



REVISED REPORT

Stage 1 and 2 Archaeological Assessment

*Aberfoyle South Pit Expansion (CBM Lake Pit), 6947 Concession Road 2,
Puslinch, Part of Lots 18, 19, 20, Concession 1, Geographic Township of
Puslinch, County of Wellington, Ontario*

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PIF: P468-0054-2020 & P468-0087-2022

Submitted to:

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Executive Summary

The Executive Summary highlights key points from the report only; for complete information and findings, as well as the limitations, the reader should examine the complete report.

A Stage 1 and 2 archaeological assessment was conducted on behalf of CBM Aggregates (CBM; the client) a division of St. Marys Cement Inc. (Canada) by Golder Associates Ltd. (Golder) (now WSP Canada Inc.) in support of a licence application for extraction under the Aggregate Resources Act (ARA) for the new Aberfoyle South Pit Expansion (Lake Pit) location, in the Township of Puslinch. The study area is approximately 46 hectares in size and is currently an agricultural field and some manicured lawn surrounding a home and farm buildings. The study area includes a portion of Lots 18, 19, and 20, Concession 1 in the Township of Puslinch in the County of Wellington, Ontario (Map 1).

The objective of the Stage 1 assessment was to compile all available information about the known and potential archaeological resources within the study area and to provide direction for the protection, management and/or recovery of these resources, consistent with Ministry of Citizenship and Multiculturalism (MCM) standards and guidelines (MCM 2011). The Stage 1 background study found potential to exist within the study area for the recovery of pre-contact Indigenous and historical Euro-Canadian archaeological resources.

The objectives of the Stage 2 archaeological assessment were to provide an overview of archaeological resources within the study area and to determine whether any of the resources might be artifacts and archaeological sites with cultural heritage value or interest, and to provide specific direction for the protection, management and/or recovery of these resources. Areas recommended for Stage 2 assessment were surveyed by a combination of pedestrian and test pit survey at an interval of five metres. The Stage 2 archaeological assessment resulted in the identification of 25 locations and findspots: 23 pre-contact Indigenous, two historical Euro-Canadian (Supplement A and D). Given the findings of the Stage 2 archaeological assessment of the study area, the following recommendations are made with further details provided in Section 5.0:

- **Location 1** is considered to exhibit cultural heritage value or interest related to the Indigenous use of the area during an as yet undated time period; Location 1 has been registered with the MCM under Borden (AiHb-374). The AiHb-374 site is recommended for long term protection and avoidance under Stage 3 PIF P468-0087-2022 using the following measures:
 - The protected area of the site is to be shown on the ARA site plan accompanying the license application. The protected site area corresponds to Figure B-2 of the supplemental documentation.
 - A condition is placed on the ARA licence stating: the AiHb-374 site is present as shown on the ARA site plan; that no extraction, alterations or soil disturbance may be carried out within the limits of the protected area of the AiHb-374 site; that post and wire fencing will be erected along the limits of the AiHb-374 site under the direction of the licensed consultant archaeologist; and, that if the AiHb-374 site is still present when the ARA license is surrendered that a restrictive covenant will be placed on title to continue the protection of the archaeological site.
 - A letter is provided by the ARA licensee stating that they are aware of the presence of the archaeological site within the limits of the ARA licence and that they are aware of the restrictions on alteration of an archaeological site of further cultural heritage value or interest as per the condition on their ARA licence and as per Section 48 of the Ontario Heritage Act.

- **Location 3** yielded a combination of historical Euro-Canadian and pre-contact Indigenous artifacts. The pre-contact Indigenous artifacts do not meet the criteria of cultural heritage value or interest: only nine artifacts were recovered. Location 3 is considered to exhibit cultural heritage value or interest related to the mid-19th century historical Euro-Canadian use of the property. As such, Stage 3 site-specific assessment is recommended for historic Euro-Canadian component of Location 3. Location 3 has been registered with the MCM under Borden (AiHb-375).
 - As only a representative sample of the historical Euro-Canadian artifacts were recovered during Stage 2 assessment an additional CSP will be completed as part of the Stage 3 assessment (MCM 2011, Section 3.2.1).
 - As a large, plough-disturbed, historical Euro-Canadian site the Stage 3 excavation should be completed as follows (MCM 2011, Table 3.1, Standards 5-7):
 - Place multiple grids of various sizing over areas of artifact concentration and excavate one-metre square test units across those grids at five metre intervals.
 - Place and excavate additional test units, amounting to 20% of the initial grid unit total between the areas of concentration to document areas of lower concentration.
 - Place and excavate further additional test units, amounting to 10% of the initial grid unit total on the periphery of the surface scatter to determine the site extent and sample the site periphery.
 - Stage 3 assessment of Location 3 should include the hand-excavation of one-metre square test units by stratigraphic level. All Stage 3 test units should be excavated to subsoil at which time the subsoil should be assessed for signs of cultural features. Should signs of cultural features be identified the cleaned subsoil will be drawn, photographed and covered with geo-textile fabric before being backfilled to protect the features. Should subsoil not reveal any signs of cultural interest, excavation will resume and continue into the first five centimetres of subsoil. All soils excavated from the test units will be screened through hardware cloth with an aperture no larger than 6 mm, to facilitate the recovery of any artifacts that may be present.
 - All recovered artifacts should be bagged in the field according to their context and be subject to laboratory analysis. A Stage 3 archaeological assessment report should include all details related to the field work and laboratory analysis.
- **Location 5** yielded a combination of historical Euro-Canadian and pre-contact Indigenous artifacts. The pre-contact Indigenous artifacts do not meet the criteria of cultural heritage value or interest as only one artifact was recovered. Location 5 is considered to exhibit cultural heritage value or interest related to the mid-19th century historical Euro-Canadian use of the property. Stage 3 site-specific assessment is recommended for Location 5. Location 5 has been registered with the MCM under Borden (AiHb-376).
 - As only a representative sample of the historical Euro-Canadian artifacts were recovered during Stage 2 assessment an additional CSP will be completed as part of the Stage 3 assessment (MCM 2011, Section 3.2.1).

- As a large, plough-disturbed, historical Euro-Canadian site the Stage 3 excavation should be completed as follows (MCM 2011, Table 3.1, Standards 5-7):
 - Place multiple grids of various sizing over areas of artifact concentration and excavate one-metre square test units across those grids at five metre intervals.
 - Place and excavate additional test units, amounting to 20% of the initial grid unit total between the areas of concentration to document areas of lower concentration.
 - Place and excavate further additional test units, amounting to 10% of the initial grid unit total on the periphery of the surface scatter to determine the site extent and sample the site periphery.
- Stage 3 assessment of Location 5 should include the hand-excavation of one-metre square test units by stratigraphic level. All Stage 3 test units should be excavated to subsoil at which time the subsoil should be assessed for signs of cultural features. Should signs of cultural features be identified the cleaned subsoil will be drawn, photographed and covered with geo-textile fabric before being backfilled to protect the features. Should subsoil not reveal any signs of cultural interest, excavation will resume and continue into the first five centimetres of subsoil. All soils excavated from the test units will be screened through hardware cloth with an aperture no larger than 6 mm, to facilitate the recovery of any artifacts that may be present.
- All recovered artifacts should be bagged in the field according to their context and be subject to laboratory analysis. A Stage 3 archaeological assessment report should include all details related to the field work and laboratory analysis.
- **Locations 2, 4, and 6** are small pre-contact Indigenous sites that do not meet the MCM criteria for requiring Stage 3 archaeological assessment. Based on the Stage 2 results, Locations 2, 4, and 6 are considered to be sufficiently documented and no further archaeological assessment is recommended.
- **Findspots 1 through 19** are solitary findspots or locations with five or less artifacts that do not meet the MCM criteria for requiring Stage 3 archaeological assessment, and, as such, are considered to be sufficiently documented and no further archaeological assessment is recommended.

The MCM is asked to review the results and recommendations presented herein and accept this report into the Provincial Register of archaeological reports. The MCM is also asked to provide a letter concurring with the results presented herein.

Study Limitations

Golder (now WSP Canada Inc.) has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the archaeological profession currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty expressed or implied is made.

This report has been prepared for the specific site, design objective, developments and purpose described to WSP by CBM Aggregates (CBM) a division of St. Marys Cement Inc. (Canada) (the client). The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

The information, recommendations and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without WSP's express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the Client, Golder may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process. Any other use of this report by others is prohibited and is without responsibility to WSP. The report, all plans, data, drawings and other documents as well as electronic media prepared by WSP are considered its professional work product and shall remain the copyright property of WSP, who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell or otherwise make available the report or any portion thereof to any other party without the express written permission of WSP. The Client acknowledges that electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client cannot rely upon the electronic media versions of WSP's report or other work products.

Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the Client in the design of the specific project.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain archaeological resources. The sampling strategies incorporated in this study comply with those identified in the Ministry of Citizenship and Multiculturalism' 2011 *Standards and Guidelines for Consultant Archaeologists*.

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APPENDIX A

Development Map

APPENDIX B

Stage 2 Artifact Catalogues

1.0 PROJECT CONTEXT

1.1 Development Context

A Stage 1 and 2 archaeological assessment was conducted on behalf of CBM Aggregates (CBM; the client) a division of St. Marys Cement Inc. (Canada) by Golder Associates Ltd. (Golder) (now WSP Canada Inc.) in support of a licence application for extraction under the Aggregate Resources Act (ARA) for the new Aberfoyle South Pit Expansion (Lake Pit) location, in the Township of Puslinch. The study area is approximately 46 hectares in size and is currently an agricultural field and some manicured lawn surrounding a home and farm buildings. The study area includes a portion of Lots 18, 19, and 20, Concession 1 in the Township of Puslinch in the County of Wellington, Ontario (Map 1).

This report is an amended version of the revised Stage 1-2 archaeological assessment report dated 17 December 2019 under PIF number P453-0004-2019. The Stage 1-2 archaeological assessment report under PIF number P453-0004-2019 was entered into the Ontario Public Register of Archaeological Reports on 30 December 2019. Following the reports entry into the Register of Archaeological Reports the limits of the proposed area to be licensed were altered to exclude the areas of Provincially Significant Wetland. This revised Stage 1-2 archaeological assessment report includes the license boundary for the ARA application and was completed under archaeological consulting licence P468, issued to Rhiannon Fisher of WSP (P468-0054-2020 and P468-0087-2022). Portions of the original study area that were subject to Stage 2 archaeological assessment as part of the original report under PIF P453-0004-2019, but are located outside of the license boundary are included in this report to document their assessment.

Appendix A contains the most up-to-date development map for CBM Lake Pit. As the Stage 3 archaeological assessments for Location 3 (AiHb-375) and Location 5 (AiHb-376) have now been completed and both sites recommended for Stage 4 mitigation, the development map reflects current recommendations for the study area rather than those contained within the current Stage 1-2 archaeological assessment report.

The objective of the Stage 1 archaeological assessment was to compile available information about the known and potential archaeological resources within the study area and to determine if a field survey (Stage 2) is required, as well as the recommended Stage 2 strategy. In compliance with the provincial standards and guidelines set out in the Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011), the objectives of the Stage 1 archaeological assessment are as follows:

- To provide information about the study area's geography, history, previous archaeological fieldwork and current land conditions;
- To evaluate in detail the study area's archaeological potential which will support recommendations for Stage 2 survey for all or parts of the property; and,
- To recommend appropriate strategies for Stage 2 survey.

To meet these objectives Golder archaeologists employed the following research strategies:

- A review of relevant archaeological, historic and environmental literature pertaining to the study area;
- A review of the land use history, including pertinent historic maps;
- An examination of the MCM Ontario Archaeological Sites Database (OASD) to determine the presence of known archaeological sites in and around the project area; and

- An inquiry with the MCM to determine previous archaeological assessments conducted in close proximity to the study area.

The objectives of the Stage 2 archaeological assessment were to provide an overview of archaeological resources on the property and to determine whether any of the resources might be artifacts and archaeological sites with cultural heritage value or interest, and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the provincial standards and guidelines set out in the MCM *Standards and Guidelines for Consultant Archaeologists* (2011), the objectives of the Stage 2 property assessment are as follows:

- To document all archaeological resources on the property;
- To determine whether the property contains archaeological resources requiring further assessment; and
- To recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

The Stage 1-2 archaeological assessment was conducted under archaeological consulting licence P453, issued to Kendra Patton of Golder (PIF: P453-0004-2019). Permission for Golder staff to enter the property for the purposes of the archaeological assessment was provided by Stephen May of CBM.

The revised Stage 1-2 archaeological assessment report was amended under archaeological consulting license P468 issued to Rhiannon Fisher of Golder (PIF: P468-0054-2020 and P468-0087-2022).

1.2 Historical Context

1.2.1 General Overview of the Pre-Contact Period in Southern Ontario

The culture history of south-central Ontario, based on Ellis and Ferris (1990), is summarised in Table 1.

Table 1: Pre-contact Indigenous cultural chronology for south-central Ontario.

Period	Characteristics	Time Period	Comments
Early Paleo	Fluted Projectiles	ca. 11000 – 8400 BCE	spruce parkland/caribou hunters
Late Paleo	Hi-Lo Projectiles	ca. 8400 – 8000 BCE	smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	ca. 8000 – 6000 BCE	slow population growth
Middle Archaic	Brewerton-like points	ca. 6000 – 2500 BCE	environment similar to present
Late Archaic	Lamoka (narrow points)	ca. 2500 – 1800 BCE	increasing site size
	Broadpoints	ca. 1800 – 1500 BCE	large chipped lithic tools
	Small Points	ca. 1500 – 1100 BCE	introduction of bow hunting
Terminal Archaic	Hind Points	ca. 1100 – 950 BCE	emergence of true cemeteries
Early Woodland	Meadowood Points	ca. 950 – 400 BCE	introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	ca. 400 BCE – 500 CE	increased sedentism
Transitional Woodland	Princess Point	ca. 500 – 1050 CE	introduction of corn
Late Woodland	Early Late Woodland	ca. 900 – 1300 CE	emergence of agricultural villages
	Middle Late Woodland	ca. 1300 – 1400 CE	long longhouses (100m +)
	Late Woodland	ca. 1400 – 1650 CE	tribal warfare and displacement

1.2.1.1 *Paleo Period*

The first human occupation of south-central Ontario begins just after the end of the Wisconsin Glacial Period. Although there were a complex series of ice retreats and advances which played a large role in shaping the local topography, south-central Ontario was finally ice free by 12,500 years ago.

The first human settlement can be traced back 11,000 years, when this area was settled by Indigenous groups that had been living south of the Great Lakes. The period of these early Indigenous inhabitants is known as the Paleo Period (Ellis and Deller 1990).

Our current understanding of settlement patterns of Early Paleo peoples suggests that small bands, consisting of probably no more than 25-35 individuals, followed a pattern of seasonal mobility extending over large territories (Ellis and Deller 1990). Early Paleo sites tend to be located in elevated locations on well-drained loamy soils. Many of the known sites were located on former beach ridges associated with glacial lakes. There are a few extremely large Early Paleo sites, such as one located close to Parkhill, Ontario, which covered as much as six hectares. It appears that these sites were formed when the same general locations were occupied for short periods of time over the course of many years. Given their placement in locations conducive to the interception of migratory mammals such as caribou, it has been suggested that they may represent communal hunting camps. There are also smaller Early Paleo camps scattered throughout the interior of southwestern and south-central Ontario, usually situated adjacent to wetlands.

Research suggests that population densities were very low during the Early Paleo Period (Ellis and Deller 1990:54). Archaeological examples of Early Paleo sites are rare.

The Late Paleo Period (8400 – 8000 BCE) has been less researched and is consequently more poorly understood. By this time the environment of south-central Ontario was coming to be dominated by closed coniferous forests with some minor deciduous elements. It seems that many of the large game species that had been hunted in the early part of the Paleo Period had either moved further north, or as in the case of the mastodons and mammoths, become extinct.

Like the Early Paleo peoples, Late Paleo peoples covered large territories as they moved about in response to seasonal resource fluctuations. On a province wide basis Late Paleo projectile points are far more common than Early Paleo materials, suggesting a relative increase in population.

The end of the Late Paleo Period was heralded by numerous technological and cultural innovations that appeared throughout the Archaic Period. These innovations may be best explained in relation to the dynamic nature of the post-glacial environment and region-wide population increases.

1.2.1.2 *Archaic Period*

During the Early Archaic Period (8000 – 6000 BCE), the jack and red pine forests that characterized the Late Paleo environment were replaced by forests dominated by white pine with some associated deciduous trees (Ellis et al. 1990:68-69). One of the more notable changes in the Early Archaic Period is the appearance of side and corner-notched projectile points. Other significant innovations include the introduction of ground stone tools such as celts and axes, suggesting the beginnings of a simple woodworking industry. The presence of these often large and not easily portable tools suggests there may have been some reduction in the degree of seasonal movement, although it is still suspected that population densities were quite low, and band territories large.

During the Middle Archaic Period (6000 – 2500 BCE) the trend to more diverse toolkits continued, as the presence of netsinkers suggest that fishing was becoming an important aspect of the subsistence economy. It was also at this time that "bannerstones" were first manufactured.

Bannerstones are carefully crafted ground stone devices that served as a counterbalance for *atlatls* or spear-throwers. Another characteristic of the Middle Archaic Period is an increased reliance on local, often poorer quality, chert resources for the manufacturing of projectile points and other stone tools. It seems that during earlier periods, when groups occupied large territories, it was possible for them to visit a primary outcrop of high-quality chert at least once during their seasonal round. However, during the Middle Archaic Period, 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 deposited by the glaciers in the local till and river gravels were utilized.

This reduction in territory size was probably the result of gradual region-wide population growth which led to the infilling of the landscape. This process forced a reorganization of Indigenous subsistence practices, as more people had to be supported from the resources of a smaller area. During the latter part of the Middle Archaic Period, technological innovations such as fish weirs have been documented as well as stone tools especially designed for the preparation of wild plant foods.

It is also during the latter part of the Middle Archaic Period that long-distance trade routes began to develop, spanning the northeastern part of the continent. In particular, native copper tools manufactured from a source located northwest of Lake Superior were being widely traded (Ellis et al. 1990:66). By 3500 BCE the local environment had stabilized and began to reflect the more modern landscape (Ellis et al. 1990:69).

During the Late Archaic Period (2500 – 950 BCE) the trend towards decreased territory size and a broadening subsistence strategy continued. Late Archaic sites are far more numerous than either Early or Middle Archaic sites, and it seems that the local population had expanded. It is during the Late Archaic Period that more formal cemeteries appear. The appearance of cemeteries during the Late Archaic Period has been interpreted as a response to increased population densities and competition between local groups for access to resources. It is argued that cemeteries would have provided strong symbolic claims over a local territory and its resources. These cemeteries are often located on heights of well-drained sandy/gravel soils adjacent to major watercourses.

This suggestion of increased territoriality is also consistent with the regionalized variation present in Late Archaic Period projectile point styles. It was during the Late Archaic Period that distinct local styles of projectile points appear. Also, it was during the Late Archaic Period that trade networks which had been established during the Middle Archaic Period continued to flourish. Native copper from northern Ontario and marine shell artifacts from as far away as the Mid-Atlantic coast are frequently encountered as grave goods at Southern Ontario sites. Other artifacts such as polished stone pipes and banded slate gorgets also appear on Late Archaic sites in Southern Ontario. One of the more unusual and interesting of the Late Archaic Period artifacts is the birdstone, which are small, bird-like effigies usually manufactured from green banded slate.

1.2.1.3 Woodland Period

The Early Woodland Period (950 – 400 BCE) 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 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 likely did not have a long use life. There have also been numerous Early Woodland sites located at which no

pottery was found, suggesting that pottery had yet to assume a central position in the day-to-day lives of Early Woodland peoples.

Other than the introduction of ceramic technology, the lifeways 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 Period 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 Periods also continued to function, although there does not appear to have been as much trade in marine shell during the Early Woodland Period. During the last 200 years of the Early Woodland Period, projectile points manufactured from high quality raw materials from the American Midwest begin to appear on sites in southwestern Ontario.

In terms of settlement and subsistence patterns, the Middle Woodland Period (400 BCE – 500 CE) 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.

In addition, Middle Woodland peoples relied much more extensively on ceramic technology. 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 and large 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 Late Woodland Period began with a shift in settlement and subsistence patterns involving an increasing reliance on corn horticulture (Fox 1990:185; Smith 1990; Williamson 1990:312). Corn may have been introduced into southwestern Ontario from the American Midwest as early as 600 CE or a few centuries before. Corn did not become a dietary staple, however, until at least three to four hundred years later, when the cultivation of corn gradually spread into south-central and southeastern Ontario.

During the early Late Woodland Period, particularly within the Princess Point Complex (*circa* 500-1050 CE), a number of archaeological material changes have been noted including the appearance of triangular projectile point styles, first seen during this period beginning with the Levanna form; cord-wrapped stick decorated ceramics using the paddle and anvil forming technique evolving from the mainly coil-manufactured and dentate stamped and pseudo-scallop shell impressed ceramics; and if not appearance, increasing use of maize (*Zea mays*) as a food source (e.g., Bursley 1995; Crawford et al. 1997; Ferris and Spence 1995:103; Martin 2004 [2007]; Ritchie 1971:31-32; Spence et al. 1990; Williamson 1990:299).

The Late Woodland Period is widely accepted as the beginning of agricultural life ways in south-central Ontario. Researchers have suggested that a warming trend during this time may have encouraged the spread of maize into southern Ontario, providing a greater number of frost-free days (Stothers and Yarnell 1977).

By approximately 600 CE, a significant shift in settlement patterns was occurring throughout the area. People began to move from the seasonally occupied waterway-oriented campsites to more permanent village sites predominately situated on higher ground, often on well-drained sandy soils. These settlements, generally only a few acres in size, were often surrounded by palisade walls where the traditional “longhouse” structure was introduced (MCR 1981).

These early longhouse-type structures were actually not all that large, averaging only 12.4 metres in length (Dodd et al. 1990:349; Williamson 1990:304-305). It is also quite common to find the outlines of overlapping house structures, suggesting that these villages were occupied long enough to necessitate re-building.

The Jesuits reported that the Huron moved their villages once every 10 – 15 years, when the nearby soils had been depleted by farming and conveniently collected firewood grew scarce (Pearce 2010). It seems likely that Early Late Woodland villages were inhabited for considerably longer, as the populations relied less heavily on corn than did later groups, and their villages were much smaller, placing less demand on nearby resources.

Judging by the presence of carbonized corn kernels and cob fragments recovered from sub-floor storage pits, agriculture was becoming a vital part of the Early Late Woodland economy. However, it had not reached the level of importance it would in the Middle and Late-Late Woodland Periods. There is ample evidence to suggest that more traditional resources continued to be exploited and comprised a large part of the subsistence economy. Seasonally occupied special purpose sites relating to deer procurement, nut collection, and fishing activities, have all been identified. While beans are known to have been cultivated later in the Late Woodland Period, they have yet to be identified on Early Late Woodland sites.

