

**Partial Stage 4 Mitigation of Location 15 (AfHg-17) at 83
Christie Drive, in Part of Lot 19, Concession A South of
Thames River, Geographic Township of North Dorchester,
Middlesex County, Ontario, Ontario**

Submitted to

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and

The Ontario Ministry of Citizenship and Multiculturalism

Prepared by

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Report Type: Original

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February 2023

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STAGE 4 ARCHAEOLOGICAL MITIGATION: LOCATION 15 (AFHG-17)

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Executive Summary

Lincoln Environmental Consulting Corp. (LEC) was retained by Doug Tarry Homes Ltd. to conduct a Stage 3 site specific assessment for an Indigenous archaeological site known as Location 15 (AfHg-17). The assessment was undertaken to meet the requirements of the *Planning Act* (Government of Ontario 2014) in advance of site plan approval. The study area is located at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, in the Geographic Township of North Dorchester, Middlesex County, Ontario.

This assessment was triggered by the Provincial Policy Statement that is informed by the Planning Act (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger Ontario Heritage Act (1990b). According to Section 2.6.2 of the PPS, “development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.”

The Stage 2 assessment was conducted from November 26th, 2019, to January 15th, 2020, under PIF number P348-0074-2019. The Stage 2 consisted of a test pit survey at 5-meter intervals and pedestrian survey at 5m intervals. A total of 17 archaeological locations were identified during the Stage 2 survey, including 5 previously registered archaeological sites.

Locations 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, and 14, do not meet provincial criteria for requiring Stage 3 assessments, as listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries’ *Standards and Guidelines for Consultant Archaeologists* (2011). These locations were deemed to have little cultural heritage value or interest and were considered sufficiently assessed during Stage 2. As such, no additional fieldwork or assessments were recommended for these Locations.

Location 15 (AfHg-17) was identified as a Late Woodland Campsite with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries’ *Standards and Guidelines for Consultant Archaeologists* (2011). Location 15 (AfHg-17) was recommended for a Stage 3 site specific assessment followed by Stage 4 mitigation of development impacts.

The Stage 3 site specific assessment of Location 15 (AfHg-17) conducted by LEC consisted of the excavation of 49 one-meter by one-meter test units across the extent of the site. A total of 73 Indigenous artifacts from the CSP and test unit excavation, distributed over roughly the same area as the Stage 2 site. The assemblage is similar to the Stage 2 assemblage by breakdown of artifact class and type, but with no diagnostics. The assemblage consists mainly of chipping detritus (62), with 11 aboriginal ceramic sherds also recovered. No cultural features were identified during the Stage 3 site specific assessment.

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Location 15 (AfHhg-17) has been interpreted as a Late Woodland campsite and due to the presence of five stage 3 units where aboriginal ceramic sherds were recovered, it requires further work in the form of a Stage 4 archaeological mitigation of development impact.

The MTCS prefers, for sites recommended for Stage 4 mitigation of impacts, that the site be avoided and protected rather than excavated, as per Section 7.9.4 Standard 2 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Options to reduce or eliminate impacts to archaeological sites include redesigning the Project, excluding the archaeological site area from the Project, or incorporating the area of the archaeological site into the Project but without alteration, as outlined in Section 3.5 of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). If these options are not feasible, Stage 4 archaeological mitigation by excavation is an alternative.

In consultation with the proponent, the Chippewa of the Thames First Nation (COTTfN), and the Oneida of the Thames First Nation (OOTfN), the Stage 4 mitigation of Location 15 (AfHhg-17) by avoidance and protection is not a viable option. Thus, Location 15 (AfHhg-17) requires Stage 4 mitigation of development impacts by excavation prior to any construction activities or impacts to the archaeological site. The Stage 4 mitigative excavation strategy of Location 15 (AfHhg-17) will be determined in accordance with Section 4.2.2 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), and in consultation with First Nation communities.

The Stage 4 archaeological mitigation of development impacts of Location 15 (AfHhg-17) consisted of the hand block excavation of 74 one metre by one metre units and resulted in the recovery of 340 Pre-Contact lithic artifacts, including 233 pieces of chipping detritus, 94 fragmentary sherds, 8 pieces of charcoal, 4 projectile points, two retouched flakes, one utilized flake, and one biface. Following hand excavation, mechanical topsoil removal was undertaken, and an additional 113 artifacts were recovered from the excavation of the three cultural features which were identified.

The Stage 4 mitigation of development impacts of Location 15 (AfHhg-17) resulted in the complete excavation and removal of the archaeological site from the ground. The archaeological value of the site now lies solely with the artifact assemblage, high precision mapping and field documentation. As such, in accordance with the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011b), **Location 15 (AfHhg-17) no longer retains cultural heritage value or interest and does not require further archaeological investigation. No further assessment of Location 15 (AfHhg-17) is recommended.**

The Ministry of Heritage, Sport, Tourism, and Culture Industries is asked to review the information presented herein, issue comment and offer written confirmation of their acceptance of this report into the provincial registry.

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Project Personnel

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Chippewa of the Thames First Nation:	Jordan Deleary, On site-field liaison; Carolyn Albert, Admin Assistant; Fallon Burch, Consultation Coordinator
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Acknowledgements

Proponent Contact:	Martha Saucier, Doug Tarry Homes Ltd.
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1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Lincoln Environmental Consulting Corp. (LEC) was retained by Doug Tarry Homes Ltd. to conduct a Stage 3 site specific assessment for an Indigenous archaeological site known as Location 15 (AfHg-17). The assessment was undertaken to meet the requirements of the *Planning Act* (Government of Ontario 2014) in advance of site plan approval. The study area is located at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, in the Geographic Township of North Dorchester, Middlesex County, Ontario.

This assessment was triggered by the Provincial Policy Statement that is informed by the Planning Act (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger Ontario Heritage Act (1990b). According to Section 2.6.2 of the PPS, “development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.”

Permission to enter the study area and document archaeological resources was provided by Martha Saucier of Doug Tarry Homes Ltd.

1.1.1 Objectives

The objective of the Stage 4 archaeological mitigation of development impacts for Location 15 (AfHg-17) is to fully remove the archaeological site from the ground and in doing so, convert the archaeological site into data (excavation records, artifacts), resulting in the loss of contextual information.

Although it may not be necessary to excavate the whole area of the archaeological site being impacted, excavation strategies must focus on recovering as much data as possible rather than sampling on the site. Full documentation of archaeological sites in stage 4 is necessary to ensure the conservation, protection, and preservation of the heritage of Ontario. The objectives of a Stage 4 mitigation of impacts are:

- To document the archaeological context, cultural features, and artifacts for all parts of the archaeological site
- To document the removal of the archaeological site
- To preserve the information about the archaeological site for future study

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A Stage 4 mitigation of development impacts typically consists of the hand excavation of part or all of a site, followed by the excavation of any cultural features.

The Stage 4 investigation has been conducted to meet the requirements of the Ministry of Tourism, Culture and Sport's (MTCS) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) as well as in consultation with the Chippewa of the Thames First Nation and the Oneida Nation of the Thames.

1.2 HISTORICAL CONTEXT

The entire Stage 2 study area comprises 42.56 hectares, consisting mainly of agricultural field, with small meadow and Woodlots in the east, and a residential structure with associated barn complex. Location 15 (AfHg-17) exists in the North-Central portion of the study area, East of Locations 10 (AfHg-375) and West of Location 16 (AfHg-18). Location 15 (AfHg-17) is located at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, in the Geographic Township of North Dorchester, Middlesex County, Ontario.

1.2.1 Pre and early Post-Contact Aboriginal Resources

Our knowledge of past First Peoples settlement and land use in Middlesex County is incomplete. Nonetheless, using province-wide (MCCR 1997) and region-specific archaeological data, a generalized cultural chronology for native settlement in the area can be proposed. The following paragraphs provide a basic textual summary of the known general cultural trends and a tabular summary appears in Table 1.

The Paleoindian Period

The first human populations to inhabit Ontario came to the region between 12,000 and 10,000 years ago, coincident with the end of the last period of glaciation. Climate and environmental conditions were significantly different than they are today; local environs would not have been welcoming to anything but short-term settlement. Termed Paleoindians by archaeologists, Ontario first peoples would have crossed the landscape in small groups (i.e., bands or family units) searching for food, particularly migratory game species. In the area, caribou may have provided the staple of the Paleoindian diet, supplemented by wild plants, small game, birds and fish. Given the low density of populations on the landscape at this time and their mobile nature, Paleoindian sites are small and ephemeral. They are usually identified by the presence of fluted projectile points and other finely made stone tools.

