	1	Ceramic	Ironstone	plain	indeterminate	
H22	495-195	PZ	1	Ceramic	RWE	unidentifiable	unidentifiable	
H23	495-199	PZ	5	Glass	Container, bottle	mould blown	body	dark brown
H24	495-199	PZ	4	Glass	Window			fragment
H25	495-199	PZ	2	Ceramic	RWE	transferprint, blue	flatware	
H26	495-199	PZ	2	Ceramic	RWE	transferprint, brown	teas	
H27	495-199	PZ	2	Ceramic	REW	coarse, glazed	holloware	brown
H28	495-199	PZ	1	Ceramic	Ironstone	Moulded	Cup	Incomplete
H29	495-200	PZ	8	Metal	Scrap			
H30	495-200	PZ	7	Ceramic	Ironstone	plain	indeterminate	
H31	495-200	PZ	4	Ceramic	REW	coarse, glazed	holloware	
H32	495-200	PZ	3	Ceramic	Red earthenware	coarse, glazed	holloware	brown
H33	495-200	PZ	2	Metal	Wire	nail		
H34	495-200	PZ	2	Glass	Window			thick

APPENDIX A: ARTIFACT CATALOGUE STAGE 3 – DgHi-1

Cat#	Prov.	Layer	Qty.	Material	Type/Ware	Motif/Technique/Colour	Function/Form	Comments
H35	495-201	PZ	3	Ceramic	Porcelain	gilt	indeterminate	
H36	495-201	PZ	2	Ceramic	Ironstone	undecorated	indeterminate	
H37	495-201	PZ	2	Ceramic	RWE	transferprint, blue	flatware	
H38	495-201	PZ	2	Ceramic	RWE	plain	indeterminate	
H39	495-201	PZ	2	Ceramic	Unidentifiable	unidentifiable	flatware	body sherd; thermally altered
H40	495-201	PZ	2	Ceramic	Ironstone	undecorated	flatware	
H41	495-201	PZ	1	Ceramic	RWE	transferprint, brown	teas	cup frags
H42	495-205	PZ	4	Glass	Container, bottle	mould blown	body	green
H43	495-205	PZ	3	Ceramic	RWE	transferprint, blue	indeterminate	
H44	495-205	PZ	3	Ceramic	RWE	transferprint, brown	flatware	exfoliated
H45	495-205	PZ	1	Ceramic	Ironstone	Moulded	flatware	wheat pattern
H46	495-215	PZ	2	Ceramic	RWE	plain	unidentifiable	exfoliated fragments
H47	495-215	PZ	2	Ceramic	Ironstone	Moulded	holloware	
H48	495-215	PZ	1	Glass	Container, bottle	mould blown	body	dark brown
H49	495-220	PZ	1	Ceramic	Ironstone	plain	holloware	
H50	496-200	PZ	5	Glass	Window			
H51	496-200	PZ	3	Metal	Wire	machine made	indeterminate	
H52	496-200	PZ	2	Glass	Container, bottle	mould blown	body	dark brown
H53	496-200	PZ	1	Ceramic	RWE	plain	unidentifiable	
H54	499-205	PZ	4	Ceramic	Semi-porcelain?	undecorated	holloware	
H55	499-205	PZ	3	Ceramic	Ironstone	plain	holloware	
H56	499-205	PZ	3	Ceramic	RWE	transferprint, green	flatware	
H57	499-205	PZ	2	Glass	Bottle	mould blown	body	clear
H58	500-190	PZ	1	Ceramic	Ironstone	undecorated	holloware	exfoliated fragments
H59	500-195	PZ	1	Ceramic	Unidentifiable	unidentifiable	indeterminate	exfoliated fragments
H60	500-195	PZ	1	Ceramic	RWE	transferprint, brown	flatware	exfoliated
H61	500-200	PZ	4	Ceramic	Ironstone	Moulded	flatware	wheat pattern
H62	500-200	PZ	1	Ceramic	Porecelain	decalcomania	holloware	
H63	500-204	PZ	4	Ceramic	RWE	decalcomania	flatware	fragment
H64	500-204	PZ	4	Glass	Container, bottle	mould blown	body	dark brown
H65	500-205	PZ	7	Ceramic	Ironstone	plain	indeterminate	exfoliated fragments
H66	500-205	PZ	3	Metal	Wire	machine made	indeterminate	
H67	500-205	PZ	3	Ceramic	RWE	transferprint, blue	teas	
H68	500-205	PZ	3	Metal	Unidentifiable			
H69	500-205	PZ	3	Ceramic	RWE	transferprint, blue	flatware	

APPENDIX A: ARTIFACT CATALOGUE STAGE 3 – DgHi-1

Cat#	Prov.	Layer	Qty.	Material	Type/Ware	Motif/Technique/Colour	Function/Form	Comments
H70	500-205	PZ	1	Ceramic	RWE	transferprint, brown	indeterminate	
H71	500-205	PZ	1	Glass	Container, bottle	mould blown	clear	
H72	500-206	PZ	6	Ceramic	Unidentifiable	unidentifiable	indeterminate	
H73	500-206	PZ	3	Ceramic	Semi-porcelain	undecorated	holloware	
H74	500-206	PZ	2	Ceramic	Ironstone	undecorated	flatware	
H75	500-210	PZ	3	Ceramic	Ironstone	plain	indeterminate	
H76	500-210	PZ	3	Ceramic	Ironstone	plain	holloware	
H77	500-210	PZ	1	Ceramic	Porcelain	undecorated	holloware	
H78	500-215	PZ	2	Ceramic	RWE	undecorated	indeterminate	
H79	500-215	PZ	1	Ceramic	RWE	transferprint, blue	flatware	
H80	501-205	PZ	4	Ceramic	Ironstone	plain	indeterminate	
H81	505-195	PZ	1	Ceramic	Ironstone	plain	holloware	
H82	505-195	PZ	1	Metal	Wire	machine made	indeterminate	
H83	505-195	PZ	1	Metal	Scrap			
H84	505-205	PZ	1	Ceramic	RWE	transferprint, blue	flatware	
H85	505-210	PZ	2	Ceramic	Ironstone	plain	indeterminate	
H86	505-215	PZ	2	Ceramic	Unidentifiable	undecorated	indeterminate	
H87	505-220	PZ	1	Glass	Window			