The Middle Late Woodland Period (1300 – 1400 CE) witnessed several interesting developments in terms of settlement patterns and artifact assemblages. Changes in ceramic styles have been carefully documented, allowing the placement of sites in the first or second half of this 100-year period. Moreover, villages, which averaged approximately 0.6 hectares in extent during the Early Late Woodland Period, now consistently range between one and two hectares in size. House lengths also change dramatically, more than doubling to an average of 30 metres, while houses of up to 45 metres have been documented. This increase in longhouse length has been variously interpreted. The simplest possibility is that increased house length is the result of a gradual, natural increase in population (Dodd et al. 1990:323, 350, 357; Smith 1990). However, this does not account for the sudden shift in longhouse lengths around 1300 CE. Other possible explanations involve changes in economic and socio-political organization (Dodd et al. 1990:357). One suggestion is that during the Middle Late Woodland Period small villages were amalgamating to form larger communities for mutual defence (Dodd et al. 1990:357). If this was the case, the more successful military leaders may have been able to absorb some of the smaller family groups into their households, thereby requiring longer structures. This hypothesis draws support from the fact that some sites had up to seven rows of palisades, indicating at least an occasional need for strong defensive measures. There are, however, other Middle Late Woodland villages which had no palisades present (Dodd et al. 1990). More research is required to evaluate these competing interpretations.

The lay-out of houses within villages also changes dramatically by 1300 CE. During the Early Late Woodland Period villages were haphazardly planned, with houses oriented in various directions. During the Middle Late Woodland Period villages are organized into two or more discrete groups of tightly spaced, parallel aligned,

longhouses. It has been suggested that this change in village organization may indicate the initial development of the clans which were a characteristic of the historically known Iroquoian peoples (Dodd et al. 1990:358).

1.2.2 Post-Contact Indigenous Occupation of Southern Ontario

The post-contact Indigenous occupation of southern Ontario was heavily influenced by the dispersal of various Iroquoian-speaking peoples by the New York State Iroquois and the subsequent return of Algonkian-speaking groups from northern Ontario at the end of the 17th century and beginning of the 18th century (Schmalz 1991).

Following the introduction of Europeans to North America, the nature of Indigenous settlement size, population distribution, and material culture shifted as settlers began to colonize the land. Despite this shift in Indigenous life ways, Indigenous peoples of southern Ontario have left behind archaeologically significant resources throughout southern Ontario which show continuity with past peoples, even if this connection has not been recorded in historical Euro-Canadian documentation.

The Project Area is situated within the historic Geographic Township of Puslinch, Wellington County, Ontario. The Project Area is within lands that first enter the Euro-Canadian historic record as part of Treaty Number 3 made with the Mississauga on December 7, 1792, though the original 'Between the Lakes' purchase for the land occurred in 1784. This purchase was to procure a permanent place for that part of the Six Nations coming into Canada.

All that parcel or tract of land lying and being between the Lakes Ontario and Erie, beginning at Lake Ontario, four miles south' westerly from the point opposite to Niagara Fort, known by the name of Mississaugue Point, and running from thence along the said lake to the creek that falls from a small lake, known by the name of Washquarter into the said Lake Ontario, and from thence north forty-five degree west, fifty miles; thence south forty-five degrees west, twenty miles; and thence south until it strikes the River La Tranche; then down the stream of the said river to that part or place where a due south course will lead to the mouth of Catfish Creek emptying into Lake Erie, and from the above-mentioned part or place of the aforesaid River La Tranche, following the south course to the mouth of the said Catfish Creek; thence down Lake Erie to the lands heretofore purchased from the Nation of Mississauga Indians; and from thence along the said purchase at Lake Ontario at the place of beginning as above mentioned together with all the woods, ways, paths, waters, watercourses and appurtenances thereunto belonging.

Morris 1943:18

1.2.3 Euro-Canadian Settlement

1.2.3.1 Puslinch Township, Wellington County

In 1838, the District of Wellington was established and contained the counties of Wellington, Waterloo, Grey and parts of Dufferin County. In 1854, Wellington County was formed and included the Townships and Towns of Amaranth, Arthur, Eramosa, Erin, Guelph, Maryborough, Nichol, Peel, Pilkington, Puslinch and Garafraxa (Wellington County 2017).

The Crown Survey of Puslinch Township began in 1828 and was completed by 1831. Settlers began to arrive in 1828 and the entire township was settled by 1840. The township was surveyed using a variation of the Double Front survey system that was commonly used between 1815 and 1829. The survey system produced a rectangular pattern of ten 100-acre lot allowances. The resulting survey created the modern farm landscape and

road pattern that is still visible today (OAC 1880). Puslinch was named after a community in Devonshire, England. The population of Puslinch Township in 1829 – one year after surveying began – was 126. By 1877 the population had grown to 4,514. In the same year, the township was described as the “least valuable in an agricultural point of view, of any in the county” (Carter 1984).

Until 1852 the study area was a part of the District of Wellington, which included the counties of Wellington, Waterloo, Grey and parts of Dufferin County. In 1852, the district was reorganized, and the United Counties of Waterloo, Wellington and Grey were formed. In 1854, Wellington County became an individual entity that consisted of the Towns and Townships of Amaranth, Arthur, Eramosa, Erin, Guelph, Garafraxa, Maryborough, Nichol, Peel, Pilkington, and Puslinch. In 1879, the City of Guelph separated from the County. The county remained politically unchanged until 1999 when it was reorganized into seven new municipalities through the amalgamation of several towns and townships. Puslinch Township remained the only municipality to exist unchanged by the amalgamation. However, recent expansions of Guelph’s city limits have resulted in portions of Puslinch being annexed into the City.

1.2.3.2 Lot 18 – 20, Concession 1, Township of Puslinch

The study area is located on part of Lots 18, 19, and 20, Concession 1, Geographic Township of Puslinch, Wellington County.

The 1861 map of Puslinch Township indicates that at this time James Hogg owns the north half of Lots 18, 19, and 20, Concession 1. No structures are illustrated on the property (Map 2).

The 1871 personal census indicates that James Hogg and his family were living in Puslinch Township and owned a total of 400 acres although only Lots 18, 19, and 20, Concession 1 are listed. 170 acres are listed as ‘improved’ with 50 in pasture, 10 in wheat, 40 in hay, and various amounts in other crops. The farm raised 8 horses, seven milk cows, 15 cattle, 33 sheep, and eight pigs and produced 200 pounds of butter, 1000 pounds of home-made cheese, and 140 pounds of wool. James Hogg was a 62-year-old widowed farmer from Scotland, and he lived on the property with his son John (37) and John’s wife Mary (28) and their children: Barbara (3) and Mary (1). The widowed Barbara Ramsay (84) was also enumerated at the property though it is not certain how she may be related to the Hogg family.

The 1877 *Illustrated Historical Atlas of Wellington County* indicates that a combined 400 acres of these three lots (plus Lot 21) in Concession 1 were owned by John Hogg in 1877 (Map 3). The 1877 *Illustrated Historical Atlas of Wellington County*, illustrates that John Hogg had two structures on his property in Concession 2 but none were illustrated within the study area.

The 1906 Historical Atlas of Wellington County indicates that a James Hogg owns 300 acres on the north half of Lots 18, 19, and 20. A structure and driveway is illustrated on the western portion of the property, in close proximity to the current extant home at 6947 Concession 2 (Map 4).

The diary of Duncan McFarlane (Lot 16, Concession 10 Puslinch Township) lists the following entries that possibly relate to the Hogg farm (McFarlane n.d):

1881, Sep. 9 “I was down at James Hoggs with James Scott to examin about the fire he got his Barn burned on Wednesday night he is insured in the Puslinch Company”

1881, Sep. 21 “I was at a metting of the Directors of the Insurance Company to settle with James Hogg with regard to the Burning of his barn”

1885, Jun. 20 “fine day untill the evening then it rained a lott I was out to the Townhall at Aberfoyle to a Magestrates cort about Hoggs horses”

1.3 Archaeological Context

1.3.1 Natural Environment

The study area is situated within the “Horseshoe Moraines” physiographic region (Chapman and Putnam 1984: 127-129).

From the edge of the escarpment in the Town of Caledon the moraines trend somewhat west of the Niagara Escarpment forming a belt of moderately hilly relief....Associated with the moraines is a system of old spillways with broad gravel terraces and swampy floors.....Good cross-sections of this landscape may be seen along Highway 7 from Rockwood to Georgetown.

Chapman and Putnam, 1984:128

The soils of the study area consist predominately of Burford loam and Dumfries soil (Map 5). Burford loam can be found smooth, very gently sloping areas; this type of soil exhibits good natural drainage and can be slightly stony (Hoffman et al. 1963). Whereas Dumfries, can be found in irregular and steeply sloping areas; this type of soil exhibits good natural drainage and can be very stony. Overall these soil types likely would have been suitable for Indigenous agricultural practices. The closest potable water source is Mill/Galt Creek which runs along the south and east sides of the study area (alternate names provided by historical and soil type maps, Maps 2 – 5). The closest substantial source of water is Puslinch Lake (~ 4.8 kilometres to the west) of the study area (Map 1).

1.3.2 Previously Identified Archaeological Sites and Surveys

A search of the MCM OASD and Golder’s corporate library indicated there are four archaeological sites currently registered within one kilometre of the study area (MCM 2019).

Table 2: Registered Archaeology Sites within 1 kilometre of Study Area

Borden Number	Site Name	Time Period
AiHb-71	Tog 2	Pre-Contact, unknown
AiHb-70	Tog 1	Pre-Contact, unknown
AiHb-354	6P2	Pre-Contact, unknown
AiHb-339	-	Pre-Contact, Late Archaic

No archaeological sites are registered within 300 metres of the study area and no previous archaeological assessments have been noted within 50 metres with the MCM.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the Freedom of Information Act. The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MCM will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

1.4 Assessing Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. In accordance with the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* the following are features or characteristics that indicate archaeological potential:

- Previously identified archaeological sites;
- Water sources:
 - Primary water sources (lakes, rivers, streams, creeks);
 - Secondary water sources (intermittent streams and creeks; springs; marshes; swamps);
 - Features indicating past water sources (e.g., glacial lake shorelines indicated by the presence of raised gravel, sand, or beach ridges; relic river or stream channels indicated by clear dip or swale in the topography; shorelines of drained lakes or marshes; and cobble beaches);
 - Accessible or inaccessible shoreline (e.g., high bluffs, swamps or marsh fields by the edge of a lake; sandbars stretching into marsh);
- Elevated topography (eskers, drumlins, large knolls, plateaux);
- Pockets of well drained sandy soil, especially near areas of heavy soil or rocky ground; Distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases (there may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings);
- Resource areas including:
 - Food or medicinal plants;
 - Scarce raw minerals (e.g., quartz, copper, ochre or outcrops of chert);
 - Early Euro-Canadian industry (fur trade, mining, logging);
- Areas of Euro-Canadian settlement; and,
- Early historical transportation routes.

In recommending a Stage 2 property survey based on determining archaeological potential for a study area, MCM stipulates the following:

- No areas within 300 metres of a previously identified site; water sources; areas of early Euro-Canadian Settlement; or locations identified through local knowledge or informants can be recommended for exemption from further assessment;
- No areas within 100 metres of early transportation routes can be recommended for exemption from further assessment; and,
- No areas within the property containing an elevated topography; pockets of well-drained sandy soil; distinctive land formations; or resource areas can be recommended for exemption from further assessment.

1.4.1 Archaeological Integrity

A negative indicator of archaeological potential is extensive land disturbance. This includes widespread earth movement activities that would have eradicated or relocated any cultural material to such a degree that the information potential and cultural heritage value or interest has been lost.

Section 1.3.2 of the MCM' 2011 Standards and Guidelines for Consultant Archaeologists states that:

Archaeological potential can be determined not to be present for either the entire property or a part(s) of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources.

MCM 2011:18

The types of disturbance referred to above includes, but is not restricted to, quarrying, sewage and infrastructure development, building footprints and major landscaping involving grading below topsoil.

1.4.2 Potential for Pre-Contact and Post-Contact Indigenous Archaeological Resources

Following the criteria outlined above in Section 1.4 to determine pre-contact and post-contact Indigenous archaeological potential, a number of factors can be highlighted. The soils of the study area would have been suitable for pre-contact Indigenous practices. The closest potable water source is Galt Creek which runs along the south and east sides of the study area. The closest substantial source of water is Puslinch Lake (~ 4.8 kilometres to the west) of the study area. All four of the archaeological sites registered within 1 kilometre of the study area were noted to be pre-contact Indigenous in nature.

When the above noted archaeological potential criteria were applied to the study area, the study area exhibits archaeological potential for pre-contact and post-contact Indigenous sites. While areas of previous disturbance eradicate the potential for the recovery of archaeological resources (Section 1.4.1), areas of no or low levels of previous disturbance retain their archaeological potential; these areas include the areas of forest, agricultural field, and manicured lawn. Map 7 illustrates areas of potential within the study area that were determined to require Stage 2 assessment.

1.4.3 Potential for Historical Euro-Canadian Archaeological Resources

Following the criteria outlined above in Section 1.4 to determine Historic Euro-Canadian archaeological potential, a number of factors can be highlighted including the occupation of the surrounding area from the early to mid-19th century as evidenced by historical mapping and land records.

When the above noted archaeological potential criteria were applied to the study area, the study area exhibits archaeological potential for Euro-Canadian sites. While areas of previous disturbance eliminate the potential for the recovery of archaeological resources (Section 1.4.1), areas of no or low levels of previous disturbance retain their archaeological potential; these areas include the areas of forest, agricultural field, and manicured lawn. Map 7 illustrates areas of potential within the study area that were determined to require Stage 2 assessment.

2.0 FIELD METHODS

2.1 Existing Conditions and Land Use

The Stage 2 field survey of the study area was conducted over a period of six days between 26 June 2019 and 10 July 2019, under archaeological consulting licence P453, issued to Kendra Patton of Golder. Kendra designated Sarah News (R485) and Christine Yellowlees (R445) to conduct the Stage 2 field work. Sarah News and Christine Yellowlees were delegated the responsibility of undertaking the archaeological fieldwork at the study area as per Section 12 of the MCM 2013 *Terms and Conditions for Archaeological Licences*, issued in accordance with clause 48(4)(d) of the *Ontario Heritage Act*.

The Stage 2 survey involved participation by archaeological field liaisons from Mississaugas of Credit First Nation and Six Nations. Details of this participation is provided in Supplement C.

The weather during the Stage 2 assessment was primarily sunny, the details of each day are presented in Table 3 below. At no time were the weather or field conditions detrimental to the recovery of archaeological material. Field visibility during the pedestrian survey was better than 80% and lighting conditions also allowed for excellent field visibility throughout. At the time of the Stage 2 survey, the study area included areas of ploughed agricultural fields, manicured lawn around extant house and out-building structures, areas of disturbance along the gravel driveway and agricultural buildings.

Table 3: Weather Conditions during Stage 2 Assessment of Study Area.

Date	Field Director	Weather
26 June 2019	Sarah News	Sunny and hot, 27°C; Field conditions too wet for pedestrian survey (Image 1), field work cancelled; photo documentation of field conditions was only on-site activity.
4 July 2019	Christine Yellowlees	Sunny and hot, 30-36°C; test pit and pedestrian survey
5 July 2019	Christine Yellowlees	Sunny and hot, 30-40°C; pedestrian survey
8 July 2019	Christine Yellowlees	Sunny and hot, 20-27°C; pedestrian survey
9 July 2019	Christine Yellowlees	Sunny and hot, 20-30°C; pedestrian survey
10 July 2019	Christine Yellowlees	Sunny and hot, 30-37°C; pedestrian survey

2.2 Field Survey Methods

The results of Stage 1 background study identified that the property contained both historical Euro-Canadian and pre-contact Indigenous archaeological potential (Map 7). Map 8 illustrates the Stage 2 assessment of the study area at 6947 Concession 2 and indicates all field conditions encountered. Map 8 also provides a photographic key to images illustrated in Section 8.0. Images 1-21 illustrate the field conditions and activities at the time of the Stage 2 survey.

The study area was primarily a ploughed agricultural field south of Concession 2. The manicured lawn surrounding the extant buildings on the property was subject to test pit survey at five metre intervals (Images 2 – 8). Each test pit was excavated to at least 30 centimetres in diameter and dug a minimum of five centimetres into sterile subsoil; the stratigraphy of each test pit was inspected for evidence of cultural features. All soil matrix from the test pits was screened through six-millimetre hardware cloth to facilitate the recovery of any cultural material. Each test pit was back filled upon completion and topped up with additional soil when necessary. No artifacts were recovered during test pit survey.

The soil was generally described as a dark-brown sand loam over and orange-brown sand subsoil.

The remainder of the study area was assessed by pedestrian survey (Images 9 – 21). The pedestrian survey was conducted at a maximum interval of five metres across the entirety of the agricultural fields. Surface visibility during the Stage 2 pedestrian survey was 80% or better. A total of 25 archaeological artifact locations and findspots were recorded during Stage 2 pedestrian survey. A 20-metre diameter buffer surrounding the initial findspot was surveyed at a one-metre interval until the limits of the artifact concentration were defined. All pre-contact Indigenous artifacts were recorded and recovered during Stage 2 controlled-surface-pick up (CSP). A representative sample of historical Euro-Canadian artifacts (including all diagnostic artifacts) were recorded and recovered during the Stage 2 CSP (MCM 2011 Section 2.1.1. Standard 8 and 9).

A field log was maintained for the duration of the investigations detailing pertinent information and digital photographs were taken of the surveyed areas and topography. Photographs were taken using an iPhone 5 cellphone camera. GPS points were recorded with a Garmin GPS Map62s, using the North American Datum (NAD) 83, with a minimal accuracy of five metres.

3.0 RECORD OF FINDS

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0 and resulted in the identification of a total of 25 archaeological locations and findspots. Table 4 provides an inventory of the documentary record generated in the field. Images 22 – 36 illustrate a representative sample of the Stage 2 recovered artifacts.

Table 4: Inventory of Documentary Record

Document Type	Current Location of Document	Additional Comments
Field Notes	WSP office in Whitby	45 pages in original field book and stored to WSP server
Hand Drawn Maps	WSP office in Whitby	6 hand drawn maps stored to WSP server
Maps Provided by Client	WSP office in Whitby	1 map stored to WSP server
Digital Photographs	WSP office in Whitby	136 photographs stored to WSP server

Lithic Material

- **Onondaga chert:** a high-quality raw material that outcrops along the north shore of Lake Erie east of the mouth of the Grand River. This material can also be recovered from secondary glacial deposits across much of southwestern Ontario, east of Chatham. The structure of the chert is usually mottled and streaked, with veins filled with chalcedony or quartz crystals and a shiny lustre (Luedtke 1992).
- **Kettle Point chert:** a relatively high-quality raw material that outcrops between Kettle Point and Ipperwash, on Lake Huron. Currently, Kettle Point occurs as submerged outcrops extending for approximately 1350 metres into Lake Huron. Secondary deposits of Kettle Point chert have been reported in Essex County and in the Ausable Basin (Eley and von Bitter 1989; Fox 2009:362).
- **Selkirk chert:** a moderate to relatively high-quality raw material that outcrops close to the embouchure of the Grand River along the north shore of Lake Erie. From the Dundee formation, it ranges in colour from mottled or banded grey to a predominantly brown colour, the latter of which being of relatively more vitreous fabric than the former. Its distribution as a secondary source material is similar to Onondaga chert and it is frequently encountered as far west as the Chatham area (Eley and von Bitter 1989; Fox 2009:362).
- **Haldimand chert:** a moderate quality raw material that outcrops along the Bois Blanc formation between Kohler and Hagersville, as well as in Cayuga, Ontario (Eley and von Bitter 1989; Fox 2009; see also Chapman and Putnam 1984: Figure 16).

Chipping Detritus Analysis

The flake assemblage was subject to morphological analysis following a classification scheme that draws from Lennox *et al.* (1986), Fisher (1997) and Ellis (1979).

3.1 Location 1 (AiHb-374)

A total of 33 pre-contact artifacts from 24 distinct CSP locations were recovered from Location 1; all of which consisted of chipped lithic tools and detritus: 27 pieces of chipping detritus, four retouched flakes, one biface, and one scraper (Image 22). Location 1 measures approximately 30 metres (north-south) by 40 metres (east-west).

Table 5: Location 1 Stage 2 Recovered Artifacts

Artifact	Freq.	%
Chipping Detritus	27	81.82
Retouched Flake	4	12.12
Biface	1	3.03
Scraper	1	3.03
Total Stage 2 Artifacts Location 1	33	100

3.1.1 Lithic Artifacts

A total of 27 pieces of chipping detritus were recovered from Location 1. Chipping detritus was the waste product from the production of lithic tools and is the most commonly recovered artifact on pre-contact Indigenous archaeological sites in southern Ontario.

Table 6: Location 1 Stage 2 Recovered Chipping Detritus

Material	Secondary		Tertiary		Broken		Shatter		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Onondaga	2	7.41	4	14.81	19	70.37	0	0.00	25	92.59
Undetermined	0	0.00	0	0.00	1	3.70	1	3.70	2	7.41
Total	2	7.41	4	14.81	20	74.07	1	3.70	27	100

One biface fragment was recovered as well as four retouched flakes, and one scraper; all of which were manufactured on Onondaga chert. Retouched flakes are qualified as expedient tools and as such they are not able to be attributed to a particular time period. Bifaces and scrapers are formal tool classes but still generally lack a dateable typology that would enable them to be temporally diagnostic, the biface and scraper recovered from Location 1 are presented in Table 7.

Table 7: Location 1 Stage 2 Recovered Formal Lithic Tools

Tool	Cat. No.	Material	Length	Width	Thickness
Biface	28	Onondaga	54.46mm	31.26mm*	11.02mm
Scraper	10	Onondaga	34.77mm	30.61mm	7.08mm

3.2 Location 2

A total of 11 pre-contact artifacts from 10 distinct CSP locations were recovered from Location 2, including 10 pieces of chipping detritus and one core (Image 23). The core was manufactured on Kettle Point chert. Location 2 measures approximately 40 metres (north-south) by 25 metres (east-west).

Table 8: Location 2 Stage 2 Recovered Artifacts

Artifact	Freq.	%
Chipping Detritus	10	90.91
Core	1	9.09
Total Stage 2 Artifacts Location 2	11	100

3.2.1 Lithic Artifacts

A total of 10 pieces of chipping detritus were recovered from Location 2. Chipping detritus was the waste product from the production of lithic tools and is the most commonly recovered artifact on pre-contact Indigenous archaeological sites in southern Ontario.

Table 9: Location 2 Stage 2 Recovered Chipping Detritus

Material	Secondary		Tertiary		Broken		Shatter		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Onondaga	2	7.41		0.00	3	11.11		0.00	5	50.00
Onondaga Heat Altered	1	3.70		0.00	2	7.41		0.00	3	30.00
Kettle Point		0.00		0.00	1	3.70		0.00	1	10.00
Undetermined		0.00		0.00	1	3.70		0.00	1	10.00
Total	3	11.11	0	0.00	7	25.93	0	0.00	10	100

3.3 Location 3 (AiHb-375)

Location 3 is a site where primarily historical Euro-Canadian artifacts were recovered. A total of 120 artifacts including 111 historical Euro-Canadian artifacts and nine pre-contact Indigenous artifacts were recovered from 68 distinct CSP locations (Image 24 and 25). Location 3 measures approximately 130 metres (north-south) by 160 metres (east-west), with a concentration of artifacts within an area 60 metres by 40 metres.