Table 1: Cultural Chronology for Native Settlement within Middlesex County

Period			Time Range (circa)	Diagnostic Features	Complexes
Paleoindian	Early		9000 – 8400 B.C.	fluted projectile points	Gainey, Barnes, Crowfield

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	Late		8400 – 8000 B.C.	non-fluted and lanceolate points	Holcombe, Hi-Lo, Lanceolate
Archaic	Early		8000 – 6000 B.C.	serrated, notched, bifurcate base points	Nettling, Bifurcate Base Horizon
	Middle		6000 – 2500 B.C.	stemmed, side & corner notched points	Brewerton, Otter Creek, Stanly/Neville
	Late		2000 – 1800 B.C.	narrow points	Lamoka
			1800 – 1500 B.C.	broad points	Genesee, Adder Orchard, Perkiomen
			1500 – 1100 B.C.	small points	Crawford Knoll
	Terminal		1100 – 850 B.C.	first true cemeteries	Hind
Woodland	Early		800 – 400 B.C.	expanding stemmed points, Vinette pottery	Meadowood
	Middle		400 B.C. – A.D. 600	thick coiled pottery, notched rims; cord marked	Couture
	Late	Western Basin	A.D. 600 – 900	Wayne ware, vertical cord marked ceramics	Riviere au Vase-Algonquin
			A.D. 900 – 1200	first corn; ceramics with multiple band impressions	Young- Algonquin
			A.D. 1200 – 1400	longhouses; bag shaped pots, ribbed paddle	Springwells-Algonquin
			A.D. 1400-1600	villages with earthworks; Parker Festoon pots	Wolf- Algonquin
Contact		Aboriginal	A.D. 1600 – 1700	early historic native settlements	Neutral Huron, Odawa, Wenro
		Euro-Canadian	A.D. 1700-1760	fur trade, missionization, early military establishments	French
			A.D. 1760-1900	Military establishments, pioneer settlement	British colonials, UELs

Archaic

The archaeological record of early native life in Southern Ontario indicates a change in lifeways beginning circa 10,000 years ago at the start of what archaeologists call the Archaic Period. The Archaic populations are better known than their Paleoindian predecessors, with numerous sites found throughout the area. The characteristic projectile points of early Archaic populations appear similar in some respects to early varieties and are likely a continuation of early trends. Archaic populations continued to rely heavily on game, particularly caribou, but diversified their diet and exploitation patterns with changing environmental conditions. A seasonal pattern of warm season riverine or lakeshore settlements and interior cold weather occupations has been documented in the archaeological record. Since the large cold weather mammal species that formed the basis of the Paleoindian subsistence pattern became extinct or moved northward with the onset of a warmer climate, Archaic populations had a more varied diet, exploiting a range of plant, bird, mammal and fish species. Reliance on specific food resources like fish, deer and nuts becomes more pronounced through time and the presence of more hospitable environs and resource abundance led to the expansion of band and family sizes. In the archaeological record, this is evident in the presence of larger sites and aggregation camps, where several families or bands would come together in times of resource abundance. The change to more preferable environmental circumstances led to a rise in population density. As a result, Archaic sites are more abundant than those from the earlier period. Artifacts typical of these occupations include a variety of stemmed and notched projectile points, chipped stone scrapers, ground stone tools (e.g. celts, adzes) and ornaments (e.g.

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bannerstones, gorgets), bifaces or tool blanks, animal bone and waste flakes, a by-product of the tool making process.

Woodland Period

Significant changes in cultural and environmental patterns are witnessed in the Woodland Period (circa 950 B.C to historic times). The coniferous forests of earlier times were replaced by stands of mixed and deciduous species. Occupations became increasingly more permanent in this period, culminating in major semi-permanent villages by 1,000 years ago. Archaeologically, the most significant changes by Woodland times are the appearance of artifacts manufactured from modeled clay and the construction of house structures. The Woodland Period is often defined by the occurrence of pottery, storage facilities and residential areas similar to those that define the incipient agricultural or Neolithic period in Europe. The earliest pottery was rather crudely made by the coiling method and house structures were simple enclosures.

Iroquoian Period

The primary Late Woodland occupants of the area were the Neutral Nation, an Iroquoian speaking population described by European missionaries. Like other known Iroquoian groups including the Huron (Wendat) and Petun, the Neutral practiced a system of intensive horticulture based on three primary subsistence crops (corn, beans and squash). Neutral villages incorporated a number of longhouses, multi-family dwellings that contained several families related through the female line. The Jesuit Relations describe several Neutral centers in existence in the 17th century, including a number of sites where missions were later established. While pre-contact Neutral sites may be identified by a predominance of well-made pottery decorated with various simple and geometric motifs, triangular stone projectile points, clay pipes and ground stone implements, sites post-dating European contact are recognized through the appearance of various items of European manufacture. The latter include materials acquired by trade (e.g., glass beads, copper/brass kettles, iron axes, knives and other metal implements) in addition to the personal items of European visitors and Jesuit priests (e.g., finger rings, stoneware, rosaries, glassware). The Neutral were dispersed and their population decimated by the arrival of epidemic European diseases and inter-tribal warfare.

1.2.2 Euro-Canadian Resources

The study area historically existed in the Township of North Dorchester, County of Middlesex. Like much of Southwestern Ontario, mostly European immigrants arrived throughout the nineteenth century and cleared Dorchester's coniferous and deciduous mixed forests for settlement and agriculture. The agriculturally fertile and rich Middlesex similarly shares a history with places like London and Woodstock: it was settled in the wake of John Graves Simcoe's visits and surveys of the region in 1793, when he also

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indicated his thoughts of making the Thames River the site of the capital of Upper Canada (Wood, 2020). The study area retained the primary purpose of agriculture from then on.

Middlesex incorporated in 1849, united with Elgin County in 1852, and split in 1853, with the earliest Euro-Canadian settlement being the village of Delaware (Carter, 1984). Middlesex County hosts some historically salient locations, such as Longwoods Road, which connects Delaware to Chatham and acted as a key supply route in the War of 1812.

North Dorchester Township's namesake is Sir Guy Carleton, Lord Dorchester, who acted as Canada's Governor General throughout the late eighteenth century (Wood, 2020). In 1794, William Reynolds built Middlesex County's first log cabin near what is now Dorchester. As a Township, Dorchester owes its development to Colonel Thomas Talbot, an early land speculator from whom the majority of the area's early Euro-Canadian settlers acquired their property. Dorchester Township's first road was Hamilton Road, formed in 1831, while the village came into existence around James Lane's smithy and Joseph Hardy's lumber mill in 1844 (Wood, 2020). Hardy was also the village's first postmaster after the first post office was sanctioned in 1856. A few years earlier (1852), the Great Western Railway invested in North Dorchester's first rail line – often a precondition of a post office at the time (Mika & Mika, 1983).

Use of the study area on Part of Lots 19 and 20, Concession A, and Part of Lots 19 and 20, Concession B, South of the River Thames, Geographic Township of North Dorchester, County of Middlesex, Ontario in the nineteenth century is determinable through historical records. According to the 1861 Census, Mrs. Orlow Mabee occupied the western parcel of Lot 20, Concession A (Library and Archives Canada, 2019a). James Cartwright, a 21-year-old bachelor farmer born in Upper Canada, occupied Lot 19 of Concession A with his family. The Cartwright family entailed James' father William (aged 56), his mother Caroline (aged 53), and their three children all under 18 together living in a single-story frame house (Library and Archives Canada, 2019a). On the Northern parcel of Lot 20, Concession B, 38-year-old England-born farmer Peter Smith lived with his wife Elisia (aged 38) and their six children in a single-story frame house (Library and Archives Canada, 2019a). Hugh Madole held the eastern side of that same Concession, while James Eagen held the western parcel.

Ten years later in 1871, the Census indicates Mrs. Mabee still held her property, though a W.T. Cartwright possessed the Cartwright family land on Lot 19, Concession A (Library and Archives Canada, 2019b). Peter Smith continued to hold land on the northwest parcel of Lot 20 Concession B, while R. Smith held the northeast section. The Smiths held other parcels in the study area – S. Smith held Lot 19, Concession B's northwest parcel, while M. Smith held the northeast portion (Library and Archives Canada, 2019b).