Table 10: Location 3 Stage 2 Recovered Artifacts

	Artifact	Freq.	%
Historical Euro-Canadian	Domestic	102	85.00
	Ceramic	[91]	[89.22]
	Glass	[11]	[10.78]
	Personal	8	6.67
	Miscellaneous Material	1	0.83
<i>Total Historical Euro-Canadian</i>		<i>111</i>	<i>92.50</i>
Pre-Contact Indigenous	Chipping Detritus	6	5.00
	Biface	2	1.67
	Scraper	1	0.83
<i>Total Pre-Contact Indigenous</i>		<i>9</i>	<i>7.50</i>
Total Stage 2 Artifacts Location 3		120	100

3.3.1 Historical Euro-Canadian Artifacts

3.3.1.1 Domestic: Ceramic Artifacts

A total of 91 ceramic fragments were recovered during the Stage 2 assessment of Location 3. Table 11 provides a breakdown of the ceramic assemblage by ware type while Table 12 provides a breakdown of the ceramic assemblage by decorative type.

Table 11: Location 3 Stage 2 Recovered Ceramics by Ware Type

Ceramic	Freq.	%
Refined White Earthenware (RWE)	57	62.64
Utilitarian	15	16.48
Ironstone	6	6.59
Vitrified White Earthenware (VWE)	4	4.40
Pearlware	4	4.40
Yellowware	3	3.30
Ceramic, undetermined	2	2.20
Total Stage 2 Ceramics Location 3	91	100

Table 12: Location 3 Stage 2 Recovered Ceramics by Decorative Type

Ceramic	Freq.	%
RWE, transfer printed	20	21.98
Stoneware	10	10.99
RWE, sponged	8	8.79
RWE, edged	7	7.69
RWE, painted	7	7.69
Ironstone, moulded	5	5.49
Coarse Earthenware, red	5	5.49
RWE, flow transfer printed	4	4.40
RWE, banded	3	3.30
RWE, moulded	3	3.30
RWE, plain	3	3.30
VWE, plain	3	3.30
Ceramic, undetermined	2	2.20
Pearlware, painted	2	2.20
Yellowware, banded	2	2.20
Ironstone, plain	1	1.10
Pearlware, plain	1	1.10
Pearlware, edged	1	1.10
RWE, stamped	1	1.10
RWE, transfer printed, painted	1	1.10
VWE, moulded	1	1.10
Yellowware, plain	1	1.10
Total Stage 2 Ceramics Location 3	91	100

Refined White Earthenware (RWE)

A total of 57 pieces of RWE were recovered from Location 3, representing 62.64% of the ceramic assemblage for the site. RWE is also known in literature as “whiteware”. RWE is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware in the late 1820s and early 1830s, however the initial manufacture date of what archaeologists call “whiteware” is not known. Early RWE tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century. A total of three of the RWE pieces were plain and undecorated, three were moulded with floral or indeterminate patterns, and pieces with further decoration discussed below.

A total of 21 pieces of transfer printed RWE were recovered during the Stage 2 assessment. Transfer printed RWE became popular quite early in the 19th century and involved the transfer of an intricate pattern from a sheet of treated paper to the unglazed surface of the clay vessel. Before 1830, almost all transfer printed wares were blue. After 1830, colors such as light blue, black, brown, green, purple and red became more common. Examples of blue (1817-1834~1859), black (1825-1838~1864), and brown (1829-1843~1869) transfer printing were recovered during Stage 2 assessment and suggest an average mid-19th century production date; one of the pieces was also decorated with green overglaze painting. The above date range merely reflects the height in popularity as well as the approximate end in production for each colour (MACL 2015). A total of four pieces of flow transfer printed RWE were recovered. Flow transfer printed wares are created in the same manner as transfer printed wares, the only difference being, the pigment is allowed to smudge and flow over the vessel, creating a muted appearance to the applied pattern. Blue was the first colour experimented with and began to be imported to North America after 1845 (Miller et al. 2000). The recovered pieces were all decorated in black; three floral patterns and one scrolling heart.

Eight pieces of sponged RWE were recovered from Location 3. Sponged RWE ceramics were a form of inexpensive tableware for which a sponge was used to apply an underglaze pigment. All over sponging was popular by the 1830s and remained common until the 1870s. Open sponging was a variation of this decorative technique that was commonly produced after 1860 (MACL 2015). The recovered sponged fragments were decorated with blue; seven all-over sponging and one open-sponging example.

A total of seven pieces of blue edged RWE were recovered from Location 3 including three pieces with a scalloped rim with impressed repeating pattern and a feathered band of blue (1800-1835), one unscalloped rim with impressed repeating pattern and a solid band of blue (1840-1860), the other three pieces were too fragmentary to determine (Miller et al. 2000).

A total of seven pieces of painted RWE were recovered during the Stage 2 assessment. As the name suggests painted RWE had its decorative motifs applied by an artisan using a small brush who painted the pattern directly onto the object. Painted wares can be distinguished from other decorative techniques because the brush strokes are visible in the artwork. The pieces recovered from this site were decorated predominately with floral patterns in blue and polychrome late palette colours. The use of underglaze red paint is further evidence that these ceramic pieces are of post-1829 whitewares (Miller et al. 2000, MACL 2015).

Banded wares were decorated with horizontal bands of coloured slip applied in varying widths. Colours are predominantly muted earth tones including, black, green, brown, orange, yellow, grey, and pale blue. Banded pieces may also include inlaid and cut away slip decoration and bands of lathe turned grooves or patterns. Banding occurred both as a primary decorative element and in conjunction with other design elements such as marbling, or the dendritic patterns found on mocha ware. Banded patterns can be found on RWE as starting in 1830 (Sussman 1997). The three pieces of banded RWE were decorated with black, blue, white, grey-blue banding.

A variety of the sponged method, stamping involves cutting a sponge into simple designs (e.g., geometric, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse but often pleasing design. This technique was used from the 1850s to the early 20th century (Adams et al. 1994). One piece of blue stamped RWE was recovered.

Utilitarian

A total of 15 utilitarian fragments were recovered from Location 3, including 10 pieces of stoneware and five fragments of coarse red earthenware. Coarse red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels. Stoneware is a hard, heavy, grey to light brown ceramic that was commonly used for utilitarian purposes (i.e., crocks and jugs). It is fired at a higher temperature than earthenware and has a less porous body. The exterior of stoneware vessels often has a salt-glaze which gives it a dimpled or “orange-peel” effect. If the crock was intended to hold liquid, the interior may have a thick dark brown coating, known as an Albany slip, which was used on stoneware vessels from about 1805 to 1920 (Miller et al 2000).

Ironstone

A total of six pieces of ironstone were recovered during the Stage 2 assessment of Location 3. Ironstone or graniteware is a variety of whiteware introduced in the 1840s that became extremely popular in Upper Canada by the 1860s (Kenyon 1985). It is usually much thicker than other whitewares and is often decorated with raised moulded designs of wheat or fruit cast directly into the fabric of the vessel. A single piece was plain and undecorated. The remaining pieces included various moulded decorations including floral and seashells.

Vitrified White Earthenware (VWE)

Vitrified White Earthenware (VWE) is fired at a slightly lower temperature than porcelain (1,200 degrees Celsius compared to above 1,300 degrees Celsius), making it less translucent than porcelain. VWE dishes are heavier and thicker than porcelain dishes. Of the four recovered fragments of VWE, three were plain and undecorated, one was decorated with sprig-ware moulding. The sprig-ware example recovered from Location 3 was a blue floral moulding on white VWE ceramic; as such it generally indicates an earliest manufacture date of the mid-19th century, though the style continued to be made well into the 20th century (MACL 2015).

Pearlware

A total of four pieces of pearlware were recovered during the Stage 2 assessment of Location 3. Pearlware, sometimes referred to as “China glazed”, is a variety of earthenware that was popular from 1780 to 1840. Pearlware is often difficult to recognize because of its similar appearance to later whiteware ceramics, however because of the addition of cobalt, the glaze has a light blue to blue-green tint. When placed on white earthenware bisque, this glaze gave the impression of a “whiter” ware than the earlier yellow tinted creamware. A single piece of the pearlware pieces was plain and undecorated. Two of the pearlware pieces were decorated with cobalt blue floral painted patterns. One of the painted pieces was marked with an impressed Davenport maker’s mark (“...ENPORT”) which indicates a date of 1805-1820 for manufacture (Godden 1984).

A single piece of edged pearlware was recovered from Location 3. Both blue and green edged wares were popular in the late 18th and early 19th centuries with green edged wares declining in popularity post 1830. This blue edged piece is scalloped with incised repeating pattern and a feathered blue band (1800-1835) (Miller et al. 2000).

Yellowware

A total of three pieces of yellowware were recovered during the Stage 2 assessment of Location 3. Yellowware ceramics were first manufactured in the 1840s and continue to be manufactured in limited quantities today (Saint Mary's University 2015). Of the yellowware ceramics, one piece was plain and two exhibited decoration: one olive and black dendritic and one brown/white/yellow banding.

Undetermined

Two of the ceramic pieces recovered from Location 3, representing 2.20% of the ceramic assemblage, could not be catalogued into specific ceramic-ware classifications. These pieces are so heavily damaged and fragmentary that it is impossible to accurately identify them by ceramic type. In order to avoid altering the separate ceramic totals, percentages, and ultimately the temporal data for the site the damaged pieces were simply classified as miscellaneous unidentified ceramics.

3.3.1.2 Domestic: Glass Artifacts

A total of 11 non-structural glass artifacts were recovered from the Stage 2 assessment of Location 3; all shards of bottle glass. Colours of bottle glass (including pharmaceutical glass) include aqua, green, and olive/black. Bottle glass colour is extremely limited with regards to providing a temporal sequence for a site; however, olive glass where the addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as "black glass" (Kendrick 1971).

Three of the fragments refit to make two bottle finishes: one Double Oil (1820s – 1900s) and one Double Ring (1840 – 1920s) (Lindsay 2019).

3.3.1.3 Personal Artifacts

A total of eight artifacts of a personal nature were recovered during Stage 2 assessment.

White clay pipes were very popular throughout the 19th century but declined in use during the 1880s with the introduction of briar pipes and cigarettes (Adams et al. 1994). Most white clay pipes found in Upper Canada were manufactured in either Quebec or Scotland, occasionally examples from English, Dutch, French, and American makers are also found. Sometimes the maker's name and/or city of manufacture was impressed on one side of the pipe stem, a practice which did not become popular until the 1840s (Adams et al. 1994, Walker 1970). The five bowl fragments were mostly plain and undecorated, with two examples of moulding (vertical lines and TD).

One shoe heel of layered leather with a single row of steel rectangular pegs was also recovered during the Stage 2 assessment.

One white "agate" button was also recovered. Agate buttons were made from pressed ceramic powder manufactured by the "Prosser" process patented in 1840. They became popular in Upper Canada beginning in the late 1840s. Agate buttons, which are often confused with white glass buttons, are distinguishable due to the dimpled appearance present on the back of the button which is a result of the moulding process (Adams et al. 1994:96). As of yet it is not possible to assign a further date range to agate buttons based on decorative elements (Sprague 2002).

3.3.1.4 Miscellaneous Artifact

One piece of slate was recovered during the Stage 2 assessment, its function was not able to be definitively defined.

3.3.2 Lithic Artifacts

A total of six pieces of chipping detritus were recovered from Location 3. Chipping detritus was the waste product from the production of lithic tools and is the most commonly recovered artifact on pre-contact Indigenous archaeological sites in southern Ontario. All of the chipping detritus was manufactured on Onondaga chert; two tertiary flakes and four broken.

Two biface fragments were recovered as well as one scraper; all of which were manufactured on Onondaga chert. Bifaces and scrapers are formal tool classes but still lack a dateable typology that would enable them to be temporally diagnostic, the biface and scraper recovered from Location 3 are presented in Table 13.

Table 13: Location 1 Stage 2 Recovered Formal Lithic Tools

Tool	Cat. No.	Material	Length	Width	Thickness
Biface	5	Onondaga	39.27mm*	21.90mm*	9.73mm
Biface	9	Onondaga	54.43mm*	44.68mm	11.50mm
Scraper	4	Onondaga	30.15mm	24.38mm	5.44mm

* indicates an incomplete measurement due to break

3.4 Location 4

A total of eight pre-contact artifacts from seven distinct CSP locations were recovered from Location 4; consisting of six pieces of chipping detritus, one retouched flake, and one biface (Image 26). All of the artifacts were manufactured on Onondaga chert; the retouched flake was heat-altered. Location 4 measures approximately 10 metres (north-south) by 20 metres (east-west).

Table 14: Location 4 Stage 2 Recovered Artifacts

Artifact	Freq.	%
Chipping Detritus	6	75.00
Retouched Flake	1	12.50
Biface	1	12.50
Total Stage 2 Artifacts Location 4	8	100

A total of six pieces of chipping detritus were recovered from Location 4. The chipping detritus included one secondary flake, one tertiary flake, and four broken flakes. Chipping detritus was the waste product from the production of lithic tools and is the most commonly recovered artifact on pre-contact Indigenous archaeological sites in southern Ontario.

One biface fragment was recovered as well as one retouched flake. Bifaces are a formal tool class but lack a dateable typology that would enable them to be temporally diagnostic, the recovered biface is roughly triangular in shape and was likely a projectile point prior to being broken laterally at both the tip and base. The measurements of the biface are as follows: 41.60mm* in length from break to break, 27.95 mm in width, and 6.38 mm in thickness. Retouched flakes are qualified as expedient tools and as such they are not able to be attributed to a particular time period.

3.5 Location 5 (AiHb-376)

Location 5 is a historical Euro-Canadian site. A total of 81 artifacts from 47 distinct CSP locations were recovered from Location 5 including 80 historical Euro-Canadian artifacts and one pre-contact Indigenous artifact (Image 27). Location 5 measures approximately 65 metres (north-south) by 65 metres (east-west), with a concentration of artifacts within an area measuring 35 meters (north-south) by 35 meters (east-west).

Table 15: Location 5 Stage 2 Recovered Artifacts

	Artifact	Freq.	%
Historical Euro-Canadian	Domestic	79	97.53
	Ceramic	[77]	[97.47]
	Glass	[2]	[2.53]
	Personal	1	1.23
<i>Total Historical Euro-Canadian</i>		80	98.77
Pre-Contact Indigenous	Scraper	1	1.23
<i>Total Pre-Contact Indigenous</i>		1	1.23
Total Stage 2 Artifacts Location 5		81	100

3.5.1 Historical Euro-Canadian Artifacts

3.5.1.1 Domestic: Ceramic Artifacts

A total of 77 ceramic fragments were recovered during the Stage 2 assessment of Location 5. Table 16 provides a breakdown of the ceramic assemblage by ware type while Table 17 provides a breakdown of the ceramic assemblage by decorative type.

Table 16: Location 5 Stage 2 Recovered Ceramics by Ware Type

Ceramic	Freq.	%
RWE	70	90.91
Utilitarian	2	2.60
Yellowware	2	2.60
Ceramic, undetermined	2	2.60
Pearlware	1	1.30
Total Stage 2 Ceramics Location 5	77	100

Table 17: Location 5 Stage 2 Recovered Ceramics by Decorative Type

Ceramic	Freq.	%
RWE, transfer printed	27	35.06
RWE, painted	14	18.18
RWE, banded	7	9.09
RWE, sponged	7	9.09
RWE, stamped	6	7.79
RWE, edged	5	6.49
RWE, plain	4	5.19
Ceramic, undetermined	2	2.60
Yellowware, banded	2	2.60
Pearlware, banded	1	1.30
Coarse Earthenware, red	1	1.30
Stoneware	1	1.30
Total Stage 2 Ceramics Location 5	77	100.00

Refined White Earthenware (RWE)

A total of 57 pieces of RWE were recovered from Location 5, representing 90.91% of the ceramic assemblage for the site. RWE is also known in literature as “whiteware”. RWE is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware in the late 1820s and early 1830s, however the initial manufacture date of what archaeologists call “whiteware” is not known. Early RWE tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century. A total of four of the RWE pieces were plain and undecorated, pieces with further decoration are discussed below.

A total of 27 pieces of transfer printed RWE were recovered during the Stage 2 assessment. Transfer printed RWE became popular quite early in the 19th century and involved the transfer of an intricate pattern from a sheet of treated paper to the unglazed surface of the clay vessel. Before 1830, almost all transfer printed wares were blue. After 1830, colors such as light blue, black, brown, green, purple and red became more common. Examples of blue (1817-1834~1859) and black (1825-1838~1864) transfer printing were recovered during Stage 2 assessment and suggest an average mid-19th century production date. The above date range merely reflects the height in popularity as well as the approximate end in production for each colour (MACL 2015).

A total of 14 pieces of painted RWE were recovered during the Stage 2 assessment. As the name suggests painted RWE had its decorative motifs applied by an artisan using a small brush who painted the pattern directly onto the object. Painted wares can be distinguished from other decorative techniques because the brush strokes are visible in the artwork. The pieces recovered from this site were decorated predominately with floral patterns in polychrome late palette colours as well as red rim bands. The use of underglaze red paint is further evidence that these ceramic pieces are of post-1829 whitewares (Miller et al. 2000, MACL 2015).

Banded wares were decorated with horizontal bands of coloured slip applied in varying widths. Colours are predominantly muted earth tones including, black, green, brown, orange, yellow, grey, and pale blue. Banded pieces may also include inlaid and cut away slip decoration and bands of lathe turned grooves or patterns. Banding occurred both as a primary decorative element and in conjunction with other design elements such as marbling, or the dendritic patterns found on mocha ware. Banded patterns can be found on RWE as starting in

1830 (Sussman 1997). The seven pieces of banded RWE were decorated with black, blue, white, grey-green banding and dendritic patterns.

Seven pieces of sponged RWE were recovered from Location 5. Sponged RWE ceramics were a form of inexpensive tableware for which a sponge was used to apply an underglaze pigment. All over sponging was popular by the 1830s and remained common until the 1870s. The recovered sponged fragments were decorated with blue.

A variety of the sponged method, stamping involves cutting a sponge into simple designs (e.g., geometric, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse but often pleasing design. This technique was used from the 1850s the early 20th century (Adams *et al.* 1994). A total of six pieces of stamped RWE were recovered from Location 5, all the pieces were decorated with red and blue paint in two general floral patterns.

A total of five pieces of edged RWE were recovered from Location 5 including three unscalped rims with repeating patterns and blue banding (1840-1860), one unscalped rim with repeating pattern and red banding (1840-1860), and one piece with a scalped rim with impressed repeating pattern and a feathered band of blue (1800-1835) (Miller et al. 2000).

Yellowware

A total of two pieces of yellowware were recovered during the Stage 2 assessment of Location 5. Yellowware ceramics were first manufactured in the 1840s and continue to be manufactured in limited quantities today (Saint Mary's University 2015). Of the yellowware ceramics, both exhibited decoration: yellow and white banding with blue dendritic pattern.

Undetermined

Two of the ceramic pieces recovered from Location 5, representing 2.60% of the ceramic assemblage, could not be catalogued into specific ceramic-ware classifications. These pieces are so heavily damaged and fragmentary that it is impossible to accurately identify them by ceramic type. In order to avoid altering the separate ceramic totals, percentages, and ultimately the temporal data for the site the damaged pieces were simply classified as miscellaneous unidentified ceramics.

Utilitarian

A total of two utilitarian fragments were recovered from Location 5 including one piece of stoneware and one fragments of coarse red earthenware. Coarse red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels.

Pearlware

A single piece of pearlware was recovered during the Stage 2 assessment of Location 5. Pearlware, sometimes referred to as "China glazed", is a variety of earthenware that was popular from 1780 to 1840. Pearlware is often difficult to recognize because of its similar appearance to later whiteware ceramics, however because of the addition of cobalt, the glaze has a light blue to blue-green tint. When placed on white earthenware bisque, this glaze gave the impression of a "whiter" ware than the earlier yellow tinted creamware. The single piece of the pearlware was a fragment of banded ware with a grey-green, white, black marbled pattern.

3.5.1.2 Domestic: Glass Artifacts

A total of two non-structural glass artifacts were recovered from the Stage 2 assessment of Location 5; one shard of bottle glass and one shard of chimney lamp glass. The recovered bottle glass was a small round base with a pontil mark, aqua in colour, and likely pharmaceutical in nature.

The chimney lamp glass was a ribbed green fragment likely from the base of an oil lamp.

3.5.1.3 Personal Artifacts

A single artifact of a personal nature was recovered during Stage 2 assessment.

One pink “agate” button was also recovered. Agate buttons were made from pressed ceramic powder manufactured by the “Prosser” process patented in 1840. They became popular in Upper Canada beginning in the late 1840s. Agate buttons, which are often confused with white glass buttons, are distinguishable due to the dimpled appearance present on the back of the button which is a result of the moulding process (Adams *et al.* 1994:96). As of yet it is not possible to assign a further date range to agate buttons based on decorative elements (Sprague 2002).

3.5.2 Lithic Artifacts

A possible thumb scraper was recovered from Location 5. Manufactured on Onondaga chert the tool is bifacially worked with steep scraper margins on three of the four sides. Scrapers are formal tool classes but still lack a dateable typology that would enable them to be temporally diagnostic, the recovered scraper has the following measurements: 28.14 mm in length, 11.43 mm in width, and 4.85 mm in thickness.

3.6 Location 6

A total of seven pre-contact artifacts from seven distinct CSP locations were recovered from Location 6; consisting of five pieces of chipping detritus, one retouched flake, and one scraper (Image 28). Location 6 measures approximately 15 metres (north-south) by 20 metres (east-west).

Table 18: Location 6 Stage 2 Recovered Artifacts

Artifact	Freq.	%
Chipping Detritus	5	71.43
Retouched Flake	1	14.29
Scraper	1	14.29
Total Stage 2 Artifacts Location 6	7	100

A total of five pieces of chipping detritus were recovered from Location 6. The chipping detritus included four broken flakes manufactured on Onondaga chert (two were subject to heat-alteration) and one piece of shatter manufactured on Kettle Point chert. Chipping detritus was the waste product from the production of lithic tools and is the most commonly recovered artifact on pre-contact Indigenous archaeological sites in southern Ontario.

One scraper was recovered as well as one retouched flake, both manufactured on Onondaga chert. Retouched flakes are qualified as expedient tools and as such they are not able to be attributed to a particular time period. Scrapers are a formal tool class but lack a dateable typology that would enable them to be temporally diagnostic, the recovered scraper is an end scraper with the following measurements: 40.25 mm in length, 25.33 mm in width, and 11.80 mm in thickness.

3.7 Findspots

A total of 19 pre-contact Indigenous Findspots were identified during Stage 2 pedestrian survey; the artifacts recovered from each findspot are described in Table 19 below.