Also extant is the Illustrated Historical Atlas of the County of Middlesex, which shows the study area's occupation in 1878 (H.R. Page & Co., 1878). Corroborating the early census, Mabee still held her parcel, W.T. Cartwright held the same, and Peter Smith, R. Smith, S. Smith, and M. continued to own their respective parcels from the 1871 census. Fortunately, the map also details some structures/features, including: a homestead and agricultural field on lot 20, Concession B, and a homestead and agricultural

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field on Lot 19, Concession B (Figure 3). Around 60 metres east and northeast of the study area, the map also indicates two homesteads and more fields belonging to Mrs. Mabee. There was one homestead and field 120 metres to the east, a cemetery roughly 300 metres to the northeast, and an east-west roadway transecting the centre of the study area between Concessions A and B. Finally, the Atlas indicates a roadway running north-south just west of the study area, in addition to the Great Western Railway line 1 kilometre north of it.

1.3 ARCHAEOLOGICAL CONTEXT

1.3.1 Existing Conditions

The entire Stage 2 study area comprises 42.56 hectares, consisting mainly of agricultural field, with small meadow and Woodlots in the east, and a residential structure with associated barn complex. Location 15 (AfHg-17) exists in the North-Central portion of the study area, East of Locations 10 (AfHg-375) and West of Location 16 (AfHg-18). Location 15 (AfHg-17) is located at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, in the Geographic Township of North Dorchester, Middlesex County, Ontario.

1.3.2 The Natural Environment

The project area is located in the Mount Elgin Ridges physiographic region as identified by Chapman and Putnam (1984:144).

The Mount Elgin Ridges region spans an area of approximately 145,686 hectares (360,000 acres) between the Thames Valley and the Norfolk Sand Plain. Geologically, this area consists of a succession of vales and ridges with elevations ranging from 245 m to 300 m asl. The ridges are moraines that consist mostly of a brown silty clay, while the vales are mostly alluvial gravel or silty sand (Chapman and Putnam 198:145). The ridges are well drained due to their soil composition while the vales are often poorly drained, resulting in the formation of a number of undrained basins that contain peat and muck soils.

(Chapman and Putnam 1984:144-145)

The soils here are comprised of sandy loam, ideal for agricultural practices and aboriginal settlement.

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in southwestern Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most commonly used variables for predictive modeling of archaeological site location in Ontario. The Thames River flows less than a kilometre to the North of the study area, while a tributary flows 490metres to the East.

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1.3.3 Previously Known Archaeological Sites and Surveys

In order to compile an inventory of archaeological resources, the registered archaeological site records kept by the MHSTCI were consulted. In Ontario, information concerning archaeological sites stored in the ASDB is maintained by the MHSTCI. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometers east to west and approximately 18.5 kilometers north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The study area under review is within Borden Block AfHg.

An examination of the ASDB has shown that there are 35 archaeological sites registered within a one-kilometer radius of the study area, including seven which lie within 250m of the Stage 2 study area, five of which, including Location 15 (AfHg-17), lie within in (Sites Data Search, Government of Ontario, April 30th, 2021); Table 2 summarizes the registered archaeological sites within one-kilometer of the study area.

Table 2: Registered Archaeological Sites within One Kilometer of the Study Area

Borden #	Site Name	Site Type	Cultural Affiliation
AfHg-30	Puff	-	-
AfHg-1	Calvert	Village	Late Woodland (Iroquoian)
AfHg-142	James O'Brien	Homestead	Euro-Canadian
AfHg-143	-	Findspot	Pre-Contact
AfHg-144	-	Scatter	Pre-Contact
AfHg-145	-	Scatter	Pre-Contact
AfHg-146	Dorchester Mill Pond Dam	Dam, Mill	Euro-Canadian
AfHg-17	Larch Lookout	Camp/Campsite/Hamlet	Archaic/Late Woodland/Euro-Canadian
AfHg-170	Szucs 1	Camp/Campsite	Pre-Contact
AfHg-171	Szucs 2	Findspot	Pre-Contact
AfHg-172	Szucs 4	Homestead	Euro-Canadian
AfHg-173	Szucs 5	Scatter	Pre-Contact
AfHg-174	Szucs 6	Scatter	Pre-Contact
AfHg-175	Szucs 7	Scatter	Pre-Contact
AfHg-176	Szucs 9	Camp/Campsite	Pre-Contact
AfHg-177	Szucs 11	Camp/Campsite	Pre-Contact
AfHg-178	Szucs 12	Scatter	Pre-Contact
AfHg-179	Szucs 13	Camp/Campsite	Pre-Contact
AfHg-18	Andrew	Homestead	Euro-Canadian/Late Woodland (Iroquoian)
AfHg-180	Szucs 14	Camp/Campsite	Pre-Contact
AfHg-181	Szucs 15	Camp/Campsite	Pre-Contact
AfHg-182	Szucs 16	House	Euro-Canadian
AfHg-183	Szucs 17	House	Euro-Canadian
AfHg-184	Szucs 18	Camp/Campsite	Pre-Contact
AfHg-19	Kieth	Homestead	Euro-Canadian/Late Woodland (Iroquoian)
AfHg-2	Mustus	Hamlet, Village	Late Woodland (Iroquoian)
AfHg-206	Cromarty Site	Camp/Campsite	Late Woodland (Iroquoian)
AfHg-25	Thinly	-	-
AfHg-26	Creek Bend	Camp/Campsite	Pre-Contact
AfHg-27	Jackle	-	-
AfHg-28	Northmuck	-	-
AfHg-29	Gunk	Cabin	Euro-Canadian
AfHg-32	Cedar Ravine	-	Archaic
AfHg-36	Celery	Cabin/Dump	Euro-Canadian
AfHg-99	AfHg-99	Findspot	Pre-Contact

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1.3.4 Summary of Previous Investigations

Prior to Woods stage 2 assessment of the study area, three previous studies had been conducted within 50m of the study area.

In 2008, Archaeologix conducted a Stage 1 & 2 archaeological assessment on lands directly south and east of the current study area. The work was documented in a report titled *Archaeological Assessment (Stages 1 & 2) Szucs Property Part of Lots 18 and 19, Concession B, Geographic Township of North Dorchester, Municipality of Thames Centre, Middlesex County, Ontario* and conducted under PIF P001-448-2008.

Nineteen locations were recorded during this survey, including 16 Aboriginal sites and three Euro-Canadian sites. Nine of the Aboriginal sites and all three Euro-Canadian sites were recommended for Stage 3 site-specific assessment (Archaeologix 2008: 34).

Of note is the Szucs 18 Site (AfHg-184), which according to the OASD is located within the current study area. Mapping within the report itself, however, indicates that the site is 70 m to the south (Archaeologix 2008: Figure 3). Fifty-nine precontact artifacts were collected within a 50m x 40m scatter, and further Stage 3 assessment was recommended.

None of the remaining 18 sites are located within 50 m of the current study area, and there is no overlap between Archaeologix' study area and the current study area, so it appears likely that AfHg-184 is not actually within the current study area boundary.

In 1983, James Keron conducted a pedestrian survey on lands throughout Westminster and North Dorchester Townships, including a portion of the present study area. The work was documented in a report titled *Archaeological Survey of the Townships of Westminster and North Dorchester*.

The Gunk Site (AfHg-29), located within the current study area, was discovered during this assessment. The Euro-Canadian artifacts collected at the Gunk Site were found within a light scatter measuring 60 m in diameter. The surface collection was completed on a 10-m transect. Keron interpreted this site as a short duration occupation, likely around the 1860's (Keron 1983: 76).

Between 1981 and 1982 William Fox conducted an excavation on the previously identified Calvert Site (AfHg-1), an Early Iroquoian Glen Meyer Village occupied between the 12th and 13th centuries (Timmins 1997: 1). The excavation was conducted prior to the development of a subdivision immediately east of the current study area. Between 1981 and 1982, Fox and his team excavated 70% of the 0.28-ha village. Their excavation documented some 5,000 post moulds and 333 features. The total assemblage includes 31,847 artifacts and an additional 655,779 ecofacts. The total artifact assemblage was narrowed down to

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the following categories: ceramic, lithic and bone, antler and shell (Timmins 1997: 32–33). Of the 46 bone artifacts recovered from the 1981–82 excavation, a single human bone was recovered in one of the refuse pits. The Calvert Site village consisted of 14 house structures and four rows of palisades. The overlapping features indicated that the village had been in use over the course of 50 to 60 years with four primary phases of occupation (Timmins 1997: 35).