Table 19: Findspots 1 – 19 Record of Finds

Findspot	No. of Artifacts	Artifact Description	Image
F. 1	2	Chipping Detritus: one broken and heat-altered flake manufactured on Onondaga chert; one secondary flake manufactured on Kettle Point chert	29
F. 2	2	Chipping Detritus: one broken flake manufactured on an undetermined chert/chalcedony. Retouched Flake: one flake manufactured on Onondaga chert.	29
F. 3	1	Biface: ovate in shape and manufactured on Onondaga chert. The measurements of the biface are as follows: 46.24 mm in length, 31.55 mm in width, and 6.18 mm in thickness	30
F. 4	2	Retouched Flake: one manufactured on an undetermined chert type Projectile Point: one stylistically similar to a Crawford-Knoll projectile point which date approximately to the Late Archaic period (1500 – 500 BCE). The projectile point is manufactured on Onondaga chert and measures as follows: 31.10 mm in length, 22.37 mm in width, 7.83 mm in thickness	30
F. 5	1	Chipping Detritus: one secondary flake manufactured on an undetermined lithic material	31
F. 6	1	Retouched Flake: one manufactured on Onondaga chert	31
F. 7	1	Chipping Detritus: one tertiary flake manufactured on an undetermined chert	31
F. 8	1	Biface: one likely broken side-notched projectile point manufactured on Onondaga chert. The measurements of the biface are as follows: 42.55 mm* in length from end to break, 24.59 mm* in width from edge to break, and 6.87 mm in thickness	31
F. 9	1	Scraper: one side/end scraper manufactured on Onondaga chert. The measurements of the scraper are as follows: 29.74 mm in length, 16.23 mm in width, and 6.39 mm in thickness	32
F. 10	1	Chipping Detritus: one broken flake manufactured on Onondaga chert	32
F. 11	1	Chipping Detritus: one primary flake manufactured on Selkirk chert	32
F. 12	1	Chipping Detritus: one broken flake manufactured on Onondaga chert	32
F. 13	1	Biface: one broken biface manufactured on Onondaga chert. The measurements of the biface are as follows: 55.84 mm in length, 22.69 mm* in width from edge to break, and 12.09 mm in thickness.	32
F. 14	5	Chipping Detritus: five broken flakes; four of which were manufactured on Onondaga chert (three heat-altered) and one of which was manufactured on an undetermined chert	33
F. 15	2	Chipping Detritus: two broken flakes manufactured on Onondaga chert	34
F. 16	1	Chipping Detritus: one tertiary flake manufactured on an undetermined chert	34

Findspot	No. of Artifacts	Artifact Description	Image
F. 17	2	Chipping Detritus: one broken flake manufactured on Onondaga chert. Biface: one broken biface (tip recovered) manufactured on Onondaga chert. The measurements of the biface are as follows: 25.75 mm* in length from tip to break, 16.38 mm in width, and 6.62 mm in thickness	35
F. 18	1	Chipping Detritus: one primary flake manufactured on an undetermined chert	36
F. 19	2	Chipping Detritus: one broken flake manufactured on Haldimand chert; one primary flake manufactured on Selkirk chert	36

General Artifact Descriptions

Chipping detritus was the waste product from the production of lithic tools and is the most commonly recovered artifact on pre-contact Indigenous archaeological sites in southern Ontario.

Retouched flakes are qualified as expedient tools and as such they are not able to be attributed to a particular time period.

Bifaces and scrapers are a formal tool class but lack a dateable typology that would enable them to be temporally diagnostic as is often possible for projectile points.

4.0 ANALYSIS AND CONCLUSIONS

4.1 Location 1 (AiHb-374)

A total of 33 pre-contact Indigenous artifacts were recovered from Location 1, including 27 pieces of chipping detritus, four retouched flakes, one biface and one scraper. All artifacts were recovered during Stage 2 CSP. Given the nature of the recovered assemblage, at this time Location 1 likely represents a small pre-contact Indigenous lithic scatter.

As more than ten non-diagnostic artifacts were recovered from within a 10-metre by 10-metre pedestrian survey area, Location 1 does meet the criteria defined for cultural heritage value or interest (MCM 2011, Section 2.2 Standard 1.a.i.1 and 3).

Location 1 is located within the limits of the area to be licensed but outside of the proposed extraction boundaries. As such Location 1 is recommended for long term protection and avoidance under Stage 3 PIF P468-0087-2022 using the measures outlined in Section 5.0.

4.2 Location 2

A total of 11 pre-contact Indigenous artifacts were recovered from Location 2, including 10 pieces of chipping detritus and one core. Despite intensified survey no further artifacts were identified. Although 11 artifacts were recovered the distribution of the artifacts is such that at no point are 10 artifacts present within a 10-metre by 10-metre area. Given the nature of the recovered assemblage, at this time Location 2 likely represents a small pre-contact Indigenous lithic scatter.

As less than ten non-diagnostic artifacts were recovered from within a 10-metre by 10-metre pedestrian survey area, Location 2 does not meet the criteria defined for cultural heritage value or interest (MCM 2011, Section 2.2 Standard 1.a.i.1 and 3).

4.3 Location 3 (AiHb-375)

Location 3 is a historical Euro-Canadian site where nine pre-contact Indigenous artifacts were also recovered. A total of 120 artifacts including 111 historical Euro-Canadian artifacts and nine pre-contact Indigenous artifacts were recovered. All pre-contact Indigenous artifacts were recovered but examples of non-diagnostic historical Euro-Canadian artifacts (such as glass and undecorated ceramics) were left in situ to assist in site relocation.

The historical Euro-Canadian artifacts recovered from Location 3 primarily date to the mid to late-19th century. Nineteenth century ceramics, predominately RWE as well as examples of earlier pearlware and later ironstone were recovered during the Stage 2 survey. Several personal artifacts were also recovered including fragments of white clay smoking pipes and a leather shoe heel. Artifacts were recovered over an area approximately 130 metres (north-south) by 160 metres (east-west), with a concentration of artifacts within an area 60 metres by 40 metres.

A review of the artifacts discussed in Section 3.3 indicate the recovered artifacts from Location 3 appear to date to the mid to late-19th century; no substantial pockets of 20th century artifacts were recovered. Although Location 3 does not correspond with any illustrated structure on the historical mapping it is likely associated with the 19th century residents of the property; at the time the property was owned by the Hogg family.

As the historical Euro-Canadian artifact assemblage contains at least 20 artifacts that date the period of use to before 1900, Location 3 does meet the criteria defined for cultural heritage value or interest (MCM 2011, Section 2.2 Standard 1.c) relating to the historical Euro-Canadian component of the site.

As less than ten non-diagnostic pre-contact Indigenous artifacts were recovered from within a 10-metre by 10-metre pedestrian survey area, Location 3 does not meet the criteria defined for cultural heritage value or interest (MCM 2011, Section 2.2 Standard 1.a.i.1 and 3).

Stage 3 archaeological assessment will be recommended for the Historic Euro-Canadian component of Location 3.

4.4 Location 4

A total of eight pre-contact Indigenous artifacts were recovered from Location 4, including six pieces of chipping detritus, one retouched flake, and one broken biface. Despite intensified survey no further artifacts were identified. Given the nature of the recovered assemblage, at this time Location 4 likely represents a small pre-contact Indigenous lithic scatter.

As less than ten non-diagnostic artifacts were recovered from within a 10-metre by 10-metre pedestrian survey area, Location 4 does not meet the criteria defined for cultural heritage value or interest (MCM 2011, Section 2.2 Standard 1.a.i.1 and 3).

4.5 Location 5 (AiHb-376)

Location 5 is a historical Euro-Canadian site where one pre-contact Indigenous isolated artifact was also recovered. A total of 81 artifacts including 80 historical Euro-Canadian artifacts and one pre-contact Indigenous artifact were recovered. All pre-contact Indigenous artifacts were recovered but examples of non-diagnostic historical Euro-Canadian artifacts (such as glass and undecorated ceramics) were left in situ to assist in site relocation.

The historical Euro-Canadian artifacts recovered from Location 5 primarily date to the mid to late-19th century. Nineteenth century ceramics, predominately RWE as well as examples of earlier pearlware were recovered during the Stage 2 survey. Artifacts were recovered over an area approximately 65 metres (north-south) by 65 metres (east-west), with a concentration of artifacts within an area measuring 35 meters (north-south) by 35 meters (east-west).

A review of the artifacts discussed in Section 3.5 indicate the recovered artifacts from Location 5 appear to date to the mid to late-19th century; no substantial pockets of 20th century artifacts were recovered. Although Location 5 does not correspond with any illustrated structure on the historical mapping it is likely associated with the 19th century residents of the property; at the time the property was owned by the Hogg family.

As the historical Euro-Canadian artifact assemblage contains at least 20 artifacts that date the period of use to before 1900, Location 5 does meet the criteria defined for cultural heritage value or interest (MCM 2011, Section 2.2 Standard 1.c) relating to the historical Euro-Canadian component of the site.

As less than ten non-diagnostic pre-contact Indigenous artifacts were recovered from within a 10-metre by 10-metre pedestrian survey area, Location 5 does not meet the criteria defined for cultural heritage value or interest (MCM 2011, Section 2.2 Standard 1.a.i.1 and 3).

Stage 3 archaeological assessment will be recommended for the Historic Euro-Canadian component of Location 5.

4.6 Location 6

A total of seven pre-contact Indigenous artifacts were recovered from Location 6, including five pieces of chipping detritus, one retouched flake, and one scraper. Despite intensified survey no further artifacts were identified. Given the nature of the recovered assemblage, at this time Location 6 likely represents a small pre-contact Indigenous lithic scatter.

As less than ten non-diagnostic pre-contact artifacts were recovered from within a 10-metre by 10-metre pedestrian survey area, Location 6 does not meet the criteria defined for cultural heritage value or interest (MCM 2011, Section 2.2 Standard 1.a.i.1 and 3).

4.7 Findspots 1 – 19

Findspots 1 – 3 and 5 – 19 are all isolated or very small lithic scatters of non-diagnostic pre-contact Indigenous artifacts. As less than ten non-diagnostic artifacts were recovered from within a 10-metre by 10-metre pedestrian survey area, Findspots 1 – 3 and 5 – 19 do not meet the criteria defined for cultural heritage value or interest (MCM 2011, Section 2.2 Standard 1.a.i.1 and 3).

Findspot 4 was defined by the recovery of two pre-contact Indigenous artifacts: one retouched flake and one projectile point (Late Archaic period). Although the projectile point is a diagnostic artifact, only one additional artifact was recovered from within a 10-metre by 10-metre pedestrian survey area and as such Findspot 4 does not meet the criteria defined for cultural heritage value or interest (MCM 2011, Section 2.2 Standard 1.a.i.1).

5.0 RECOMMENDATIONS

The following recommendations are made for the Locations and Findspots identified during Stage 2 assessment:

- **Location 1** is considered to exhibit cultural heritage value or interest related to the Indigenous use of the area during an as yet undated time period; Location 1 has been registered with the MCM under Borden AiHb-374. The AiHb-374 site is recommended for long term protection and avoidance under Stage 3 PIF P468-0087-2022 using the following measures:
 - The protected area of the site is to be shown on the ARA site plan accompanying the license application. The protected site area corresponds to Figure B-2 of the supplemental documentation.
 - A condition is placed on the ARA licence stating: the AiHb-374 site is present as shown on the ARA site plan; that no extraction, alterations or soil disturbance may be carried out within the limits of the protected area of the AiHb-374 site; that post and wire fencing will be erected along the limits of the AiHb-374 site under the direction of the licensed consultant archaeologist; and, that if the AiHb-374 site is still present when the ARA licence is surrendered that a restrictive covenant will be placed on title to continue the protection of the archaeological site.
 - A letter is provided by the ARA licensee stating that they are aware of the presence of the archaeological site within the limits of the ARA licence and that they are aware of the restrictions on alteration of an archaeological site of further cultural heritage value or interest as per the condition on their ARA licence and as per Section 48 of the Ontario Heritage Act.
- **Location 3** yielded a combination of historical Euro-Canadian and pre-contact Indigenous artifacts. The pre-contact Indigenous artifacts do not meet the criteria of cultural heritage value or interest: only nine artifacts were recovered. Location 3 is considered to exhibit cultural heritage value or interest related to the mid-19th century historical Euro-Canadian use of the property. As such, Stage 3 site-specific assessment is recommended for historic Euro-Canadian component of Location 3. Location 3 has been registered with the MCM under Borden (AiHb-375).
 - As only a representative sample of the historical Euro-Canadian artifacts were recovered during Stage 2 assessment an additional CSP will be completed as part of the Stage 3 assessment (MCM 2011, Section 3.2.1).
 - As a large, plough-disturbed, historical Euro-Canadian site the Stage 3 excavation should be completed as follows (MCM 2011, Table 3.1, Standards 5-7):
 - Place multiple grids of various sizing over areas of artifact concentration and excavate one-metre square test units across those grids at five metre intervals.
 - Place and excavate additional test units, amounting to 20% of the initial grid unit total between the areas of concentration to document areas of lower concentration.
 - Place and excavate further additional test units, amounting to 10% of the initial grid unit total on the periphery of the surface scatter to determine the site extent and sample the site periphery.

- Stage 3 assessment of Location 3 should include the hand-excavation of one-metre square test units by stratigraphic level. All Stage 3 test units should be excavated to subsoil at which time the subsoil should be assessed for signs of cultural features. Should signs of cultural features be identified the cleaned subsoil will be drawn, photographed and covered with geo-textile fabric before being backfilled to protect the features. Should subsoil not reveal any signs of cultural interest, excavation will resume and continue into the first five centimetres of subsoil. All soils excavated from the test units will be screened through hardware cloth with an aperture no larger than 6 mm, to facilitate the recovery of any artifacts that may be present.
- All recovered artifacts should be bagged in the field according to their context and be subject to laboratory analysis. A Stage 3 archaeological assessment report should include all details related to the field work and laboratory analysis. At the time of writing, the Stage 3 archaeological assessment has been completed under PIF P468-0065-2020. Please refer to the Stage 3 report for the results and recommendations.
- **Location 5** yielded a combination of historical Euro-Canadian and pre-contact Indigenous artifacts. The pre-contact Indigenous artifacts do not meet the criteria of cultural heritage value or interest as only one artifact was recovered. Location 5 is considered to exhibit cultural heritage value or interest related to the mid-19th century historical Euro-Canadian use of the property. Stage 3 site-specific assessment is recommended for Location 5. Location 5 has been registered with the MCM under Borden (AiHb-376).
 - As only a representative sample of the historical Euro-Canadian artifacts were recovered during Stage 2 assessment an additional CSP will be completed as part of the Stage 3 assessment (MCM 2011, Section 3.2.1).
 - As a large, plough-disturbed, historical Euro-Canadian site the Stage 3 excavation should be completed as follows (MCM 2011, Table 3.1, Standards 5-7):
 - Place multiple grids of various sizing over areas of artifact concentration and excavate one-metre square test units across those grids at five metre intervals.
 - Place and excavate additional test units, amounting to 20% of the initial grid unit total between the areas of concentration to document areas of lower concentration.
 - Place and excavate further additional test units, amounting to 10% of the initial grid unit total on the periphery of the surface scatter to determine the site extent and sample the site periphery.
 - Stage 3 assessment of Location 5 should include the hand-excavation of one-metre square test units by stratigraphic level. All Stage 3 test units should be excavated to subsoil at which time the subsoil should be assessed for signs of cultural features. Should signs of cultural features be identified the cleaned subsoil will be drawn, photographed and covered with geo-textile fabric before being backfilled to protect the features. Should subsoil not reveal any signs of cultural interest, excavation will resume and continue into the first five centimetres of subsoil. All soils excavated from the test units will be screened through hardware cloth with an aperture no larger than 6 mm, to facilitate the recovery of any artifacts that may be present.

- All recovered artifacts should be bagged in the field according to their context and be subject to laboratory analysis. A Stage 3 archaeological assessment report should include all details related to the field work and laboratory analysis. At the time of writing, the Stage 3 archaeological assessment has been completed under PIF P468-0077-2021. Please refer to the Stage 3 report for the results and recommendations.
- **Locations 2, 4, and 6** are all small pre-contact Indigenous lithic scatter sites that do not meet the criteria defined for cultural heritage value or interest and as such are considered to be sufficiently documented and no further archaeological assessment is recommended.
- **Findspots 1 through 19** are solitary findspots or locations with five or less artifacts that do not meet the criteria defined for cultural heritage value or interest and as such are considered to be sufficiently documented and no further archaeological assessment is recommended.

Despite completion of the Stage 2 assessment to MCM standards, no archaeological assessment can necessarily account for all potential archaeological resources. Should deeply buried archaeological resources be identified during ground disturbance activity associated with future development of the study area, ground disturbance activities should be immediately halted and the Archaeology Division of the Culture Programs Unit of the MCM notified.

The MCM is asked to review the results and recommendations presented herein and accept this report into the Provincial Register of archaeological reports. The MCM is also asked to provide a letter concurring with the results presented herein.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Minister of Heritage, Sport, Tourism, and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c O.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 Heritage, Sport, Tourism, and Culture Industries, a letter will be issued by the ministry stating that there are no further concerns with regards to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licenced 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 licenced archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be representative of a new archaeological site or sites 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*.

The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.

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8.0 IMAGES



Image 1: Initial Stage 2 field work cancelled due to oversaturated field conditions, 26 June 2019. View north-east.



Image 2: Stage 2 test pit survey at 5 m intervals, area of slope greater than 20°, 4 July 2019. View south.



Image 3: Stage 2 test pit survey at 5 m intervals, 4 July 2019. View south-west.



Image 4: Stage 2 test pit, 4 July 2019. View north.



Image 5: Stage 2 test pit survey at 5 m intervals, 4 July 2019. View west.



Image 6: Stage 2, area of previous disturbance, concrete farm courtyard, 4 July 2019. View south-west.



Image 7: Stage 2 test pit, 4 July 2019. View north.



Image 8: Stage 2 test pit survey at 5 m intervals, 4 July 2019. View south.



Image 9: Stage 2 pedestrian survey at 5 m intervals, 4 July 2019. View north.



Image 10: Stage 2 pedestrian survey at 5 m intervals, 4 July 2019. View west.



Image 11: Stage 2 pedestrian survey at 5 m intervals, 4 July 2019. View west.



Image 12: Stage 2 pedestrian survey, intensification of Location 1, 4 July 2019. View west.



Image 13: Stage 2 pedestrian survey, intensification of Location 3, 5 July 2019. View south.



Image 14: Stage 2 pedestrian survey at 5 m intervals, 8 July 2018. View south.



Image 15: Stage 2 pedestrian survey, ground visibility, 8 July 2019. View down and north.



Image 16: Stage 2, creek tributary that intersects the property, 9 July 2019. View south-west.



Image 17: Stage 2 pedestrian survey at 5 m intervals, 9 July 2019. View north-west.



Image 18: Stage 2 pedestrian survey, intensification of Location 5, 9 July 2019. View west.



Image 19: Stage 2 pedestrian survey, 10 July 2019. View north-west.



Image 20: Stage 2, area of low-lying permanent wet, 10 July 2019. View north.



Image 21: Stage 2 pedestrian survey, intensification of Location 6, 10 July 2019. View north-east.



Image 22: Stage 2 recovered artifacts, Location 1 (Top L-R): biface and scraper (Bottom L-R): retouched flake x2, chipping detritus x2, scale as indicated.



Image 23: Stage 2 recovered artifacts, Location 2 (L-R): core, chipping detritus x3, scale as indicated.



Image 24: Stage 2 recovered artifacts, Location 3 (Top): shoe heel (Middle L-R): painted pearlware, Prosser button, white clay pipe bowl (Bottom L-R): banded yellowware, banded RWE, moulded ironstone, blue edged RWE, scale as indicated.



Image 25: Stage 2 recovered artifacts, Location 3 (Top L-R): chipping detritus x3 (Bottom L-R): biface x2, scraper, scale as indicated.



Image 26: Stage 2 recovered artifacts, Location 4 (L-R): biface, retouched flake, chipping detritus x2, scale as indicated.



Image 27: Stage 2 recovered artifacts, Location 5 (Top L-R): button and scraper (Middle L-R): transfer printed RWE x2, banded pearlware (Bottom L-R): painted RWE x2, banded yellowware, red edged RWE, scale as indicated.



Image 28: Stage 2 recovered artifacts, Location 6 (Top L-R); chipping detritus x4 (Bottom L-R): scraper, retouched flake, chipping detritus, scale as indicated.



Image 29: Stage 2 recovered artifacts, Findspot 1 (L): chipping detritus x2 and Findspot 2 (R): chipping detritus and retouched flake, scale as indicated.



Image 30: Stage 2 recovered artifacts, Findspot 3 (L): biface and Findspot 4 (R): retouched flake and projectile point (Crawford Knoll), scale as indicated.



Image 31: Stage 2 recovered artifacts, Findspot 5 (Top L): chipping detritus; Findspot 6 (Top R): retouched flake; Findspot 7 (Bottom L): chipping detritus; Findspot 8 (Bottom R): biface, scale as indicated.



Image 32: Stage 2 recovered artifacts, Findspot 9 (Top L): scraper; Findspot 10 (Top Middle): chipping detritus; Findspot 11 (Top R): chipping detritus; Findspot 11 (Bottom L): chipping detritus x2; Findspot 13 (Bottom R): chipping detritus, scale as indicated.



Image 33: Stage 2 recovered artifacts, Findspot 14, chipping detritus, scale as indicated.



Image 34: Stage 2 recovered artifacts, Findspot 15 (L): chipping detritus x2 and Findspot 16 (R): chipping detritus, scale as indicated.

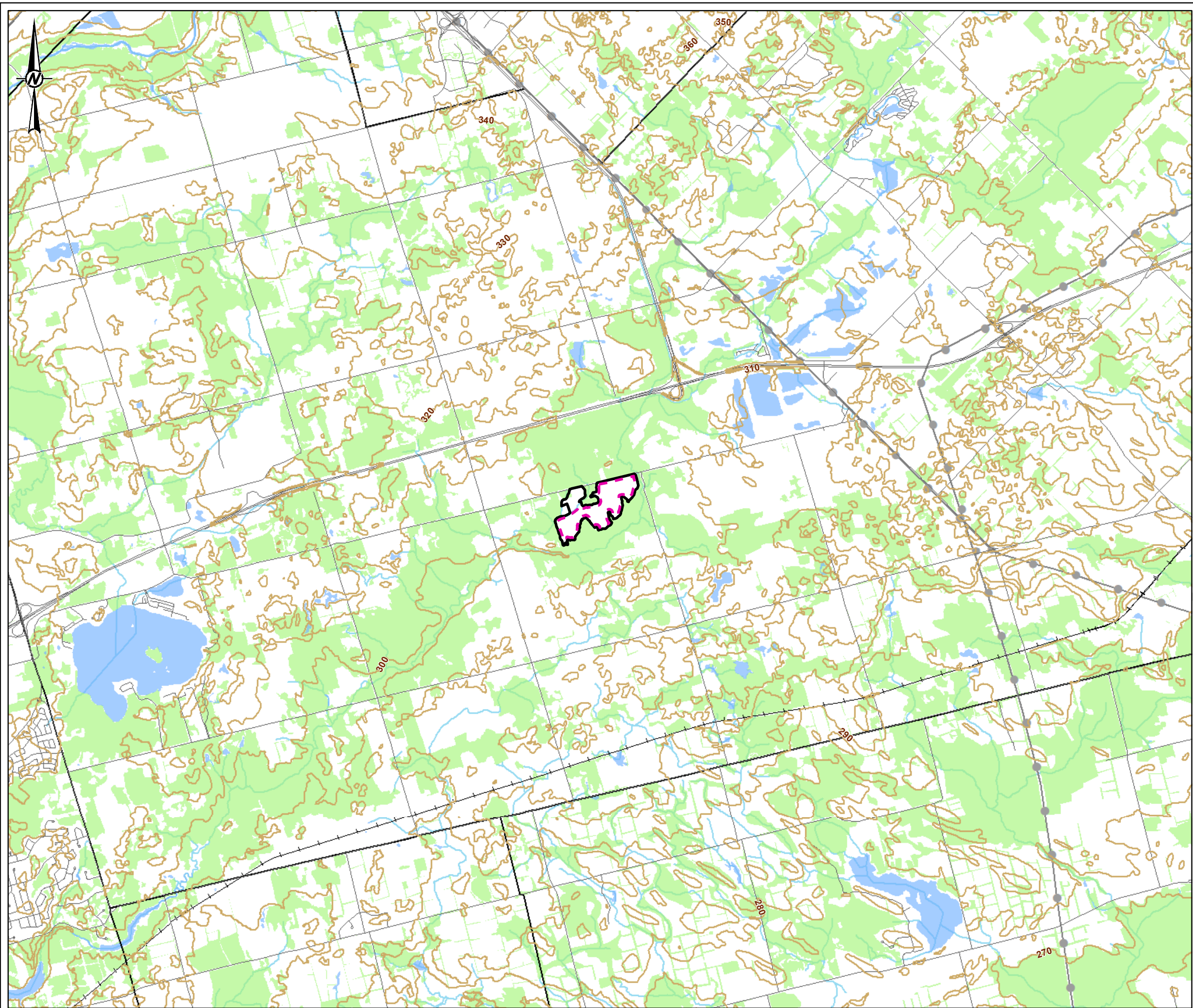


Image 35: Stage 2 recovered artifacts, Findspot 17 (L-R): biface and chipping detritus, scale as indicated.

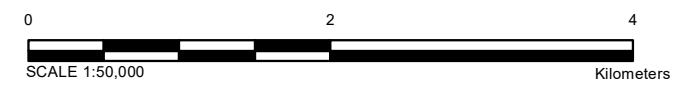
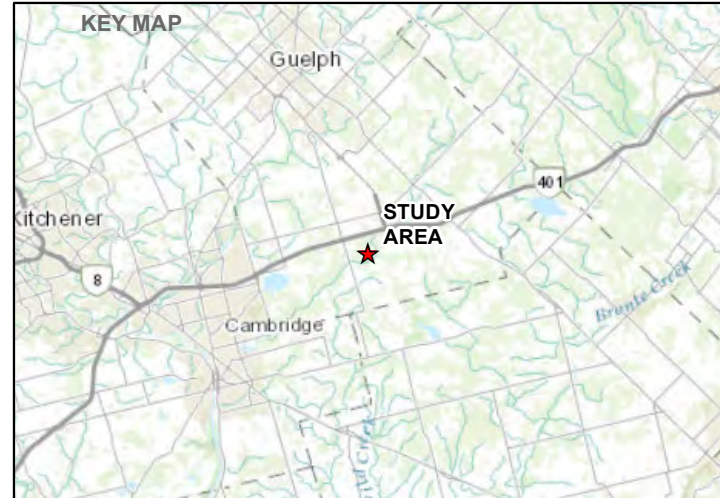


Image 36: Stage 2 recovered artifacts Findspot 18 (L): chipping detritus and Findspot 19 (R): chipping detritus x2, scale as indicated.

9.0 MAPS



- LEGEND**
- CONTOUR (M)
 - ROAD
 - RAILWAY
 - UTILITY LINE
 - PROPOSED EXTRACTION AREA
 - ▭ LICENSE BOUNDARY/STUDY AREA
 - WATER COURSE
 - WATERBODY
 - WOODED AREA



REFERENCE(S)

1. BASEDATA: MNRF LIO, OBTAINED 2017
2. IMAGERY: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N
PROJECTION: TRANSVERSE MERCATOR

CLIENT
CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC. (CANADA)

PROJECT
**LAKE PIT
 6947 CONCESSION ROAD 2, PUSLINCH, ON**

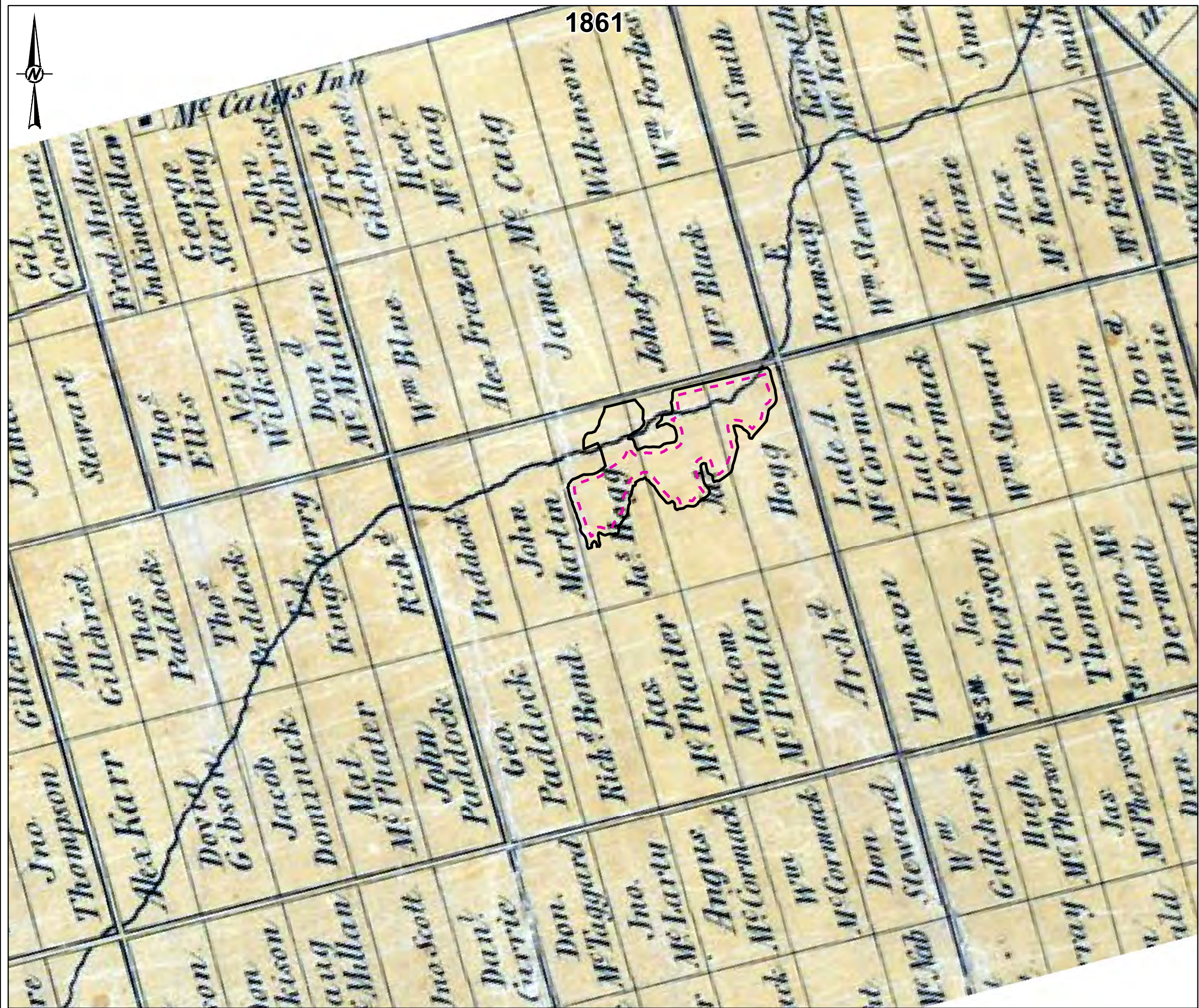
TITLE
STUDY AREA



CONSULTANT	YYYY-MM-DD	2023-03-23
	DESIGNED	ST/SD
	PREPARED	ST/SD
	REVIEWED	AS
	APPROVED	HM

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 297mm

1861



LEGEND
 PROPOSED EXTRACTION AREA
 LICENSE BOUNDARY/STUDY AREA



REFERENCE(S)
1. HISTORIAL IMAGERY RETRIEVED VIA: TOWNSHIP OF PUSLINCH, 7404 WELLINGTON ROAD 34, PUSLINCH, ON N0B 2J0
2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983

CLIENT
CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC.(CANADA)

PROJECT
LAKE PIT
6947 CONCESSION ROAD 2 , PUSLINCH, ON

TITLE
A PORTION OF THE 1861 MAP OF PUSLINCH TOWNSHIP

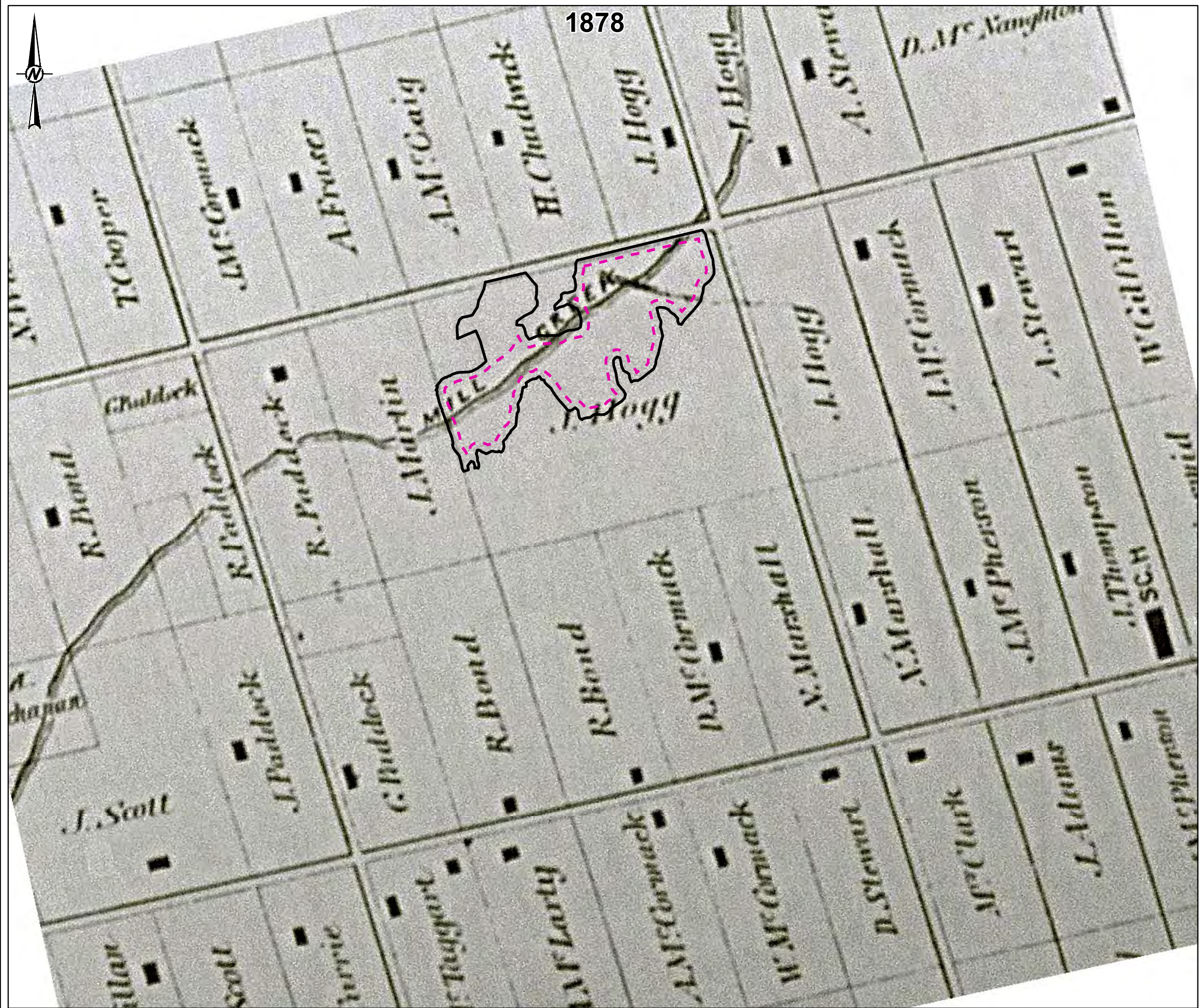
CONSULTANT	WSP	YYYY-MM-DD	2023-03-23
DESIGNED		ST/SD	
PREPARED		ST/SD	
REVIEWED		AS	
APPROVED		HM	

PROJECT NO. CONTROL REV. FIGURE
1791470 - - - 2


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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 20mm

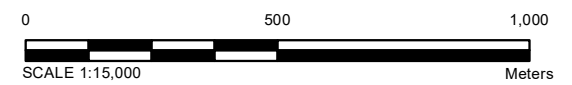
1878



LEGEND

 PROPOSED EXTRACTION AREA

 LICENSE BOUNDARY/STUDY AREA



REFERENCE(S)

1. HISTORIAL IMAGERY: WALKER AND MILES. 1877. ILLUSTRATED ATLAS OF THE COUNTY OF WELLINGTON
2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983

CLIENT
CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC.(CANADA)

PROJECT
LAKE PIT
6947 CONCESSION ROAD 2 , PUSLINCH, ON

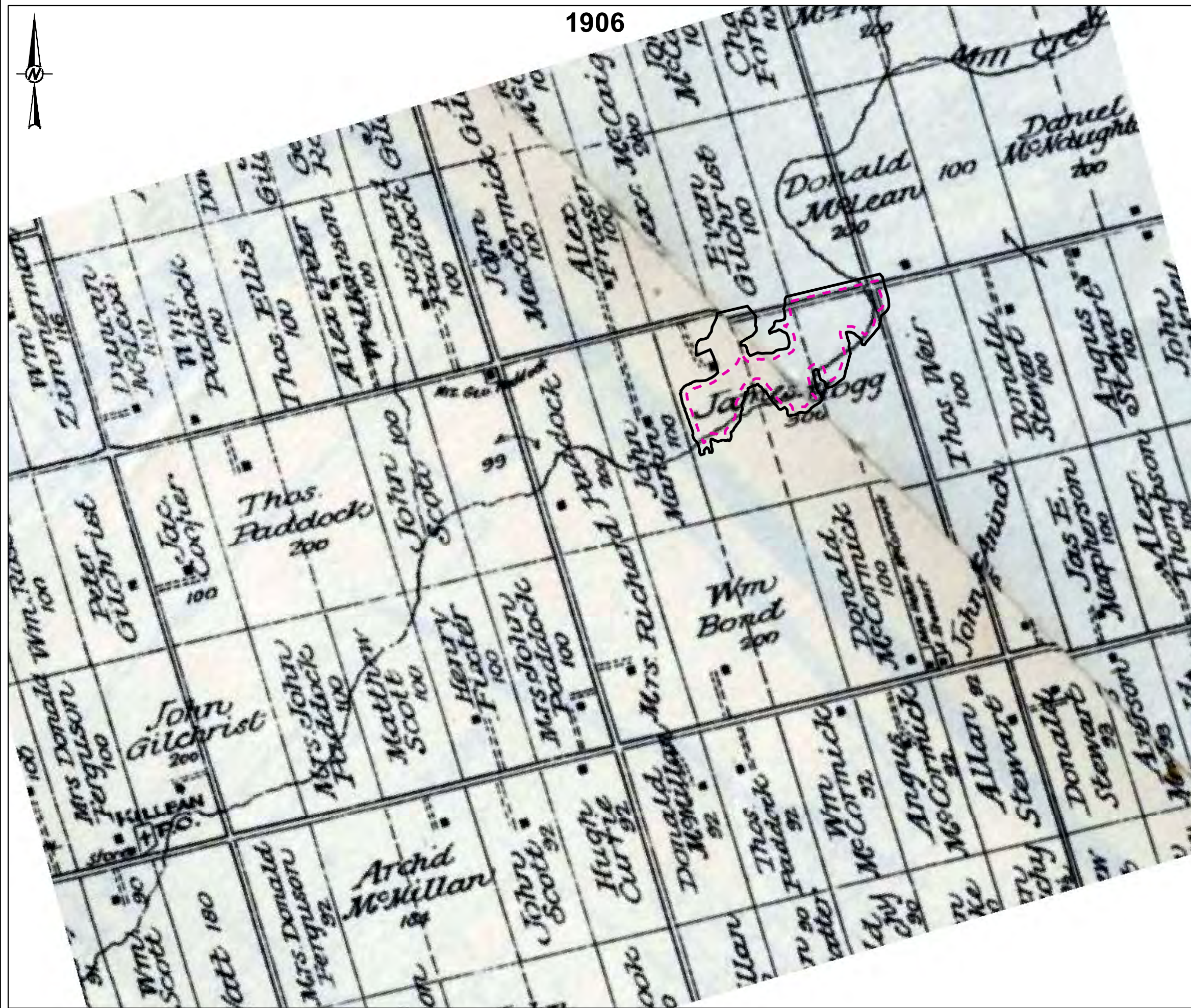
TITLE
A PORTION OF THE 1877 COUNTY ATLAS OF WELLINGTON COUNTY

CONSULTANT		YYYY-MM-DD	2023-03-23
DESIGNED		ST/SD	
PREPARED		ST/SD	
REVIEWED		AS	
APPROVED		HM	

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 297mm

1906



LEGEND

- PROPOSED EXTRACTION AREA
- LICENSE BOUNDARY/STUDY AREA



REFERENCE(S)

- HISTORIAL IMAGERY RETRIEVED VIA: TOWNSHIP OF PUSLINCH, 7404 WELLINGTON ROAD 34, PUSLINCH, ON N0B 2J0
- COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983

CLIENT

CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC.(CANADA)

PROJECT

LAKE PIT
6947 CONCESSION ROAD 2, PUSLINCH, ON

TITLE

A PORTION OF THE 1906 MAP OF PUSLINCH TOWNSHIP

CONSULTANT



YYYY-MM-DD	2023-03-23
DESIGNED	ST/SD
PREPARED	ST/SD
REVIEWED	AS
APPROVED	HM

PROJECT NO.
1791470

CONTROL

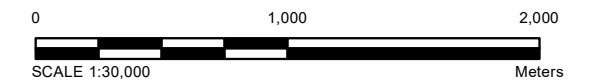
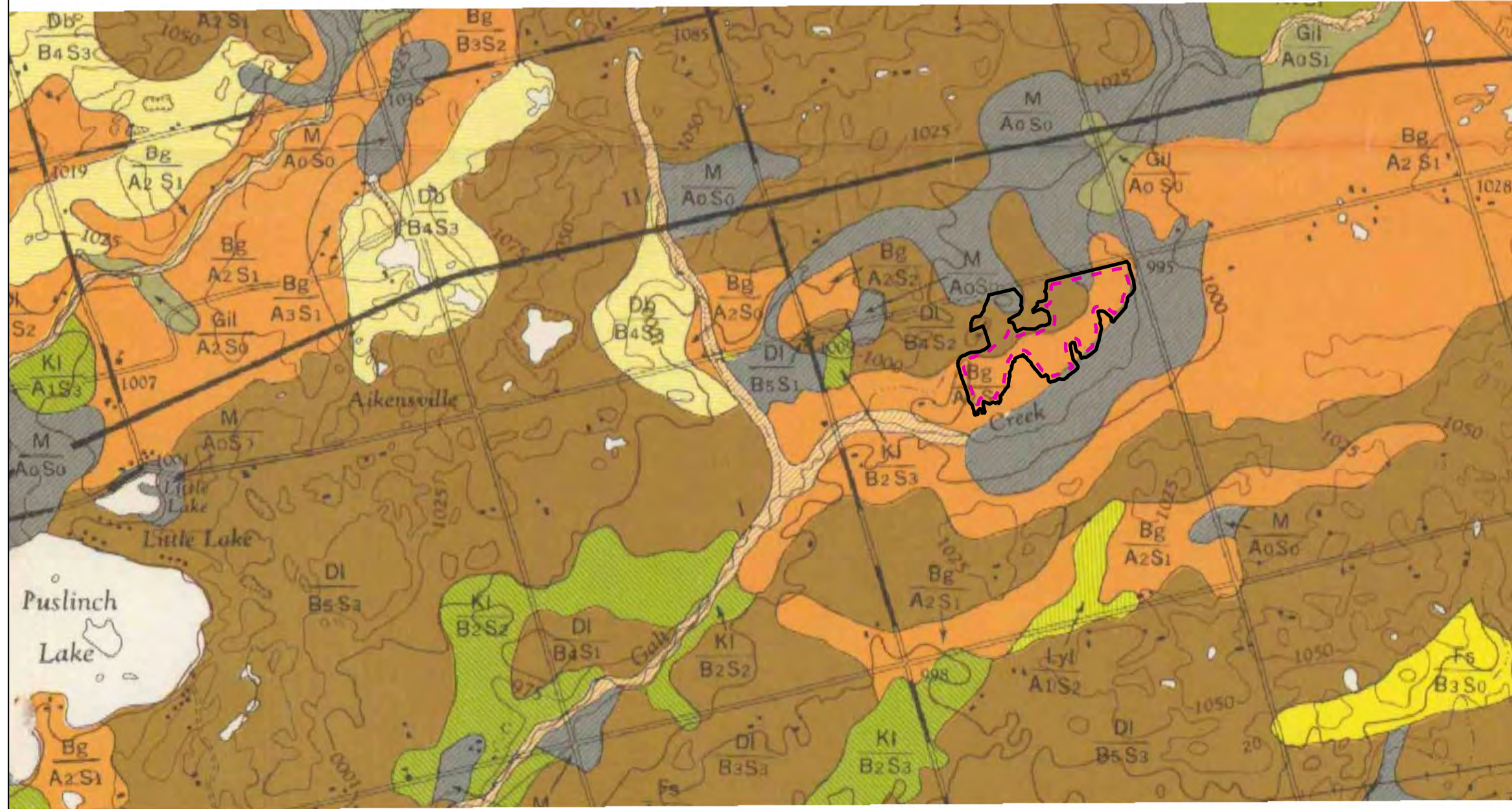
REV.

FIGURE
4



LEGEND

- PROPOSED EXTRACTION AREA
- LICENSE BOUNDARY/STUDY AREA



REFERENCE(S)

1. SOIL MAP: HOFFMAN DW, MATTHEWS BC, WICKLUND RE. 1963. SOIL SURVEY OF WELLINGTON COUNTY, REPORT NO. 35 OF THE ONTARIO SOIL SURVEY, RESEARCH BRANCH, CANADA, DEPARTMENT OF AGRICULTURE AND THE ONTARIO AGRICULTURAL COLLEGE.
2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983

CLIENT

CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC.(CANADA)

PROJECT

LAKE PIT
6947 CONCESSION ROAD 2 , PUSLINCH, ON

TITLE

SOIL TYPES OF STUDY AREA

CONSULTANT

	YYYY-MM-DD	2023-03-23
	DESIGNED	ST/SD
	PREPARED	ST/SD
	REVIEWED	AS
	APPROVED	HM

PROJECT NO.
1791470

CONTROL

REV.