William Fox also documented three other registered sites within the current study area: AfHg-17, AfHg-18, and AfHg-2. These three sites are likely associated with the Calvert Village Site (Fox personal communication).

There have been no other documented archaeological investigations within 50 meters of the subject property. However, it should be noted that the Ministry of Heritage, Sport, Tourism, and Culture Industries currently does not provide an inventory of archaeological assessments carried out within 50 meters of a property, so a complete inventory of assessments on lands adjacent to the subject property cannot be provided.

1.3.5 Summary of Past Archaeological Investigations within 50m

The Stage 2 assessment was conducted from November 26th 2019, to January 15th, 2020 under PIF number P348-0074-2019. The Stage 2 consisted of a test pit survey at 5 meter intervals and pedestrian survey at 5m intervals. A total of 17 archaeological locations were identified during the Stage 2 survey. Four of the identified sites, four sites had been previously registered in the OASD, and an additional four sites were newly registered. Recommendations were made as follows below (Wood 2020).

1) The archaeological site identified as Location 1 (AfHg-377) in this report is a multicomponent site, with a pre-contact Aboriginal component and a Euro-Canadian domestic component.

a. The pre-contact Aboriginal component at Location 1 represents a single findspot that is not temporally diagnostic. This component of Location 1 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Therefore, the Aboriginal component of Location 1 has no further cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. No additional fieldwork or assessment is recommended for the Aboriginal component of Location 1.

b. Stage 3 Investigations are warranted for the Euro-Canadian component of Location 1. This site represents a Euro-Canadian domestic site with cultural heritage value or interest according to the criteria listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Specifically, 20 artifacts that date the period of use to before 1900 were found at the site. Location 1 (AfHg-377) is a small post-contact site where it is not yet evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. Therefore, Stage 3 fieldwork will involve the hand

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excavation of 1-m square units in a 5-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 20% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.

2) The Euro-Canadian findspot identified in this report as Location 2 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 2 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 2.

3) The Euro-Canadian scatter identified in this report as Location 3 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 3 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 3.

4) The Late Archaic Aboriginal findspot identified in this report as Location 4 (AfHg-373) does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 4 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 4.

5) Stage 3 investigations are warranted for the site identified in this report as Location 5 (AfHg-2). This site represents a Late Woodland Glen Meyer village site with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). It is evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. This site is in an agricultural field. Therefore, Stage 3 fieldwork will involve a controlled surface artifact collection after the field on which it is located has been ploughed and allowed to appropriately weather as per Section 3.2.1. This will be followed by the hand-excavation of 1-m square units in a 10-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 40% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.2.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.

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6) *The Aboriginal findspot identified in this report as Location 6 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 6 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 6.*

7) *The Late Archaic findspot identified in this report as Location 7 (AfHg-374) does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 7 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 7.*

8) *The Aboriginal findspot identified in this report as Location 8 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 8 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 8.*

9) *The Aboriginal findspot identified in this report as Location 9 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 9 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 9.*

10) *Stage 3 investigations are warranted for the site identified in this report as Location 10 (AfHg-375). This site represents a Woodland period Aboriginal site with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). It is evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. This site is in an agricultural field. Therefore, Stage 3 fieldwork will involve a controlled surface artifact collection after the field on which it is located has been ploughed and allowed to appropriately weather as per Section 3.2.1. This will be followed by the hand-excavation of 1-m square units in a 10-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 40% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.2.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.*

11) *The Aboriginal findspot identified in this report as Location 11 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant*

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Archaeologists (2011). Location 11 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 11.

12) The Aboriginal findspot identified in this report as Location 12 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 12 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 12.

13) The Aboriginal lithic scatter identified in this report as Location 13 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 13 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 13.

14) The Aboriginal findspot identified in this report as Location 14 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 14 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 14.

15) Stage 3 Investigations are warranted for the site identified in this report as Location 15 (AfHg-17). This site represents a Late Woodland campsite with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). It is evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. This site is in an agricultural field. Therefore, Stage 3 fieldwork will involve a controlled surface artifact collection after the field on which it is located has been ploughed and allowed to appropriately weather as per Section 3.2.1. This will be followed by the hand-excavation of 1-m square units in a 10-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 40% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.2.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.

16) The archaeological site identified as Location 16 (AfHg-18) in this report is a multicomponent site, with a pre-contact Aboriginal component and a Euro-Canadian domestic component.

a. The pre-contact Late Archaic component of Location 16 meets the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and

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Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 16 (AfHg-18) is a pre-contact site where it is not yet evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. Therefore, Stage 3 fieldwork will involve the hand excavation of 1-m square units in a 5-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 20% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.

b. The Euro-Canadian scatter identified in this report as Location 16 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 16 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 16.

17) Stage 3 investigations are warranted for the site identified in this report as Location 17 (AfHg-376). This site represents a Woodland period Aboriginal site with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). It is evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. This site is in an agricultural field. Therefore, Stage 3 fieldwork will involve a controlled surface artifact collection after the field on which it is located has been ploughed and allowed to appropriately weather as per Section 3.2.1. This will be followed by the hand-excavation of 1-m square units in a 10-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 40% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.2.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.

18) The balance of the study area does not require further archaeological assessment.

(Wood 2020:4-9)

Location 15 was subject to a Stage 3 site specific assessment in 2021 by LEC under PIF# P1131-0008-2021.

The Stage 3 site specific assessment of Location 15 (AfHg-17) conducted by LEC consisted of the excavation of 49 one-meter by one-meter test units across the extent of the site. A total of 73 Indigenous artifacts from the CSP and test unit excavation, distributed over roughly the same area as the Stage 2 site. The assemblage is similar to the Stage 2 assemblage by breakdown of artifact class and type, but

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with no diagnostics. The assemblage consists mainly of chipping detritus (62), with 11 aboriginal ceramic sherds also recovered. No cultural features were identified during the Stage 3 site specific assessment. Location 15 (AfHhg-17) has been interpreted as a Late Woodland campsite and due to the presence of five stage 3 units where aboriginal ceramic sherds were recovered, it requires further work in the form of a Stage 4 archaeological mitigation of development impacts.

Location 15 (AfHg-17) was deemed to retain further cultural heritage value or interest according to section 3.4 of the *2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011)* and a stage 4 mitigation of development impacts was recommended.

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2.0 FIELD METHODS

The entire Stage 2 study area comprises 42.56 hectares, consisting mainly of agricultural field, with small meadow and Woodlots in the east, and a residential structure with associated barn complex. Location 15 (AfHg-17) exists in the North-Central portion of the study area, East of Locations 10 (AfHg-375) and West of Location 16 (AfHg-18). Location 15 (AfHg-17) is located at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, in the Geographic Township of North Dorchester, Middlesex County, Ontario.

Upon arrival at the site, geographic reference markers that were documented during the Stage 3 archaeological assessment were relocated using a Top Con FC-5000 Network Rover using the North American Datum 1983 (NAD83).

The original five-meter by five-meter grid was reestablished across the extent of the sites according to the Stage 3 site specific assessment. This grid was reestablished using a Top Con Fc-5000 Network Rover, using the NAD83. Furthermore, Ploughing had not occurred since the Stage 3 test unit excavations, and the unit excavations were still easily identified.

The five-meter units in the grid are referred to by the intersection coordinates of their southwest corner. Each five-meter square was divided into 25 one-meter units, with sub-square number one located in the southwest corner of the five-meter unit, number five in the southeast corner, number six located immediately north of number one, and so on. All test units were excavated in systematic levels. Each one-meter unit contained a single stratigraphic layer (topsoil) and was excavated into the first five centimeters of subsoil. All soil from the units was screened through six-millimeter hardware cloth. All artifacts recovered during Stage 4 mitigation were retained for laboratory analysis and description. Artifacts recovered during Stage 4 mitigation were recorded and catalogued regarding their corresponding one-meter sub-square unit number.

The Stage 4 archaeological mitigation of development impacts of Location 15 (AfHg-17) consisted of the hand block excavation of 74 one metre by one metre units and resulted in the recovery of 340 Pre-Contact lithic artifacts, including 233 pieces of chipping detritus, 94 fragmentary sherds, 8 pieces of charcoal, 4 projectile points, two retouched flakes, one utilized flake, and one biface. The test units ranged in depth from 31 centimeters to 39 centimeters. Each test unit contained a single stratigraphic layer (ploughzone) and was excavated into the first five centimeters of subsoil.

Upon completion of block excavation, and in consultation with the Oneida of the Thames First Nation and the Chippewas of the Thames First Nation, the site was stripped using a smooth bucket backhoe and according to section 4.2.3 of the 2011 Standards and Guidelines for Consulting Archaeologists Government of Ontario 2011). Stripping continued to 10 meters beyond the limits of Stage 3 test units and any identified cultural features. Mechanical Topsoil Removal followed section 4.2.3 Standards 1-6 of the 2011 Standards and Guidelines for Consulting Archaeologists Government of Ontario 2011). The site

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meets conditions under Standard 1 for Mechanical topsoil removal. Location 15 (Afhg-17) is a woodland site which has been subject to ploughing for several decades and has only one cultural stratum below topsoil. The Stage 2 and 3 assessments documented a representative sample of artifacts as well as block excavation during Stage 4, as per the Stage 3 recommendations (LEC 2021). This site is considered large. Mechanical topsoil removal met conditions set out as per Standard 2. A backhoe with a smooth bucket was used to pull soil away from the site area. Mechanical topsoil removal met conditions set out as per Standard 3. Field conditions were optimal, and soils were dry. Mechanical topsoil removal proceeded to topsoil/subsoil interface and the remainder of the soil was cleaned with shovel shining and trowel. Mechanical topsoil removal met conditions set out as per Standard 4. No subsurfaces were allowed to dry out. A team of archaeologists was monitoring the backhoe and shining as the topsoil was removed. Mechanical topsoil removal met conditions set out as per Standard 5, artifact rich features were identified and there was no indication that features were being compromised due to the topsoil removal. Mechanical topsoil removal met conditions set out as per Standard 6. All surfaces were cleaned by shovel shining and trowel.

A total of three cultural features were identified from which an additional 113 artifacts were recovered. Each feature was mapped using a Top Con FC-5000 Network Rover at sub centimeter accuracy. The feature was then excavated, and the soil screened through 6mm hard wire mesh and all artifacts retained for laboratory analysis. Soil samples were taken according to section 4.4 of 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). A shovel and bucket were used, and soil samples were taken from the second half of each feature after stratigraphy and profiles were determined based on the first half excavation. Between 2 and 5 liters of soil were collected from each the Feature. Due to the nature of the features, and the material being collected, these amounts were deemed sufficient (Wright 2005).

All artifacts recovered were retained for laboratory analysis and will be processed as per Section 3.2.1 Standard 6 of the MTCS' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011b).

During the Stage 4 mitigation the weather was warm and sunny. At no time were field or weather conditions detrimental to the recovery of archaeological material. Lighting and soil conditions were suitable, and visibility was excellent. Photos 1-12 illustrate field conditions during the Stage 4 excavations. Table 3 provides a summary of the weather and field conditions.

All artifacts recovered during Stage 4 mitigation were retained for laboratory analysis and description. Artifacts recovered during Stage 4 mitigation were recorded and catalogued regarding their corresponding one-meter sub-square unit number, or corresponding Feature and context within the feature.

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Table 3: Location 15 (AfHg-17) Weather and Field Conditions

Date	Activity	Weather	Field Conditions
August 28 th , 2021	Block Excavation	Warm, sunny	Dry friable soils; screens well
August 29 th , 2021	Block Excavation	Warm, sunny	Dry friable soils; screens well
August 30 th , 2021	Block Excavation	Warm, sunny	Dry friable soils; screens well
August 31 st , 2021	Block Excavation	Warm, sunny	Dry friable soils; screens well
September 1 st , 2021	Block Excavation	Warm, sunny	Dry friable soils; screens well
October 13 th , 2021	MTR, Feature Excavation	Warm, sunny	Dry friable soils; screens well

Fieldwork for Location 15 (AfHg-17) was done in consultation with the Chippewa of the Thames First Nation who had a monitor in the field for the duration of the project and the Oneida Nation of the Thames who had a monitor on site when one was available. All strategies followed the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) as well as strategies previously agreed upon between LEC and the COTTfN and the ONTTfN in the Stage 3 report (LEC 2022).

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3.0 RECORD OF FINDS

The Stage 4 mitigation was conducted employing the methods described in Section 2.0 of this report. An inventory of the documentary record generated by fieldwork is provided in Table 4 and the results of the Stage 4 mitigation is discussed in greater detail below. Maps indicating the exact site location and all UTM coordinates recorded during the assessment are included in the Supplementary Documentation to this report.

Table 4: Inventory of Documentary Record: Stage 4 Mitigation of Location 15 (AfHg-17)

Document Type	Current Location of Document Type	Additional Comments
5 Pages of Field Notes	LEC office in London	Photocopied and stored digitally in project file
1 Map Provided by Client	LEC office in London	In original field book and photocopied in project file
25 Digital Photographs	LEC office in London	Stored digitally in project file
1 hand drawn map	LEC office in London	In original field book and photocopied in project file
340 pre-contact artifacts	LEC office in London	Stored in individual bags in 1 banker's box
Artifact Catalogue	LEC office in London	Stored digitally in project file

All the material culture collected during the Stage 4 mitigation of Location 15 (AfHg-17) is contained in 2 Bankers boxes. It will be temporarily housed at the LEC London office until formal arrangements can be made for a transfer to an MHSTCI collections facility.

3.1 CULTURAL MATERIAL

The Stage 4 archaeological mitigation of development impacts of Location 15 (AfHg-17) consisted of the hand block excavation of 74 one metre by one metre units and resulted in the recovery of 340 Pre-Contact lithic artifacts, including 233 pieces of chipping detritus, 94 fragmentary sherds, 8 pieces of charcoal, 4 projectile points, two retouched flakes, one utilized flake, and one biface. The test units ranged in depth from 31 centimeters to 39 centimeters. Each test unit contained a single stratigraphic layer (ploughzone) and was excavated into the first five centimeters of subsoil. Three cultural features were identified. Figure 4 (and Figure 4 of the Supplementary Documentation) provides the results of the Stage 4 mitigation. A sample of artifacts recovered from the Stage 4 mitigation is depicted in Section 8.2. Table 5 summarizes the artifacts recovered during the Stage 4 mitigation of Location 15 (AfHg-17) and a full catalogue is provided in Appendix A.

Table 5: Location 15 (AfHg-17) Artifact Breakdown

Artifact Class	Frequency	%
Chipping Detritus	233	68.53

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Fragmentary Sherds	94	27.65
Retouched Flake	2	<1
Utilized Flake	1	<1
Biface	1	<1
Projectile Point	4	1.18
Charcoal	8	2.35
Total	340	100

3.1.1 Chipping Detritus

A total of 233 pieces of chipping detritus were recovered, including 2 retouched flakes and one utilized flake and were subject to morphological analysis following the classification scheme described by Andrefsky (1998), Thomas (1992), and Odell (2004). Table 6 outlines the results of the detailed morphological analysis of the chipping detritus and is the full artifact catalogue.

Table 6: Chipped Stone Debitage Analysis

Material	Primary Thinning Flake		Secondary Retouch Flake		Secondary Knapping Flake		Biface Thinning Flake		Flake Fragment		Shatter		Total Analyzed	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Onondaga	1	<1	0	0	84	36.05	12	5.15	129	55.36	0	0	226	97.00
Kettle Point	0	0	0	0	7	3.00	0	0	0	0	0	0	7	3.00
Total	1	<1	0	0	91	39.05	12	5.15	129	55.36	0	0	233	100

The morphological analysis of the chipped stone debitage indicates that flake fragments (129) comprise the majority of the assemblage while 91 secondary knapping flakes were also recovered, 12 biface thinning flakes, and only one primary flake.

Primary flakes are produced during the initial reduction phases of raw material blanks and tend to exhibit minimal dorsal flake scarring. These flakes are also characterized by the presence of cortex, or original un-flaked area, on their dorsal surfaces and proximal ends. Secondary knapping flakes are long and thin and have three or more flake scars on the dorsal face and little or no cortex (Thomas 1992). Secondary Reduction flakes are the result of precise flake removal through pressure flaking, where the maker applies direct pressure onto a specific part of the tool to facilitate flake removal. Pressure flaking generally produces smaller, thinner flakes than does percussion flaking.

The morphological analysis of the flake assemblage from Location 15 (AfHg-17) suggests that the lithic practices at this site consisted mainly of the re-sharpening and maintenance of expedient tools from existing inventory or debitage.

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The majority of the recovered flakes are manufactured from Onondaga chert while the remainder are a local till chert and likely represent natural occurrences rather than cultural material. Chert type identifications were accomplished visually using reference materials located in the LEC London office.