FIGURE

CONCESSION ROAD 4



SIDER ROAD 20 NORTH

WELLINGTON ROAD 34

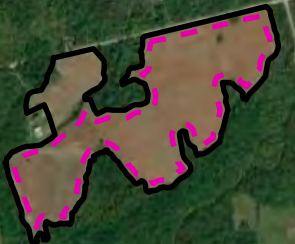
HIGHWAY 6

CONCESSION ROAD 7



HIGHWAY 401

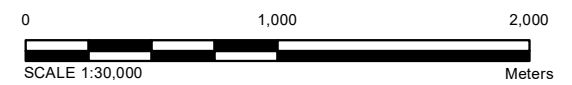
WELLINGTON ROAD 35

CORE ROAD



LEGEND

-  PROPOSED EXTRACTION AREA
-  LICENSE BOUNDARY/STUDY AREA



REFERENCE(S)

1. BASE DATA: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N
PROJECTION: TRANSVERSE MERCATOR

CLIENT

CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC.(CANADA)

PROJECT

LAKE PIT
6947 CONCESSION ROAD 2 , PUSLINCH, ON

TITLE

2019 AERIAL IMAGERY OF STUDY AREA

CONSULTANT



YYYY-MM-DD	2023-03-23
DESIGNED	ST/SD
PREPARED	ST/SD
REVIEWED	AS
APPROVED	HM

PROJECT NO.
1791470

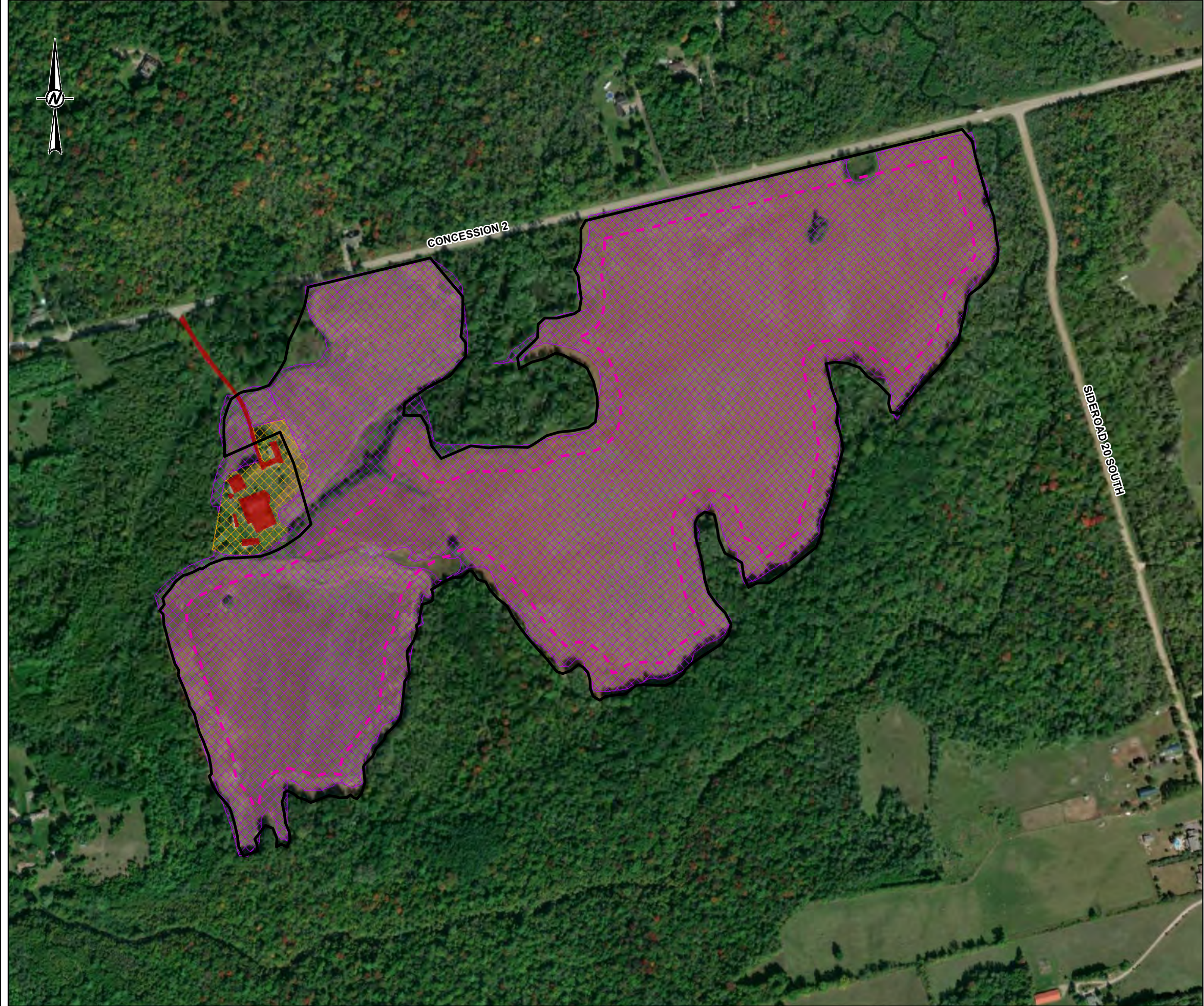
CONTROL
-






REV.
-

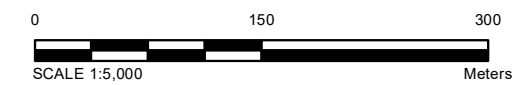
FIGURE
6

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 28mm



- LEGEND**
-  LICENSE BOUNDARY/STUDY AREA
 -  PROPOSED EXTRACTION AREA
 -  AREA OF PREVIOUS DISTURBANCE, NO ARCHAEOLOGICAL POTENTIAL, NO STAGE 2 ASSESSMENT RECOMMENDED
 -  AREA OF ARCHAEOLOGICAL POTENTIAL, STAGE 2 ASSESSMENT BY PEDESTRIAN SURVEY AT 5M INTERVALS RECOMMENDED
 -  AREA OF ARCHAEOLOGICAL POTENTIAL, STAGE 2 ASSESSMENT BY TEST PIT SURVEY AT 5M INTERVALS RECOMMENDED




REFERENCE(S)
 1. BASE DATA: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
 SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
 2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N
 PROJECTION: TRANSVERSE MERCATOR

CLIENT
CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC.(CANADA)

PROJECT
**LAKE PIT
 6947 CONCESSION ROAD 2 , PUSLINCH, ON**

TITLE
STAGE 1 ARCHAEOLOGICAL POTENTIAL

	CONSULTANT	YYYY-MM-DD	2023-03-23
	DESIGNED		ST/SD
	PREPARED		ST/SD
	REVIEWED		AS
	APPROVED		HM

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 297mm

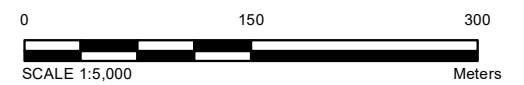


CONCESSION 2

SIDE ROAD 20 SOUTH

LEGEND

-  PHOTOGRAPHIC LOCATION
-  PROPOSED EXTRACTION AREA
-  LICENSE BOUNDARY/STUDY AREA
-  AREA OF LOW-LYING PERMANENTLY WET GROUND, NO ARCHAEOLOGICAL POTENTIAL, NO STAGE 2 ASSESSMENT
-  AREA OF PREVIOUS DISTURBANCE, NO ARCHAEOLOGICAL POTENTIAL, NO STAGE 2 ASSESSMENT RECOMMENDED
-  AREA OF ARCHAEOLOGICAL POTENTIAL, STAGE 2 ASSESSMENT BY PEDESTRIAN SURVEY AT 5M INTERVALS COMPLETED
-  AREA OF ARCHAEOLOGICAL POTENTIAL, STAGE 2 ASSESSMENT BY TEST PIT SURVEY AT 5M INTERVALS COMPLETED



REFERENCE(S)

1. BASE DATA: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
 SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
 2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N
 PROJECTION: TRANSVERSE MERCATOR

CLIENT

CBM AGGREGATES, A DIVISION OF ST. MARYS CEMENT INC.(CANADA)

PROJECT

LAKE PIT
6947 CONCESSION ROAD 2 , PUSLINCH, ON

TITLE

STAGE 2 ARCHAEOLOGICAL METHODOLOGY AND PHOTOGRAPHIC LOCATIONS

CONSULTANT



YYYY-MM-DD	2023-03-23
DESIGNED	ST/SD
PREPARED	ST/SD
REVIEWED	AS
APPROVED	HM

PROJECT NO.
1791470

CONTROL
-

REV.
-

FIGURE
8

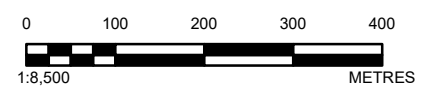
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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 297mm



LEGEND

- WATERCOURSE
- FIELD VERIFIED PROVINCIAL SIGNIFICANT WETLAND EDGE
- PROPOSED EXTRACTION AREA
- LICENSE BOUNDARY/STUDY AREA



- REFERENCE(S)**
1. GROUNDWATER LEVATIONS SELECTED MARCH 12, 2020.
 2. BASEDATA: MNRFLIO, OBTAINED 2019
 3. IMAGERY SOURCE: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY IMAGE SEPTEMBER 2016
 4. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM

CLIENT
CBM AGGREGATES

PROJECT
**LAKE PIT
 6947 CONCESSION ROAD 2, PUSLINCH, ON**

TITLE
SITE LOCATION MAP

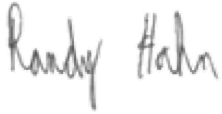
CONSULTANT	YYYY-MM-DD	2023-03-23
	DESIGNED	SO/PGM
	PREPARED	STB
	REVIEWED	DH
	APPROVED	

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 26mm

Signature Page

WSP Canada Inc.



Randy Hahn, PhD
Archaeologist



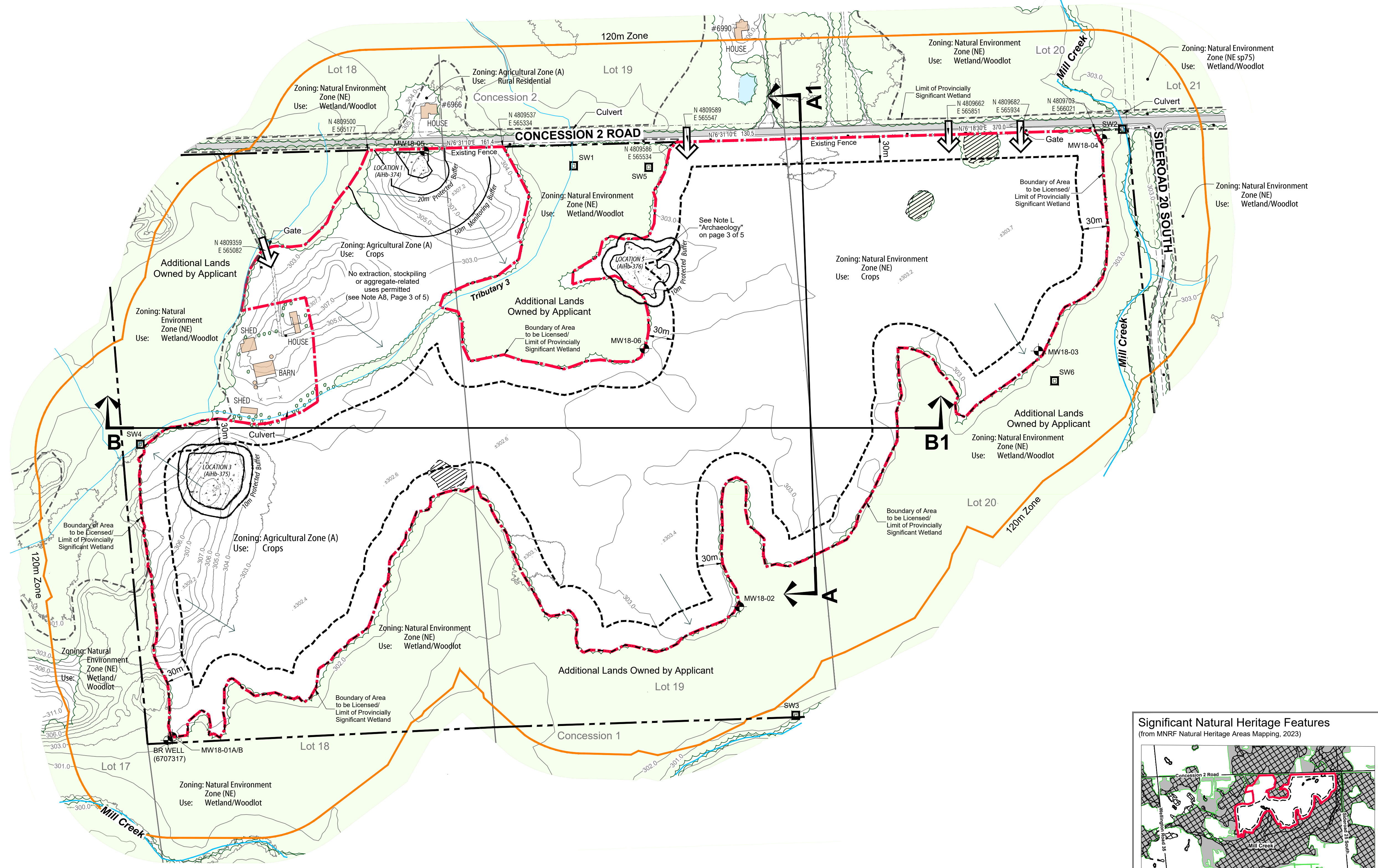
Rhiannon Fisher, MSc, RPA
Senior Archaeologist

KP/RH/RF/BD/HJD/MT/ca

[https://golderassociates.sharepoint.com/sites/21291g/deliverables/archaeology/stage-1-2/amended-report-under-new-pif/p468-0054-2020 & p468-0087-2022_r_28august2023.docx](https://golderassociates.sharepoint.com/sites/21291g/deliverables/archaeology/stage-1-2/amended-report-under-new-pif/p468-0054-2020-&p468-0087-2022_r_28august2023.docx)

APPENDIX A

Development Map



Legal Description
 PART OF LOTS 18, 19 and 20
 CONCESSION 1
 (Geographic Township of Puslinch)
 TOWNSHIP OF PUSLINCH
 COUNTY OF WELLINGTON

Legend

- Boundary of Area to be Licensed
- Limit of Excavation
ALL SETBACKS ARE DRAWN TO SCALE AND SHOW LABELLED DISTANCES
- Additional Lands Owned by Applicant
POST & WIRE FENCE UNLESS OTHERWISE NOTED
- Existing Fence
POST & WIRE FENCE UNLESS OTHERWISE NOTED
- Public Road - Paved
- Public Road - Gravel
- Private Laneway
- Existing Access
- Hydro Pole
- Provincially Significant Wetland
ON-SITE VERIFIED IN FIELD BY WSP 2021 AND OFF-SITE FROM ONTARIO GEOHUB
- Unevaluated Wetland
GRCA OPEN DATA
- Groundwater Monitor
WSP 2021
- Surface Water Monitor
WSP 2021
- Cross Sections
SEE PAGE 5 OF 5 FOR EXISTING AND REHABILITATED CROSS SECTIONS
- Contour with Elevation
METRES ABOVE SEA LEVEL
- Existing Spot Height Elevation
METRES ABOVE SEA LEVEL
- Building/Structure
LOCATION AND USE FOR BUILDINGS ON-SITE AND WITHIN 120m ARE SHOWN ON THIS PAGE
- Existing Vegetation
- Direction of Surface Drainage (IF ANY)
- Drainage Feature
AS INDICATED
- Parcel Fabric
LOCATION APPROXIMATE
- Archaeological Site
SITE RECOMMENDED FOR FURTHER ARCHAEOLOGICAL FIELD WORK

Site Plan Amendments

No.	Date	Description	By

PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
MHBC
 200 - 540 BINGEMANS CENTRE DR. KITCHENER, ON. N2B 3X9 | P: 519.576.3650 F: 519.576.0121 | WWW.MHBCPLAN.COM

MNRF Approval Stamp

Stamp

DRAFT

North

Applicant ST. MARYS CEMENT INC. (CANADA)
 55 Industrial St. 4th Floor
 Toronto, Ontario M4G 3W9
 Telephone: (416) 696-4411

Applicant's Signature
 David Hanratty
 Votorantim Cimentos - North American Aggregates
 Director of Land & Resources

Project
Aberfoyle South Pit Expansion

MNRF Licence Reference No.	Pre-approval review:
Plan Scale 1:2,500 (Arch D)	For Client Review - August 2023
Plot Scale 1:2.5 [1mm = 2.5 units] MODEL	Drawn By D.G.S. File No.
Checked By N.D.	

EXISTING FEATURES PLAN
1 OF 5

Notes

A. General

- This site plan is prepared under the Aggregate Resources Act (ARA) for a Class A licence for a pit below the ground water table and follows the Aggregate Resources of Ontario: Site Plan Standards August 2020, specifically Existing Features for all sites (Numbers 1-26 in the standards).
- Area Calculations:
 Licence Area: 44.8 hectares (110 acres)
 Limit of Extraction: 27.5 hectares (67 acres)
 3. All measurements shown are in metres unless specified otherwise.

B. References

- Topographic information compiled by GeoOptic (a division of Aeon Egmond Ltd.) with supplementary information from the Ontario Digital Terrain Model (contains information licensed under the Open Government Licence - Ontario). Data from GeoOptic was produced from aerial photography that was flown on June 4, 2021. Mapping is produced in real world scale and coordinates (NAD83 UTM Zone 17N). Contour interval is 1m. All elevations are geodetic (CGVD2013 ht2).
- Plan of Survey prepared by Delph & Jenkins North Ltd. (2018).
- The subject lands are zoned Agricultural (A) and Natural Environment (NE) and subject to an Environmental Protection Overlay in the Township of Puslinch Comprehensive Zoning By-law 2018-023 [April 2018 and Revised January 2020].
- Ontario GeoHub @ King's Printer for Ontario, 2023.
- Grand River Conservation Authority (GRCA)
- Land use information compiled from 2021 imagery, site visits and client input.

C. Drainage

- Surface drainage on and within 120 metres of the licence boundary is by overland flow in the directions shown by arrows on the plan view or by infiltration.

D. Groundwater

- Based on the available groundwater elevation data, the maximum predicted water table on the site is 301.91 metres asl in the western edge of the extraction area (as measured at SW4) to 303.95 masl in the northeastern portion of the site (as measured at MW18-04). The water table slopes downward moving from east to west across the site.

E. Site Access and Fencing

- There are several existing field accesses to the site in the locations shown on the plan view.
- Post and wire fencing (unless noted otherwise) exists in the locations shown on the plan view.

F. Aggregate Related Site Features

- There are no existing aggregate operations or features on-site such as processing areas with stationary or portable equipment, stockpiles, recyclable materials, scrap, haul roads, fuel storage, berms or excavation faces.

G. Significant Natural Features

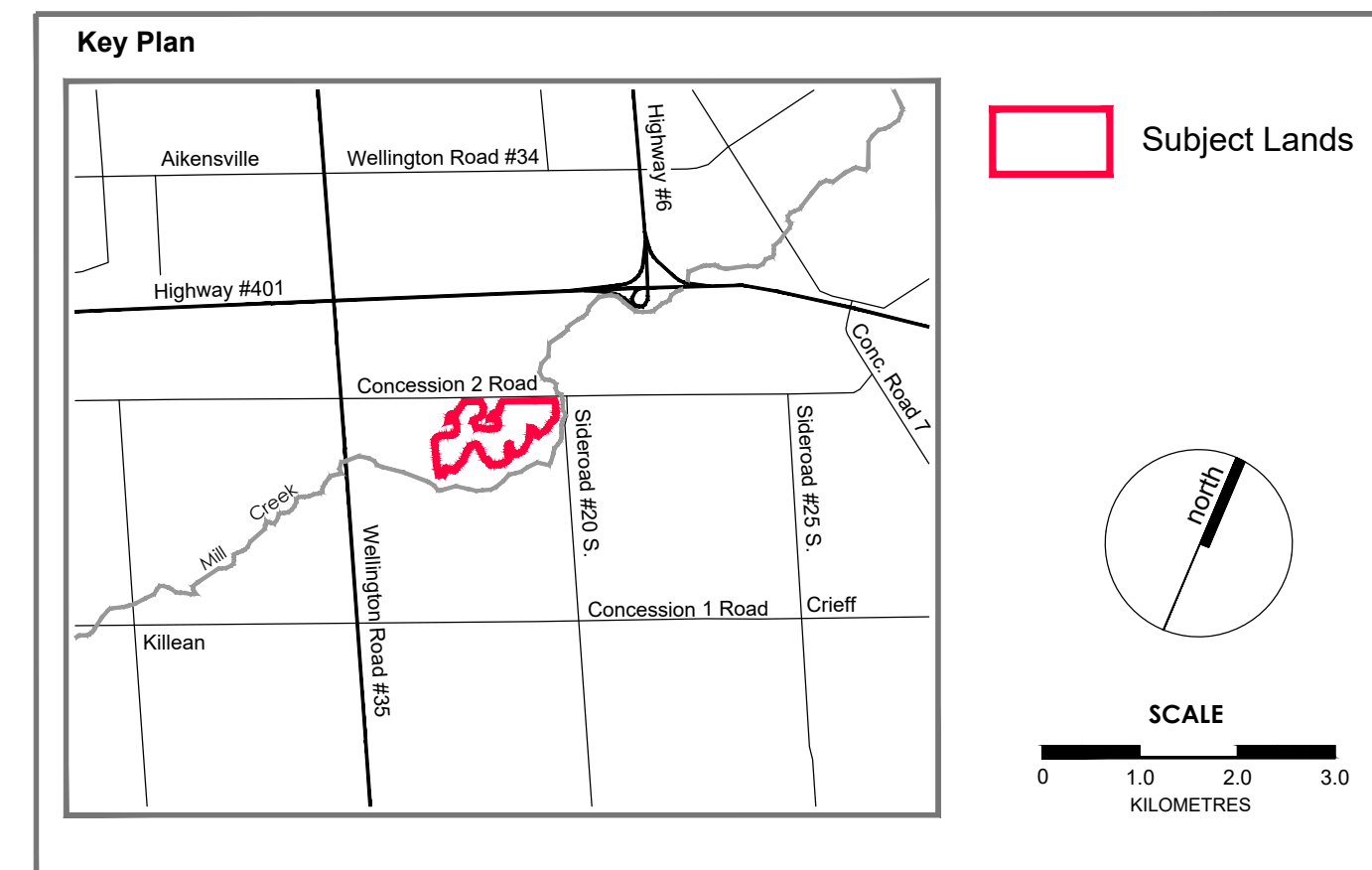
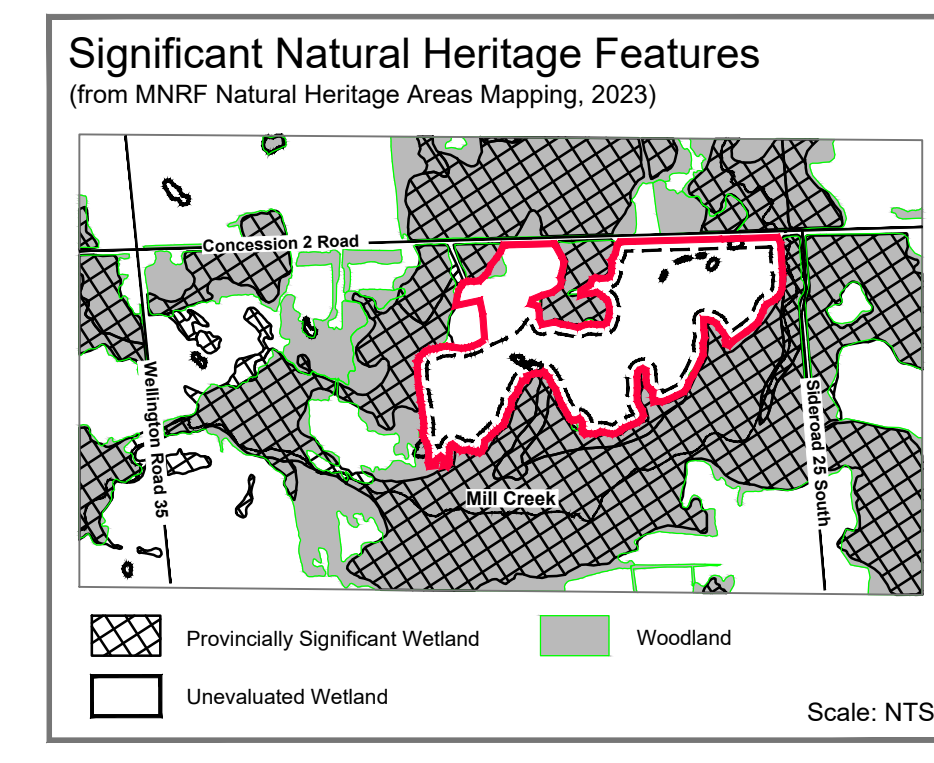
- On-site: fish habitat (Tributary 3), evaluated wetlands
- Off-site: within 120m: Mill Creek-Puslinch Provincially Significant Wetland, significant woodlands, endangered and threatened species habitat (little brown myotis, northern myotis, eastern small-footed myotis, tri-coloured bat and black ash), fish habitat and significant wildlife habitat.