Onondaga formation chert is from the Middle Devonian age, with outcrops occurring along the north shore of Lake Erie between Long Point and the Niagara River (Eley and von Bitter 1989). It is a high-quality raw material frequently utilized by pre-contact people and often found at archaeological sites in southern Ontario. Onondaga chert occurs in nodules or irregular thin beds. It is a dense non-porous rock that may be light to dark grey, bluish grey, brown or black and can be mottled with a dull to vitreous or waxy lustre (Eley and von Bitter 1989).

The use of mainly Onondaga cherts indicates that the people at the site were relying on one source of raw material. Primary outcrops of Onondaga chert are found along Lake Erie. Thus, lithic procurement strategies at Location 15 (AfHg-17) mainly involved some long-distance travel or trade.

3.1.2 Expedient and Informal Tools

Only two retouched flakes and a utilized flake were recovered from Location 15 (AfHg-17). All the expedient tools manufactured of Onondaga chert, from secondary flakes or flake fragments. One biface was also recovered, consisting of the midsection of what is likely a broken projectile point. The expedient and informal tools do little for site interpretation. A sample is depicted in Plate 1.

3.1.3 Organics

Eight charcoal fragments were recovered, all from cultural features. The charcoal is small and fragmentary and indeterminate by species, and does little for site interpretation.

3.1.4 Projectile Points

A total of four projectile points were recovered, three from block excavation, and one from Feature 2. Two of the projectile points are manufactured of Kettle Point chert and are missing the bases, so are of indeterminate typology. The other two are of Onondaga chert and a lower quality local chert, and are missing tips, but have tanged bases characteristic of Glen Meyer tanged points, from the Early Ontario Iroquoian period (700-1300AD). The nearby village site known as Location 5 (AfHg-2) was identified as a Glen Meyer site, and these dates are consistent with the dates thus far assigned to the site and the overall archaeology of the area.

3.1.5 Aboriginal Ceramics

A total of two fragmentary aboriginal ceramic sherds were recovered from the Stage 3 assessment of Location 15 (AfHg-17). Most were very fragmentary (<2cm in diameter), while sherds from the features were larger (2-5cm in diameter) with no identifiable surface treatments in any. No rim, neck or shoulder

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sherds were identified. The sherds are too small to determine vessel type or function. The sherds had a fine to medium grit temper, but beyond that there is little to determine from the ceramic assemblage. The sherds have been assigned the broad date of Woodland Period.

3.1.6 Settlement Pattern

A total of three cultural features were identified during the Stage 4 mitigation of Location 15 (AfHg-17). Each was interpreted as a refuse pit, associated with the Late Woodland archaeological site, and consisted of one stratigraphic layer overlying subsoil.

Feature 1 had been bisected by two plough scars, one going North-South, the other going East-West, and represented only the base of the original refuse pit. Feature 1 measured 72cm (East-West) by 74cm (North-South) and had a total depth of 18cm. No soil sample was taken due to the small size of the feature. A total of seven artifacts were recovered, including 4 pieces of chipping detritus and three fragmentary sherds.

Feature 2 measure 138cm (East-West) by 76cm (North-South) and had a total depth of 34cm. A two litre soil sample was taken from the South half, from which 4 pieces of charcoal were recovered, as well as 25grams of granular pottery, one piece of chipping detritus, and two fragmentary sherds. From soil screening, 22 fragmentary sherds, seven pieces of chipping detritus and a Glen Meyer tanged point were recovered.

Feature 3 measured 86cm (East-West) by 73cm (North-South) and had a depth of 71cm. It resembled Feature 1 in shape, though had not been destroyed by ploughing. Sixty-nine artifacts were recovered from Feature 3, including charcoal, chipping detritus, and fragmentary sherds. A 5 litre soil sample was taken, from which 85 grams of granular ceramics and micro fragments of charcoal were recovered.

3.1.7 Summary

Location 15 (AfHg-17) is thought to perhaps represent a Late Woodland campsite, or more likely an extension of the surrounding Glen Meyer complex, where a village existed to the east, known as the Calvert Site (AfHg-1) identified by Fox in 1980, as well as the Late Woodland Location 16 (AfHg-18) immediately to the East and the Glen Meyer village which still partially exists to the South known as Location 5 (AfHg-2) also identified by Fox, and excavated by LEC in 2020.

Lithic material procurement relied on some long-distance trade and manufacturing activities involved tool maintenance. The Stage 4 archaeological mitigation of development impacts of Location 15 (AfHg-17) consisted of the hand block excavation of 74 one metre by one metre units and resulted in the recovery of 340 Pre-Contact lithic artifacts, including 231 pieces of chipping detritus, two retouched flakes, a utilized flake, a biface, four projectile point, 94 fragmentary sherds and 8 pieces of charcoal. A total of three cultural features were identified, all interpreted as refuse pits associated with the Late Woodland site.

STAGE 4 ARCHAEOLOGICAL MITIGATION: LOCATION 15 (AFHG-17)

Record of finds

February 2023

The mitigation resulted in the complete excavation and removal of the archaeological site, which no longer exists in the ground and has been fully documented. The archaeological value of the site now lies solely with the artifact assemblage, high precision mapping and field documentation. As such, in accordance with Section 3.4.2 and Section 3.4.3 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011b), Location 15 (AfHg-17) no longer retains cultural heritage value or interest and does not require further archaeological investigation. **No further assessment of Location 15 (AfHg-17) is recommended.**

STAGE 4 ARCHAEOLOGICAL MITIGATION: LOCATION 15 (AfHg-17)

Analysis and Conclusions
February 2023

4.0 ANALYSIS AND CONCLUSIONS

The Stage 4 archaeological mitigation of development impacts of Location 15 (AfHg-17) consisted of the hand block excavation of 74 one metre by one metre units and resulted in the recovery of 340 Pre-Contact lithic artifacts, including 233 pieces of chipping detritus, 94 fragmentary sherds, 8 pieces of charcoal, 4 projectile points, two retouched flakes, one utilized flake, and one biface. Following hand excavation, mechanical topsoil removal was undertaken, and an additional 113 artifacts were recovered from the excavation of the three cultural features which were identified.

Diagnostic artifacts include the 94 ceramic sherds and 2 Glen Meyer type projectile points, which are consistent with the dates thus far assigned to the site.

Location 15 (AfHg-17) represents an extension of the Early Iroquoian Glen Meyer sites which characterize the area. It may be associated with the nearby Location 10 (AfHg-375), which is a smaller campsite to the West, or more likely an outlying portion of Location 16 (AfHg-18) immediately to the East, where more extensive settlement pattern and similar pottery was recovered (LEC 2023). Location 5 (AfHg-2) was identified a few hundred meters to the South as a Glen Meyer habitation site, originally in 1980 by William Fox and was later confirmed during Stage 3 and 4 excavations undertaken by LEC (LEC 2022, not yet entered into Register). The Calvert site (AfHg-1) was also identified by Fox to the East, in what is now a subdivision. The Calvert site was identified as an Early Iroquoian Glen Meyer village, consisting of 14 long houses occupied over a 50–60-year period (Timmins 1997:35).

The mitigation resulted in the complete excavation and removal of the archaeological site, which no longer exists in the ground and has been fully documented. The archaeological value of the site now lies solely with the artifact assemblage, high precision mapping and field documentation. As such, in accordance with Section 3.4.2 and Section 3.4.3 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011b), Location 15 (AfHg-17) no longer retains cultural heritage value or interest and does not require further archaeological investigation. **No further assessment of Location 15 (AfHg-17) is recommended.**

STAGE 4 ARCHAEOLOGICAL MISITGATION: LOCATION 15 (AFHG-17)

Recommendations
February 2023

5.0 RECOMMENDATIONS

The Stage 4 mitigative excavations were carried out from August 28th, 2021 to October 13th, 2021, in accordance with the Ministry of Tourism, Culture, and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Location 15 (AfHg-17) was excavated in consultation with the Chippewa of the Thames First Nation and the Oneida Nation of the Thames.

The mitigation resulted in the complete excavation and removal of the archaeological site, which no longer exists in the ground and has been fully documented. The archaeological value of the site now lies solely with the artifact assemblage, high precision mapping and field documentation. As such, in accordance with Section 3.4.2 and Section 3.4.3 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011b), Location 15 (AfHg-17) no longer retains cultural heritage value or interest and does not require further archaeological investigation. **No further assessment of Location 15 (AfHg-17) is recommended.**

The MCM is asked to review the results presented and to accept this report into the Ontario Public Register of Archaeological Reports.