H. Cross Sections

- As shown on this page. Detailed sections are shown on page 5 of 5.
- Cross section locations are identified on the plan view for each drawing.

I. Report References

- Noise: "Noise Impact Assessment, Aberfoyle Pit Expansion" January 2023 (Source: WSP)
- Natural Environment: "Natural Environment Report, Proposed Aberfoyle South Pit Expansion" March 2023 (Source: WSP)
- Hydrogeology: "Water Report Level 1/2 Aberfoyle South Pit Expansion" March 2023 (Source: WSP)
- Maximum Predicted Water Table Report: "Maximum Predicted Water Table Report" March 2023 (Source: WSP)
- Archaeology: "Stage 1 and 2 Archaeological Assessment, Revised Report" April 2023 and "Stage 3 Archaeological Assessment (Locations 3 & 5)" May 2023 (Source: WSP)
- Traffic: "Transportation Impact Study, CBM Aberfoyle South Pit Expansion" December 2022 (Source: TYLin)
- Agricultural Review: "Proposed Aberfoyle South Pit Expansion: Agricultural Considerations" February 2023 (Source: MHBC Planning)
- Dust: "Best Management Practices Plan for the Control of Fugitive Dust at Aberfoyle South Pit Expansion Version 1" October 2021 (Source: WSP)



APPENDIX B

Stage 2 Artifact Catalogues

Location 1

Cat #	Date	Context	Level	Artifact	Description	Description	Total Freq.	Comments	Broad Type	Material/Class	Material/Class	Alteration	Completeness	Object/Function
1	04-Jul-19	Loc1-CSP1	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
2	04-Jul-19	Loc1-CSP2	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
3	04-Jul-19	Loc1-CSP3	Surface	chipping detritus	secondary		1		PreContact	Chert	Onondaga	~	Complete	Debitage
4	04-Jul-19	Loc1-CSP4	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
5	04-Jul-19	Loc1-CSP5	Surface	chipping detritus	tertiary		1		PreContact	Chert	Onondaga	~	Complete	Debitage
6	04-Jul-19	Loc1-CSP6	Surface	chipping detritus	tertiary		1		PreContact	Chert	Onondaga	~	Complete	Debitage
7	04-Jul-19	Loc1-CSP7	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
8	04-Jul-19	Loc1-CSP8	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
9	04-Jul-19	Loc1-CSP9	Surface	retouched flake	1 margin		1	1 margin of retouch, 1 possible margin of utilization, flat/broken secondary	PreContact	Chert	Onondaga	~	-	Tool
10	04-Jul-19	Loc1-CSP10	Surface	scraper	end		1	L: 34.777mm W: 30.61mm T: 7.08mm 3 margins of retouch	PreContact	Chert	Onondaga	~	Complete	Tool
11	04-Jul-19	Loc1-CSP11	Surface	chipping detritus	broken	primary	1		PreContact	Chert	Onondaga	~	-	Debitage
12	04-Jul-19	Loc1-CSP12	Surface	chipping detritus	broken		2		PreContact	Chert	Onondaga	~	-	Debitage
13	04-Jul-19	Loc1-CSP13	Surface	chipping detritus	broken		2		PreContact	Chert	Onondaga	~	-	Debitage
14	04-Jul-19	Loc1-CSP14	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
15	04-Jul-19	Loc1-CSP14	Surface	chipping detritus	tertiary		1		PreContact	Chert	Onondaga	~	-	Debitage
16	04-Jul-19	Loc1-CSP15	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
17	04-Jul-19	Loc1-CSP16	Surface	retouched flake	1 margin		1	1 margin of retouch, secondary flake	PreContact	Chert	Onondaga	~	Complete	Tool
18	04-Jul-19	Loc1-CSP16	Surface	chipping detritus	tertiary		1		PreContact	Chert	Onondaga	~	-	Debitage
19	04-Jul-19	Loc1-CSP17	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
20	04-Jul-19	Loc1-CSP18	Surface	chipping detritus	broken		1		PreContact	Chert	Undetermined	~	-	Debitage
21	04-Jul-19	Loc1-CSP19	Surface	chipping detritus	secondary		1		PreContact	Chert	Onondaga	~	-	Debitage
22	04-Jul-19	Loc1-CSP19	Surface	retouched flake	2 margins		1	2 margins of retouch on broken primary flake, possibly intended to be scraper	PreContact	Chert	Onondaga	~	-	Tool
23	04-Jul-19	Loc1-CSP20	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
24	04-Jul-19	Loc1-CSP20	Surface	chipping detritus	shatter		1		PreContact	Chert	Undetermined	~	-	Debitage
25	04-Jul-19	Loc1-CSP21	Surface	chipping detritus	broken		3		PreContact	Chert	Onondaga	~	-	Debitage
26	04-Jul-19	Loc1-CSP22	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage

27	04-Jul-19	Loc1-CSP23	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
28	04-Jul-19	Loc1-CSP24	Surface	biface	triangular	broken	1	Longitudinal break, L: 54.46mm W: 31.26mm* T: 11.02mm	PreContact	Chert	Onondaga	~	-	Tool
29	04-Jul-19	Loc1-CSP25	Surface	retouched flake	1 margin		1	1 margin of retouch, secondary flake	PreContact	Chert	Onondaga	~	Complete	Tool

Location 2

Cat #	Date	Context	Level	Artifact	Description	Description	Total Freq.	Comments	Broad Type	Material/Class	Material/Class	Alteration	Completeness	Object/Function
1	05-Jul-19	Loc2-CSP1	Surface	chipping detritus	secondary		1		PreContact	Chert	Onondaga	~	Complete	Debitage
2	05-Jul-19	Loc2-CSP2	Surface	chipping detritus	secondary		1		PreContact	Chert	Onondaga	heat-altered	Complete	Debitage
3	05-Jul-19	Loc2-CSP3	Surface	chipping detritus	broken		2		PreContact	Chert	Onondaga	heat-altered	-	Debitage
4	05-Jul-19	Loc2-CSP4	Surface	chipping detritus	broken		1		PreContact	Chert	Kettle Point	~	-	Debitage
5	05-Jul-19	Loc2-CSP5	Surface	chipping detritus	secondary		1		PreContact	Chert	Onondaga	~	-	Debitage
6	05-Jul-19	Loc2-CSP6	Surface	core			1		PreContact	Chert	Kettle Point	~	-	Debitage
7	05-Jul-19	Loc2-CSP7	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
8	05-Jul-19	Loc2-CSP8	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
9	05-Jul-19	Loc2-CSP9	Surface	chipping detritus	broken		1		PreContact	Chert	Undetermined	~	-	Debitage
10	05-Jul-19	Loc2-CSP10	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage

Location 3

Cat #	Date	Context	Level	Artifact	Description	Description	Total Freq.	Comments	Broad Type	Material/Class	Material/Class	Alteration	Completeness	Object/Function
1	08-Jul-19	Loc3-CSP1	Surface	ironstone	moulded	floral	1	rim, floral on a vine	Historic	Ceramic	Refined	~	Rim	Domestic
2	08-Jul-19	Loc3-CSP2	Surface	RWE	moulded	undetermined	1	rim, exfoliated glaze	Historic	Ceramic	Refined	~	Rim	Domestic
3	08-Jul-19	Loc3-CSP3	Surface	RWE	transfer printed	blue	1	geometric: Blue Willow	Historic	Ceramic	Refined	~	Body	Domestic
4	08-Jul-19	Loc3-CSP4	Surface	scraper	end		1	break along 1 side, additional retouch at base L: 30.15mm W: 24.38mm T: 5.44mm	PreContact	Chert	Onondaga	~	-	Tool
5	08-Jul-19	Loc3-CSP5	Surface	biface	triangular		1	1 very worked edge L: 39.27mm* W: 21.90mm* T: 9.73mm	PreContact	Chert	Onondaga	~	Complete	Tool
6	08-Jul-19	Loc3-CSP6	Surface	RWE	transfer printed - painted	blue	1	blue floral with green over-glaze (leaf)	Historic	Ceramic	Refined	~	Body	Domestic
7	08-Jul-19	Loc3-CSP7	Surface	RWE	transfer printed	blue	2	1 rim, geometric: Blue Willow; 1 body, geometric (dark blue)	Historic	Ceramic	Refined	~	Rim/Body	Domestic

8	08-Jul-19	Loc3-CSP7	Surface	glass, bottle	aqua	moulded	1	"...C.S &Co LD"	Historic	Glass		~	Base	Domestic
9	08-Jul-19	Loc3-CSP8	Surface	biface	ovate	broken	1	lateral break L: 54.43mm* W: 44.68mm D: 11.50mm	PreContact	Chert	Onondaga	~	-	Tool
10	08-Jul-19	Loc3-CSP9	Surface	chipping detritus	tertiary		1	white and pale grey chert	PreContact	Chert	Onondaga	~	Complete	Detritus
11	08-Jul-19	Loc3-CSP10	Surface	chipping detritus	tertiary		1	white and pale grey chert	PreContact	Chert	Onondaga	~	Complete	Detritus
12	08-Jul-19	Loc3-CSP11	Surface	RWE	plain		1		Historic	Ceramic	Refined	~	Body	Domestic
13	08-Jul-19	Loc3-CSP11	Surface	pearlware	painted	cobalt blue	1	blue floral	Historic	Ceramic	Refined	~	Body	Domestic
14	08-Jul-19	Loc3-CSP12	Surface	RWE	edged	blue	1	blue, scalloped, incised, feathered	Historic	Ceramic	Refined	~	Rim	Domestic
15	08-Jul-19	Loc3-CSP13	Surface	yellowware	plain		1		Historic	Ceramic	Refined	~	Rim	Domestic
16	08-Jul-19	Loc3-CSP13	Surface	RWE	plain		1		Historic	Ceramic	Refined	~	Body	Domestic
17	08-Jul-19	Loc3-CSP13	Surface	coarse earthenware	red	glazed	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
18	08-Jul-19	Loc3-CSP13	Surface	glass, bottle	aqua		2		Historic	Glass		~	Body	Domestic
19	08-Jul-19	Loc3-CSP14	Surface	glass, bottle	olive		1		Historic	Glass		~	Body	Domestic
20	08-Jul-19	Loc3-CSP14	Surface	RWE	flow transfer printed	black	1	floral	Historic	Ceramic	Refined	~	Base	Domestic
21	08-Jul-19	Loc3-CSP15	Surface	pearlware	edged	blue	1	blue, scalloped, incised, feathered	Historic	Ceramic	Refined	~	Rim	Domestic
22	08-Jul-19	Loc3-CSP16	Surface	RWE	transfer printed	blue	1	floral	Historic	Ceramic	Refined	~	Body	Domestic
23	08-Jul-19	Loc3-CSP17	Surface	RWE	edged	blue	1	blue, scalloped, incised, feathered	Historic	Ceramic	Refined	~	Rim	Domestic
24	08-Jul-19	Loc3-CSP18	Surface	RWE	transfer printed	blue	1	floral	Historic	Ceramic	Refined	~	Body	Domestic
25	08-Jul-19	Loc3-CSP19	Surface	RWE	transfer printed	light blue	1	floral	Historic	Ceramic	Refined	~	Body	Domestic
26	08-Jul-19	Loc3-CSP20	Surface	coarse earthenware	red	glazed	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
27	08-Jul-19	Loc3-CSP21	Surface	stoneware	beige salt-glazed	Albany slip	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
28	08-Jul-19	Loc3-CSP21	Surface	VWE	moulded	sprigware	1	blue floral sprig moulded ware	Historic	Ceramic	Refined	~	Body	Domestic
29	08-Jul-19	Loc3-CSP21	Surface	RWE	sponged	blue	1		Historic	Ceramic	Refined	~	Body	Domestic
30	08-Jul-19	Loc3-CSP22	Surface	RWE	edged	blue	1	blue, scalloped - back piece only	Historic	Ceramic	Refined	~	Rim	Domestic
31	08-Jul-19	Loc3-CSP22	Surface	RWE	transfer printed	blue	1	floral, on moulded piece	Historic	Ceramic	Refined	~	Rim	Domestic
32	08-Jul-19	Loc3-CSP22	Surface	RWE	flow transfer printed	black	1	floral	Historic	Ceramic	Refined	~	Body	Domestic

33	08-Jul-19	Loc3-CSP23	Surface	ironstone	moulded	floral	1	rim, floral on a vine	Historic	Ceramic	Refined	~	Rim	Domestic
34	08-Jul-19	Loc3-CSP23	Surface	RWE	sponged	blue	1	painted blue band, sponged ware framing	Historic	Ceramic	Refined	~	Body	Domestic
35	08-Jul-19	Loc3-CSP23	Surface	stoneware	Albany slip	Albany slip	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
36	08-Jul-19	Loc3-CSP24	Surface	RWE	sponged	blue	1		Historic	Ceramic	Refined	~	Rim	Domestic
37	08-Jul-19	Loc3-CSP24	Surface	pearlware	plain		1		Historic	Ceramic	Refined	~	Base	Domestic
38	08-Jul-19	Loc3-CSP24	Surface	RWE	banded		1	black/white/grey-blue	Historic	Ceramic	Refined	~	Rim	Domestic
39	08-Jul-19	Loc3-CSP25	Surface	RWE	banded		1	blue/white	Historic	Ceramic	Refined	~	Body	Domestic
40	08-Jul-19	Loc3-CSP26	Surface	clay smoking pipe	bowl	plain	2		Historic	White Ball Clay		~	Rim	Personal
41	08-Jul-19	Loc3-CSP26	Surface	RWE	painted	polychrome	1	black floral stem	Historic	Ceramic	Refined	~	Body	Domestic
42	08-Jul-19	Loc3-CSP26	Surface	RWE	transfer printed	blue	1	geometric: Blue Willow	Historic	Ceramic	Refined	~	Body	Domestic
43	08-Jul-19	Loc3-CSP26	Surface	RWE	transfer printed	black	1	geometric	Historic	Ceramic	Refined	~	Rim	Domestic
44	08-Jul-19	Loc3-CSP27	Surface	ironstone	moulded	undetermined	1		Historic	Ceramic	Refined	~	Rim	Domestic
45	08-Jul-19	Loc3-CSP27	Surface	clay smoking pipe	bowl	plain	1		Historic	White Ball Clay		~	Rim	Personal
46	08-Jul-19	Loc3-CSP28	Surface	RWE	edged	blue	1	blue, straight, incised chicken foot, band	Historic	Ceramic	Refined	~	Rim	Domestic
47	08-Jul-19	Loc3-CSP28	Surface	glass, bottle	aqua	finish	1	Double Ring	Historic	Glass		~	Finish	Domestic
48	08-Jul-19	Loc3-CSP28	Surface	glass, bottle	green		1		Historic	Glass		~	Body	Domestic
49	08-Jul-19	Loc3-CSP29	Surface	RWE	transfer printed	light blue	1	floral/scene	Historic	Ceramic	Refined	~	Body	Domestic
50	08-Jul-19	Loc3-CSP29	Surface	coarse earthenware	red	glazed	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
51	08-Jul-19	Loc3-CSP29	Surface	stoneware	Grey Salt Glazed	Albany slip	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
52	08-Jul-19	Loc3-CSP29	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Detritus
53	08-Jul-19	Loc3-CSP30	Surface	stoneware	Albany slip	Albany slip	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
54	08-Jul-19	Loc3-CSP30	Surface	RWE	moulded	floral	1	daisy	Historic	Ceramic	Refined	~	Body	Domestic
55	08-Jul-19	Loc3-CSP30	Surface	RWE	transfer printed	blue	1	Blue Willow	Historic	Ceramic	Refined	~	Body	Domestic
56	08-Jul-19	Loc3-CSP30	Surface	RWE	painted	polychrome	3	green, pink, blue floral	Historic	Ceramic	Refined	~	Rim/Body	Domestic
57	08-Jul-19	Loc3-CSP30	Surface	RWE	edged	blue	2	1 scalloped, back only; 1 incised chicken foot, band	Historic	Ceramic	Refined	~	Rim	Domestic
58	08-Jul-19	Loc3-CSP30	Surface	glass, bottle	olive		1		Historic	Glass		~	Body	Domestic

59	08-Jul-19	Loc3-CSP31	Surface	glass, bottle	olive	push-up	1		Historic	Glass		~	Base	Domestic
60	08-Jul-19	Loc3-CSP32	Surface	yellowware	banded	dendritic	1	olive and black dendritic	Historic	Ceramic	Refined	~	Body	Domestic
61	08-Jul-19	Loc3-CSP32	Surface	clay smoking pipe	bowl	TD	1	moulded TD	Historic	White Ball Clay		~	Rim	Personal
62	08-Jul-19	Loc3-CSP33	Surface	RWE	sponged	blue	1	with blue band framing edge	Historic	Ceramic	Refined	~	Body	Domestic
63	08-Jul-19	Loc3-CSP34	Surface	VWE	plain		1		Historic	Ceramic	Refined	~	Body	Domestic
64	08-Jul-19	Loc3-CSP35	Surface	VWE	plain		1		Historic	Ceramic	Refined	~	Body	Domestic
65	08-Jul-19	Loc3-CSP35	Surface	RWE	flow transfer printed	black	1	scrolling heart	Historic	Ceramic	Refined	~	Body	Domestic
66	08-Jul-19	Loc3-CSP36	Surface	coarse earthenware	red	glazed	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
67	08-Jul-19	Loc3-CSP36	Surface	stoneware	Grey Salt Glazed	Albany slip	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
68	08-Jul-19	Loc3-CSP37	Surface	RWE	sponged	blue	1	with blue band framing edge	Historic	Ceramic	Refined	~	Body	Domestic
69	08-Jul-19	Loc3-CSP38	Surface	RWE	sponged	blue	1	with blue band framing edge	Historic	Ceramic	Refined	~	Body	Domestic
70	08-Jul-19	Loc3-CSP38	Surface	RWE	flow transfer printed	black	1	floral	Historic	Ceramic	Refined	~	Body	Domestic
71	08-Jul-19	Loc3-CSP39	Surface	stoneware	Yellow Salt-Glaze	Grey-Salt Glaze	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
72	08-Jul-19	Loc3-CSP40	Surface	RWE	transfer printed	brown	1	scene	Historic	Ceramic	Refined	~	Body	Domestic
73	08-Jul-19	Loc3-CSP41	Surface	RWE	transfer printed	blue	2	1 floral, 1 scene: ladies in bonnets, dresses	Historic	Ceramic	Refined	~	Body	Domestic
74	08-Jul-19	Loc3-CSP42	Surface	ironstone	plain		1		Historic	Ceramic	Refined	~	Body	Domestic
75	08-Jul-19	Loc3-CSP42	Surface	RWE	banded		1	blue/white	Historic	Ceramic	Refined	~	Body	Domestic
76	08-Jul-19	Loc3-CSP43	Surface	RWE	transfer printed	blue	1	Blue Willow	Historic	Ceramic	Refined	~	Body	Domestic
77	08-Jul-19	Loc3-CSP44	Surface	shoe	heel		1	heel fragment, steel rectangular pegs - single arch of pegs	Historic	Leather	Metal	~	-	Personal
78	08-Jul-19	Loc3-CSP44	Surface	RWE	stamped	blue	1		Historic	Ceramic	Refined	~	Body	Domestic
79	08-Jul-19	Loc3-CSP45	Surface	RWE	transfer printed	blue	1	geometric	Historic	Ceramic	Refined	~	Rim	Domestic
80	08-Jul-19	Loc3-CSP45	Surface	stoneware	Bristol Salt-Glazed	Clear Lead Glaze	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
81	08-Jul-19	Loc3-CSP45	Surface	yellowware	banded		1	brown/yellow/white - 2 thin brown - 1 thick white - 2 thin brown	Historic	Ceramic	Refined	~	Body	Domestic

82	08-Jul-19	Loc3-CSP46	Surface	RWE	transfer printed	blue	1	geometric	Historic	Ceramic	Refined	~	Body	Domestic
83	08-Jul-19	Loc3-CSP46	Surface	coarse earthenware	red	glazed	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
84	08-Jul-19	Loc3-CSP46	Surface	glass, bottle	olive		1		Historic	Glass		~	Body	Domestic
85	08-Jul-19	Loc3-CSP47	Surface	stoneware	Grey Salt Glazed	Albany slip	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
86	08-Jul-19	Loc3-CSP47	Surface	RWE	painted	blue	1	blue floral	Historic	Ceramic	Refined	~	Body	Domestic
87	08-Jul-19	Loc3-CSP48	Surface	pearlware	painted	cobalt blue	1	floral, MM: "ENPORT" impressed	Historic	Ceramic	Refined	~	Base	Domestic
88	08-Jul-19	Loc3-CSP48	Surface	ceramic, undetermined			1		Historic	Ceramic	Refined	heat-altered	Body	Domestic
89	08-Jul-19	Loc3-CSP48	Surface	glass, bottle	aqua	finish	2	(fit) Double Oil	Historic	Glass		~	Finish	Domestic
90	08-Jul-19	Loc3-CSP49	Surface	RWE	transfer printed	light blue	1	floral	Historic	Ceramic	Refined	~	Body	Domestic
91	08-Jul-19	Loc3-CSP50	Surface	ironstone	moulded	shells	1	assorted shells and coral	Historic	Ceramic	Refined	~	Rim	Domestic
92	08-Jul-19	Loc3-CSP51	Surface	slate			1	(recent break)	Historic	Stone	Slate	~	-	Miscellaneous
93	08-Jul-19	Loc3-CSP52	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Detritus
94	08-Jul-19	Loc3-CSP53	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Detritus
95	08-Jul-19	Loc3-CSP54	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Detritus
96	08-Jul-19	Loc3-CSP55	Surface	RWE	moulded	undetermined	1		Historic	Ceramic	Refined	~	Rim	Domestic
97	08-Jul-19	Loc3-CSP56	Surface	RWE	painted	polychrome	1	red floral	Historic	Ceramic	Refined	~	Body	Domestic
98	08-Jul-19	Loc3-CSP57	Surface	button	prosser	white	1	med (15.66mm), 4-holes	Historic	Ceramic	Prosser	~	Complete	Personal
99	08-Jul-19	Loc3-CSP58	Surface	VWE	plain		1		Historic	Ceramic	Refined	~	Body	Domestic
100	08-Jul-19	Loc3-CSP59	Surface	RWE	transfer printed	brown	1	geometric	Historic	Ceramic	Refined	~	Rim	Domestic
101	08-Jul-19	Loc3-CSP60	Surface	RWE	transfer printed	blue	1	geometric border, scene	Historic	Ceramic	Refined	~	Body	Domestic
102	08-Jul-19	Loc3-CSP61	Surface	clay smoking pipe	bowl	plain	1		Historic	White Ball Clay		~	Rim	Personal
103	08-Jul-19	Loc3-CSP62	Surface	RWE	plain		1		Historic	Ceramic	Refined	~	Rim	Domestic
104	08-Jul-19	Loc3-CSP62	Surface	stoneware	Grey Salt Glazed	Albany slip	1	blue lettering "...C. W"	Historic	Ceramic	Coarse	~	Body	Utilitarian
105	08-Jul-19	Loc3-CSP63	Surface	RWE	sponged	blue	1		Historic	Ceramic	Refined	~	Body	Domestic
106	08-Jul-19	Loc3-CSP64	Surface	ironstone	moulded		1	leaf	Historic	Ceramic	Refined	~	Rim	Domestic
107	08-Jul-19	Loc3-CSP64	Surface	ceramic, undetermined			1		Historic	Ceramic	Refined	heat-altered	Body	Domestic

108	08-Jul-19	Loc3-CSP65	Surface	RWE	sponged	blue	1	open-sponged	Historic	Ceramic	Refined	~	Rim	Domestic
109	08-Jul-19	Loc3-CSP65	Surface	RWE	edged	blue	1	blue, scalloped, incised, feathered	Historic	Ceramic	Refined	~	Rim	Domestic
110	08-Jul-19	Loc3-CSP66	Surface	clay smoking pipe	bowl	moulded	1	moulded vertical lines	Historic	White Ball Clay		~	Body	Personal
111	08-Jul-19	Loc3-CSP67	Surface	stoneware	beige salt-glazed	Albany slip	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
112	08-Jul-19	Loc3-CSP68	Surface	RWE	painted	polychrome	1	red floral	Historic	Ceramic	Refined	~	Body	Domestic

Location 4

Cat #	Date	Context	Level	Artifact	Description	Description	Total Freq.	Comments	Broad Type	Material/Class	Material/Class	Alteration	Completeness	Object/Function
1	09-Jul-19	Loc4-CSP1	Surface	biface	triangular	broken	1	broken projectile point, broken laterally at tip and base L: 41.60mm* W: 27.955mm T: 6.38mm	PreContact	Chert	Onondaga	~	-	Tool
2	09-Jul-19	Loc4-CSP2	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
3	09-Jul-19	Loc4-CSP3	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
4	09-Jul-19	Loc4-CSP4	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
5	09-Jul-19	Loc4-CSP4	Surface	chipping detritus	secondary		1		PreContact	Chert	Onondaga	~	-	Debitage
6	09-Jul-19	Loc4-CSP5	Surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	~	-	Debitage
7	09-Jul-19	Loc4-CSP6	Surface	chipping detritus	tertiary		1		PreContact	Chert	Onondaga	~	-	Debitage
8	09-Jul-19	Loc4-CSP7	Surface	retouched flake	2 margins		1	primary type flake, retouch on both side on dorsal surface	PreContact	Chert	Onondaga	heat-altered	-	Tool

Location 5

Cat #	Date	Context	Level	Artifact	Description	Description	Total Freq.	Comments	Broad Type	Material/Class	Material/Class	Alteration	Completeness	Object/Function
1	09-Jul-19	Loc5-CSP1	Surface	RWE	painted	polychrome	1	red and green floral	Historic	Ceramic	Refined	~	Rim	Domestic
2	09-Jul-19	Loc5-CSP2	Surface	RWE	painted	polychrome	1	red rim band	Historic	Ceramic	Refined	~	Body	Domestic
3	09-Jul-19	Loc5-CSP3	Surface	RWE	transfer printed	blue	1	scene	Historic	Ceramic	Refined		Rim	Domestic
4	09-Jul-19	Loc5-CSP4	Surface	RWE	painted	polychrome	1	red likely floral	Historic	Ceramic	Refined	~	Body	Domestic
5	09-Jul-19	Loc5-CSP5	Surface	RWE	edged	blue	1	blue, straight, impressed chicken foot, band	Historic	Ceramic	Refined	~	Rim	Domestic
6	09-Jul-19	Loc5-CSP5	Surface	ceramic, undetermined			1		Historic	Ceramic	Refined	~	Body	Domestic
7	09-Jul-19	Loc5-CSP6	Surface	RWE	transfer printed	blue	1	scene	Historic	Ceramic	Refined		Body	Domestic

8	09-Jul-19	Loc5-CSP6	Surface	RWE	painting	polychrome	1	blue floral	Historic	Ceramic	Refined	~	Body	Domestic
9	09-Jul-19	Loc5-CSP7	Surface	RWE	painting	polychrome	1	red and green floral	Historic	Ceramic	Refined	~	Rim	Domestic
10	09-Jul-19	Loc5-CSP8	Surface	RWE	transfer printed	blue	2	geometric	Historic	Ceramic	Refined	~	Rim	Domestic
11	09-Jul-19	Loc5-CSP9	Surface	RWE	edged	red	1	red, straight, incised lines, feathered	Historic	Ceramic	Refined	~	Rim	Domestic
12	09-Jul-19	Loc5-CSP9	Surface	RWE	banded		1	black/white/blue	Historic	Ceramic	Refined	~	Body	Domestic
13	09-Jul-19	Loc5-CSP10	Surface	RWE	transfer printed	light blue	1	geometric	Historic	Ceramic	Refined	~	Body	Domestic
14	09-Jul-19	Loc5-CSP11	Surface	RWE	edged	blue	1	blue, straight, feathered	Historic	Ceramic	Refined	~	Rim	Domestic
15	09-Jul-19	Loc5-CSP11	Surface	RWE	transfer printed	blue	2	1 geometric rim, 1 floral	Historic	Ceramic	Refined	~	Rim/Body	Domestic
16	09-Jul-19	Loc5-CSP12	Surface	RWE	banded		1	black/white	Historic	Ceramic	Refined	~	Body	Domestic
17	09-Jul-19	Loc5-CSP13	Surface	RWE	banded		1	black/white/grey-green	Historic	Ceramic	Refined	~	Rim	Domestic
18	09-Jul-19	Loc5-CSP13	Surface	RWE	sponged	blue	1		Historic	Ceramic	Refined	~	Body	Domestic
19	09-Jul-19	Loc5-CSP13	Surface	RWE	transfer printed	blue	2	geometric	Historic	Ceramic	Refined	~	Body	Domestic
20	09-Jul-19	Loc5-CSP14	Surface	RWE	sponged	blue	1		Historic	Ceramic	Refined	~	Body	Domestic
21	09-Jul-19	Loc5-CSP14	Surface	RWE	transfer printed	blue	1	geometric: Blue Willow	Historic	Ceramic	Refined	~	Body	Domestic
22	09-Jul-19	Loc5-CSP15	Surface	RWE	transfer printed	blue	1	1 Blue Willow, 1 floral	Historic	Ceramic	Refined		Body	Domestic
23	09-Jul-19	Loc5-CSP16	Surface	RWE	banded		1	1 black/white/blue; 1 blue/white	Historic	Ceramic	Refined		Body	Domestic
24	09-Jul-19	Loc5-CSP17	Surface	RWE	banded		1	blue/white	Historic	Ceramic	Refined		Body	Domestic
25	09-Jul-19	Loc5-CSP17	Surface	RWE	painting	polychrome	1	red rim band, blue stamped flora stars, green leaves	Historic	Ceramic	Refined		Rim	Domestic
26	09-Jul-19	Loc5-CSP18	Surface	RWE	stamped		1	red stamped floral, green painted band	Historic	Ceramic	Refined		Body	Domestic
27	09-Jul-19	Loc5-CSP19	Surface	RWE	transfer printed	blue	1	geometric	Historic	Ceramic	Refined		Body	Domestic
28	09-Jul-19	Loc5-CSP19	Surface	coarse earthenware	red	glazed	1		Historic	Ceramic	Coarse	~	Body	Utilitarian
29	09-Jul-19	Loc5-CSP20	Surface	RWE	sponged	blue	1		Historic	Ceramic	Refined		Body	Domestic
30	09-Jul-19	Loc5-CSP20	Surface	RWE	transfer printed	blue	1	floral	Historic	Ceramic	Refined		Body	Domestic
31	09-Jul-19	Loc5-CSP20	Surface	RWE	plain		1		Historic	Ceramic	Refined		Body	Domestic
32	09-Jul-19	Loc5-CSP21	Surface	RWE	transfer printed	blue	1	floral	Historic	Ceramic	Refined		Body	Domestic

33	09-Jul-19	Loc5-CSP21	Surface	RWE	painted	polychrome	1	black rim band int/ext, green floral	Historic	Ceramic	Refined		Body	Domestic
34	09-Jul-19	Loc5-CSP22	Surface	RWE	sponged	blue	1		Historic	Ceramic	Refined		Body	Domestic
35	09-Jul-19	Loc5-CSP22	Surface	RWE	painted	polychrome	1	red and green floral	Historic	Ceramic	Refined	~	Rim	Domestic
36	09-Jul-19	Loc5-CSP23	Surface	yellowware	banded	dendritic	1	yellow/white/blue dendritic	Historic	Ceramic	Refined		Rim	Domestic
37	09-Jul-19	Loc5-CSP23	Surface	RWE	transfer printed	blue	1	geometric	Historic	Ceramic	Refined		Base	Domestic
38	09-Jul-19	Loc5-CSP23	Surface	RWE	transfer printed	black	1	scene, "PA.." possible child's cup	Historic	Ceramic	Refined		Body	Domestic
39	09-Jul-19	Loc5-CSP24	Surface	RWE	transfer printed	blue	1	geometric: Blue Willow	Historic	Ceramic	Refined		Rim	Domestic
40	09-Jul-19	Loc5-CSP25	Surface	RWE	painted	polychrome	1	red rim band	Historic	Ceramic	Refined	~	Rim	Domestic
41	09-Jul-19	Loc5-CSP25	Surface	RWE	transfer printed	blue	1	floral	Historic	Ceramic	Refined		Body	Domestic
42	09-Jul-19	Loc5-CSP25	Surface	RWE	plain		1		Historic	Ceramic	Refined		Body	Domestic
43	09-Jul-19	Loc5-CSP26	Surface	RWE	stamped	blue	1	floral	Historic	Ceramic	Refined		Body	Domestic
44	09-Jul-19	Loc5-CSP26	Surface	RWE	transfer printed	blue	2	1 geometric, 1 floral	Historic	Ceramic	Refined		Body	Domestic
45	09-Jul-19	Loc5-CSP27	Surface	RWE	transfer printed	blue	1	floral	Historic	Ceramic	Refined		Body	Domestic
46	09-Jul-19	Loc5-CSP28	Surface	stoneware			1	grey unglazed, bottle base	Historic	Ceramic	Coarse		Base	Utilitarian
47	09-Jul-19	Loc5-CSP29	Surface	RWE	painted	polychrome	1	red rim band	Historic	Ceramic	Refined	~	Rim	Domestic
48	09-Jul-19	Loc5-CSP30	Surface	RWE	plain		1		Historic	Ceramic	Refined		Body	Domestic
49	09-Jul-19	Loc5-CSP30	Surface	yellowware	banded	dendritic	1	yellow/white/blue dendritic	Historic	Ceramic	Refined		Body	Domestic
50	09-Jul-19	Loc5-CSP30	Surface	RWE	stamped	blue	1	2 painted bands above stamped patterns	Historic	Ceramic	Refined		Rim	Domestic
51	09-Jul-19	Loc5-CSP30	Surface	pearlware	banded		1	marbled grey-green/white/brown	Historic	Ceramic	Refined		Body	Domestic
52	09-Jul-19	Loc5-CSP31	Surface	RWE	painted	polychrome	1	black stem, blue and green floral	Historic	Ceramic	Refined	~	Body	Domestic
53	09-Jul-19	Loc5-CSP31	Surface	ceramic, undetermined			1		Historic	Ceramic	Refined		Body	Domestic
54	09-Jul-19	Loc5-CSP31	Surface	RWE	transfer printed	blue	1	geometric: Blue Willow	Historic	Ceramic	Refined		Rim	Domestic
55	09-Jul-19	Loc5-CSP31	Surface	button	prosser	pink	1	sm 4-holes	Historic	Ceramic			Complete	Personal
56	09-Jul-19	Loc5-CSP32	Surface	RWE	sponged	blue	1		Historic	Ceramic	Refined		Body	Domestic

57	09-Jul-19	Loc5-CSP32	Surface	RWE	transfer printed	blue	1	floral	Historic	Ceramic	Refined		Body	Domestic
58	09-Jul-19	Loc5-CSP33	Surface	RWE	banded	dendritic	1	white/grey-green dendritic	Historic	Ceramic	Refined		Body	Domestic
59	09-Jul-19	Loc5-CSP34	Surface	RWE	banded		1	blue/white	Historic	Ceramic	Refined		Body	Domestic
60	09-Jul-19	Loc5-CSP34	Surface	RWE	stamped	blue	1	painted bands above stamped patterns	Historic	Ceramic	Refined		Rim	Domestic
61	09-Jul-19	Loc5-CSP35	Surface	RWE	sponged	blue	1		Historic	Ceramic	Refined		Body	Domestic
62	09-Jul-19	Loc5-CSP36	Surface	RWE	transfer printed	blue	1	scene	Historic	Ceramic	Refined		Base	Domestic
63	09-Jul-19	Loc5-CSP37	Surface	RWE	transfer printed	blue	1	geometric	Historic	Ceramic	Refined		Body	Domestic
64	09-Jul-19	Loc5-CSP37	Surface	RWE	edged	blue	1	blue, straight, feathered	Historic	Ceramic	Refined		Rim	Domestic
65	09-Jul-19	Loc5-CSP38	Surface	RWE	painted	polychrome	1	red rim band	Historic	Ceramic	Refined	~	Rim	Domestic
66	09-Jul-19	Loc5-CSP39	Surface	RWE	stamped	blue	1	painted bands above stamped patterns	Historic	Ceramic	Refined		Body	Domestic
67	09-Jul-19	Loc5-CSP40	Surface	RWE	painted	polychrome	1	red rim band	Historic	Ceramic	Refined	~	Rim	Domestic
68	09-Jul-19	Loc5-CSP41	Surface	biface	ovate	scraper	1	bifacially worked, steep scraper margins 3/4 sides, possible thumb scraper, L: 28.14mm W: 11.43mm T: 4.85mm	PreContact	Chert	Onondaga		Complete	Tool
69	09-Jul-19	Loc5-CSP42	Surface	RWE	stamped	blue	1	painted bands above stamped patterns	Historic	Ceramic	Refined		Rim	Domestic
70	09-Jul-19	Loc5-CSP42	Surface	RWE	sponged	blue	1		Historic	Ceramic	Refined		Body	Domestic
71	09-Jul-19	Loc5-CSP42	Surface	RWE	painted	polychrome	1	red rim band, red, blue, green floral	Historic	Ceramic	Refined	~	Rim	Domestic
72	09-Jul-19	Loc5-CSP43	Surface	RWE	transfer printed	blue	1	floral tree	Historic	Ceramic	Refined		Body	Domestic
73	09-Jul-19	Loc5-CSP44	Surface	RWE	edged	blue	1	blue, scalloped, incised lines, feathered	Historic	Ceramic	Refined		Rim	Domestic
74	09-Jul-19	Loc5-CSP45	Surface	glass, bottle	aqua		1	small round base, pontil, vial-sized	Historic	Glass			-	Domestic
75	09-Jul-19	Loc5-CSP45	Surface	glass, chimney lamp	green		1	ribbed	Historic	Glass	Lighting		-	Domestic
76	09-Jul-19	Loc5-CSP46	Surface	RWE	transfer printed	blue	1	floral	Historic	Ceramic	Refined		Body	Domestic
77	09-Jul-19	Loc5-CSP47	Surface	RWE	plain		1		Historic	Ceramic	Refined		Body	Domestic

Location 6

Cat #	Date	Context	Level	Artifact	Description	Description	Total Freq.	Comments	Broad Type	Material/Class	Material/Class	Alteration	Completeness	Object/Function
1	10-Jul-19	Loc6-CSP1	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	-	-	Detritus
2	10-Jul-19	Loc6-CSP2	surface	chipping detritus	shatter		1		PreContact	Chert	Kettle Point	-	-	Detritus

3	10-Jul-19	Loc6-CSP3	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	heat-altered	-	Detritus
4	10-Jul-19	Loc6-CSP4	surface	retouched flake	2 margins		1	2 margins of retouch	PreContact	Chert	Onondaga	-	-	Tool
5	10-Jul-19	Loc6-CSP5	surface	scraper	end		1	end scraper, also retouch on ventral surface L: 40.25mm W: 25.33mm T: 11.80mm	PreContact	Chert	Onondaga	-	-	Tool
6	10-Jul-19	Loc6-CSP6	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga			Detritus
7	10-Jul-19	Loc6-CSP7	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	heat-altered	-	Detritus

Findspots

Cat #	Date	Context	Level	Artifact	Description	Description	Total Freq.	Comments	Broad Type	Material/Class	Material/Class	Alteration	Completeness	Object/Function
1	09-Jul-19	Findspot 1	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	heat-altered	-	Detritus
2	09-Jul-19	Findspot 1	surface	chipping detritus	secondary		1		PreContact	Chert	Kettle Point	-	-	Detritus
1	09-Jul-19	Findspot 2	surface	chipping detritus	broken		1		PreContact	Chert	Undetermined/Chalcedony	-	-	Detritus
2	09-Jul-19	Findspot 2	surface	retouched flake	1 margin		1	1 margin of retouch	PreContact	Chert	Onondaga	-	-	Tool
1	09-Jul-19	Findspot 3	surface	biface	ovate		1	large secondary flake with flaking around edge on both surfaces L: 46.24mm W: 31.55mm T: 6.18mm	PreContact	Chert	Onondaga	-	-	Tool
1	09-Jul-19	Findspot 4	surface	projectile point	Crawford Knoll		1	L: 31.10mm W: 22.37mm T: 7.83mm	PreContact	Chert	Onondaga	-	-	Tool
2	09-Jul-19	Findspot 4	surface	retouched flake	1 margin		1	1 margin of retouch	PreContact	Chert	Undetermined	-	-	Tool
1	09-Jul-19	Findspot 5	surface	chipping detritus	secondary		1	cortex of pink-brown speckled mica/granite inclusions	PreContact	Chert	Undetermined	-	-	Detritus
1	10-Jul-19	Findspot 6	surface	retouched flake	3 margins		1	3 margins of retouch	PreContact	Chert	Onondaga	-	-	Tool
1	10-Jul-19	Findspot 7	surface	chipping detritus	tertiary		1	chert: light brown, slight pink tone, light white speckles	PreContact	Chert	Undetermined			Debitage
1	10-Jul-19	Findspot 8	surface	biface	broken		1	possible broken side-notched PPO L: 42.55mm* W: 24.59mm* T: 6.87mm	PreContact	Chert	Onondaga	-	-	Tool

1	10-Jul-19	Findspot 9	surface	scraper	side/end		1	L: 29.74mm W: 16.23mm T: 6.39mm	PreContact	Chert	Onondaga	-	-	Tool
1	10-Jul-19	Findspot 10	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	-	-	Debitage
1	10-Jul-19	Findspot 11	surface	chipping detritus	primary		1		PreContact	Chert	Selkirk	-	-	Debitage
1	10-Jul-19	Findspot 12	surface	chipping detritus	broken		2		PreContact	Chert	Onondaga	-	-	Debitage
1	10-Jul-19	Findspot 13	surface	biface	broken		1	L: 55.84mm W: 22.69mm* T: 12.09mm	PreContact	Chert	Onondaga	-	-	Tool
1	10-Jul-19	Findspot 14-CSP1	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	-	-	Debitage
2	10-Jul-19	Findspot 14-CSP2	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	heat altered	-	Debitage
3	10-Jul-19	Findspot 14-CSP3	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	heat altered	-	Debitage
4	10-Jul-19	Findspot 14-CSP4	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	heat altered	-	Debitage
5	10-Jul-19	Findspot 14-CSP5	surface	chipping detritus	broken		1		PreContact	Chert	Undetermined	-	-	Debitage
1	10-Jul-19	Findspot 15	surface	chipping detritus	broken		2		PreContact	Chert	Onondaga	-	-	Debitage
1	10-Jul-19	Findspot 16	surface	chipping detritus	tertiary		1	Chert: rosy/bright white with small inclusions (translucent)	PreContact	Chert	Undetermined	-	-	Debitage
1	10-Jul-19	Findspot 17	surface	chipping detritus	broken		1		PreContact	Chert	Onondaga	-	-	Debitage
2	10-Jul-19	Findspot 17	surface	biface	triangular	broken	1	tip, L: 25.75mm* W: 16.38mm T: 6.62mm	PreContact	Chert	Onondaga	-	-	Tool
1	10-Jul-19	Findspot 18	surface	chipping detritus	primary		1		PreContact	Chert	Undetermined	-	-	Debitage
1	10-Jul-19	Findspot 19-CSP1	surface	chipping detritus	primary		1		PreContact	Chert	Dundee (Selkirk)	-	-	Debitage
2	10-Jul-19	Findspot 19-CSP2	surface	chipping detritus	broken		1		PreContact	Chert	Haldimand	-	-	Debitage



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