STAGE 4 ARCHAEOLOGICAL MISITGATION: LOCATION 15 (AFHG-17)

Advice on Compliance with Legislation
February 2023

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

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

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

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

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

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 license.

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8.0 IMAGES

8.1 SITE PHOTOS



Image 1: Block Excavation in Progress at Location 15 (AfHg-17) Facing Northwest



Image 2: Block Excavation in Progress at Location 15 (AfHg-17) Facing East



Image 3: Excavated Block at Location 15 (AfHg-17) Facing North



Image 4: Excavated Block at Location 15 (AfHg-17) Facing South



Image 5: MTR in Progress Facing West



Image 6: MTR in Progress Facing South



Image 7: Feature 1 Top Plan Facing North



Image 8: Feature 1 South Profile Facing South



Image 9: Feature 2 Top Plan Facing North



Image 10: Feature 2 South Profile Facing South

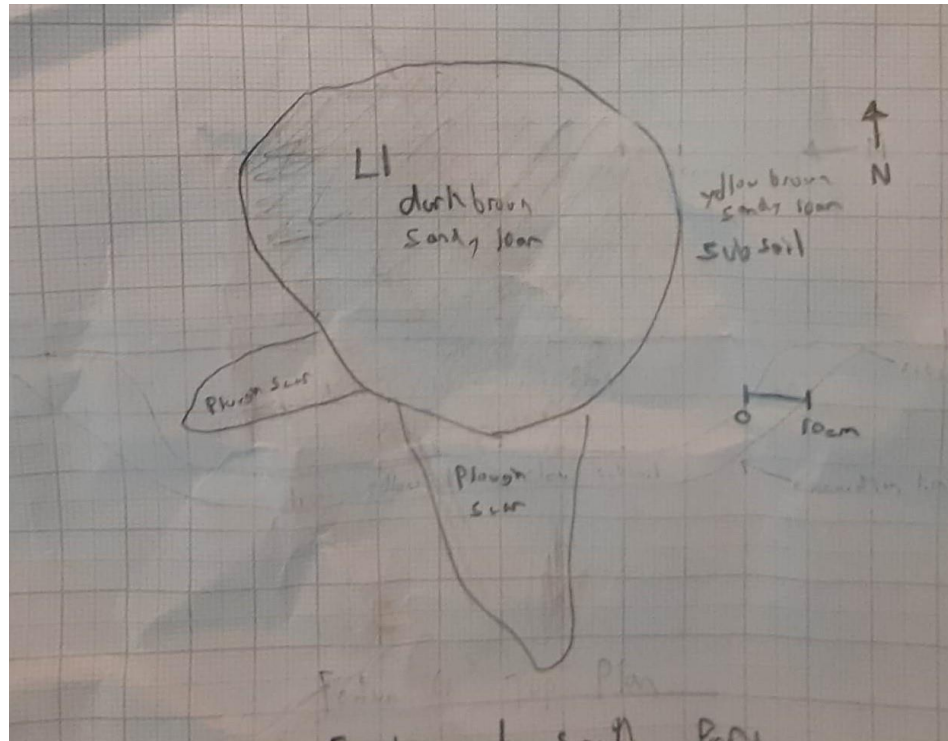


Image 11: Feature 3 Top Plan Facing North

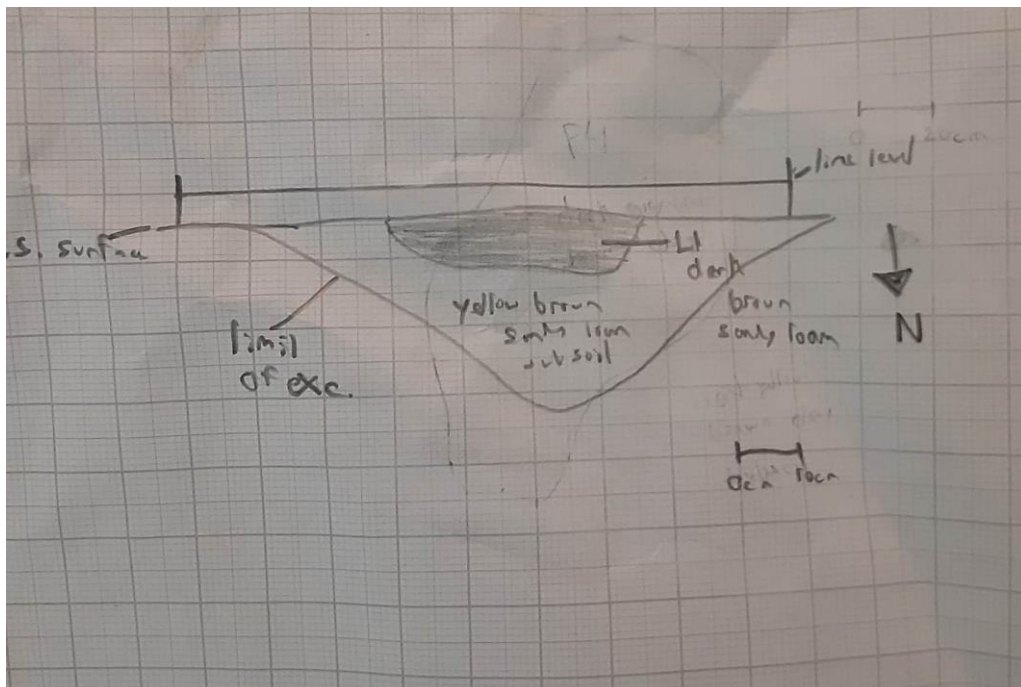


Image 12: Feature 3 South Profile Facing South

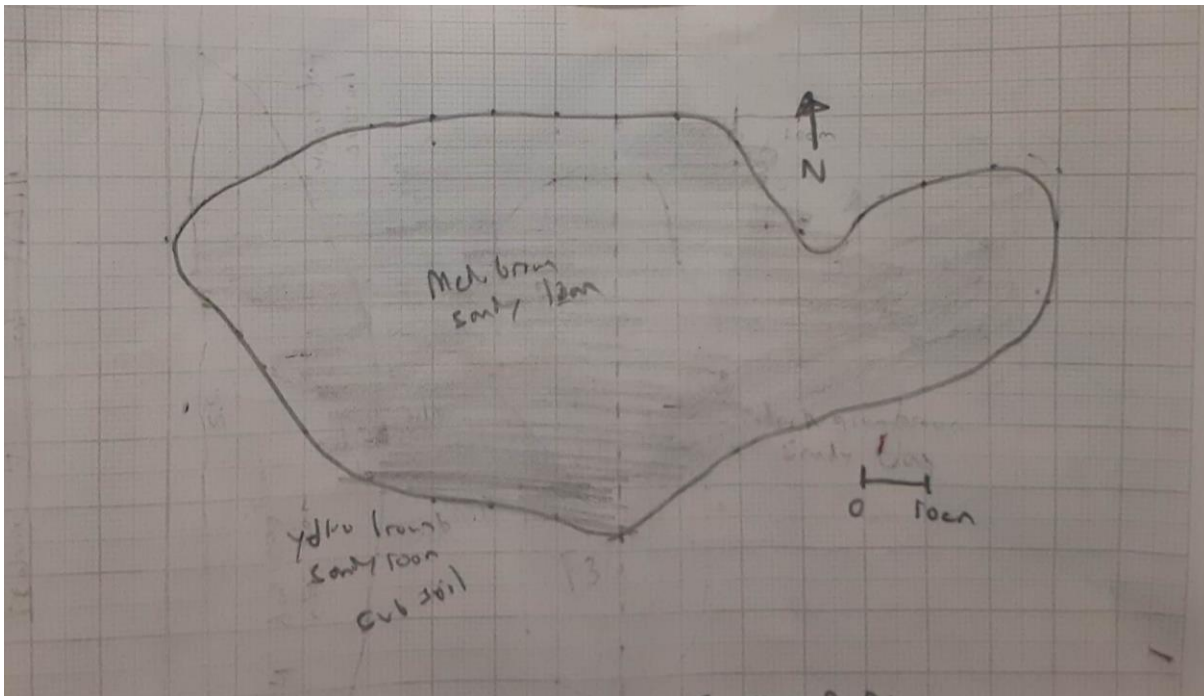
8.2 FEATURE SKETCHES



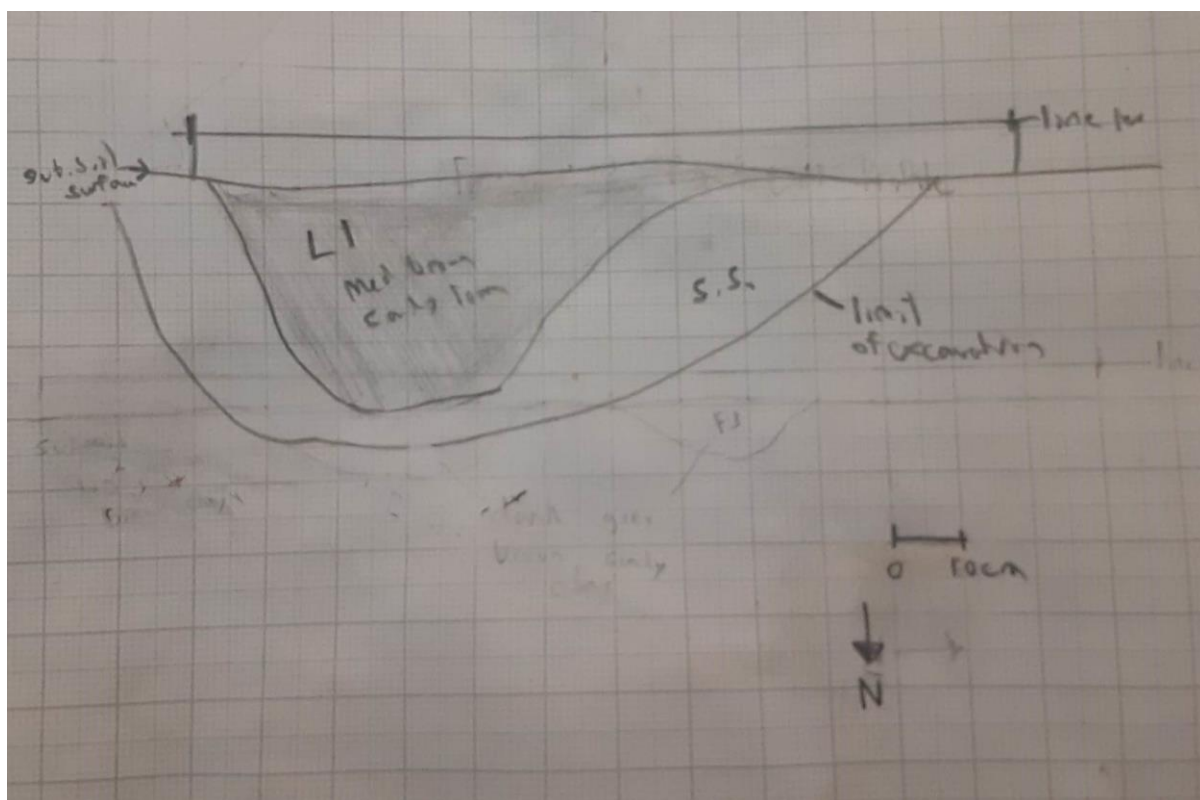
Sketch 1: Feature 1 Top Plan, Facing North



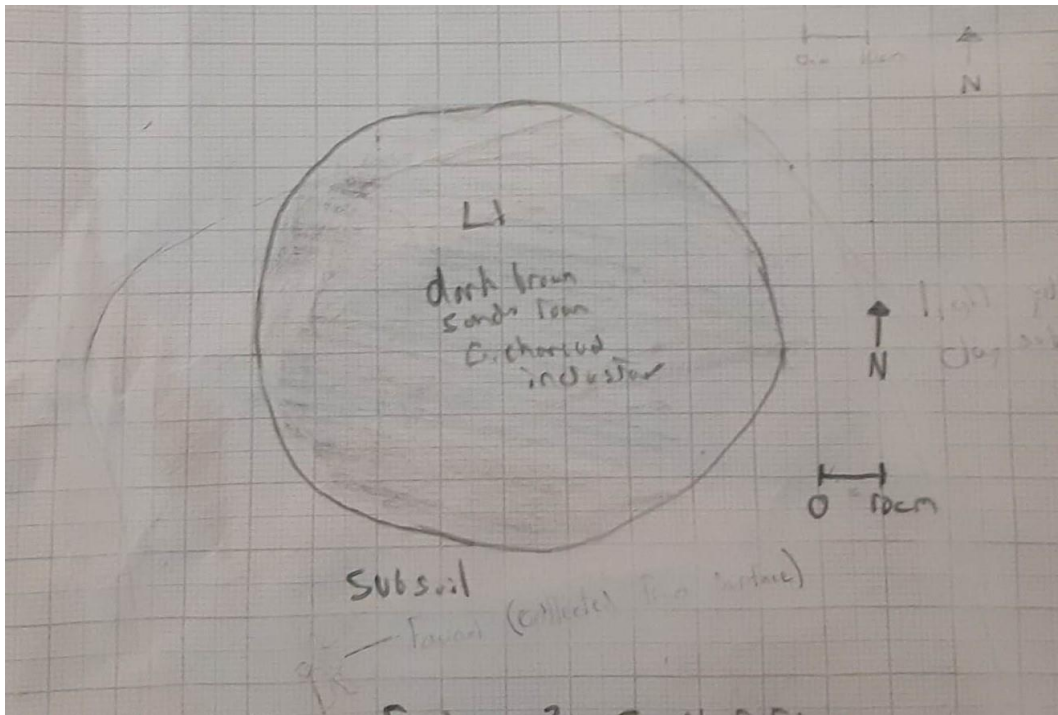
Sketch 2: Feature 1 South Profile, Facing South



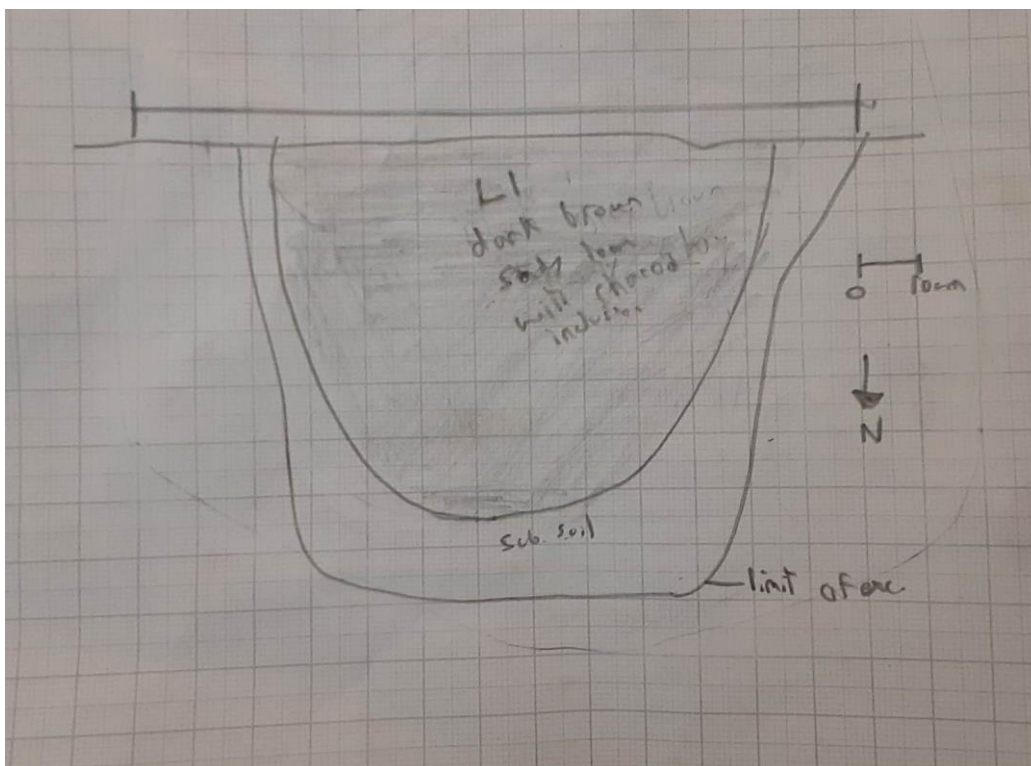
Sketch 3: Feature 2 Top Plan, Facing North



Sketch 4: Feature 2 South Profile, Facing South



Sketch 5: Feature 3 Top Plan Facing North



Sketch 6: Feature 3 South Profile Facing South

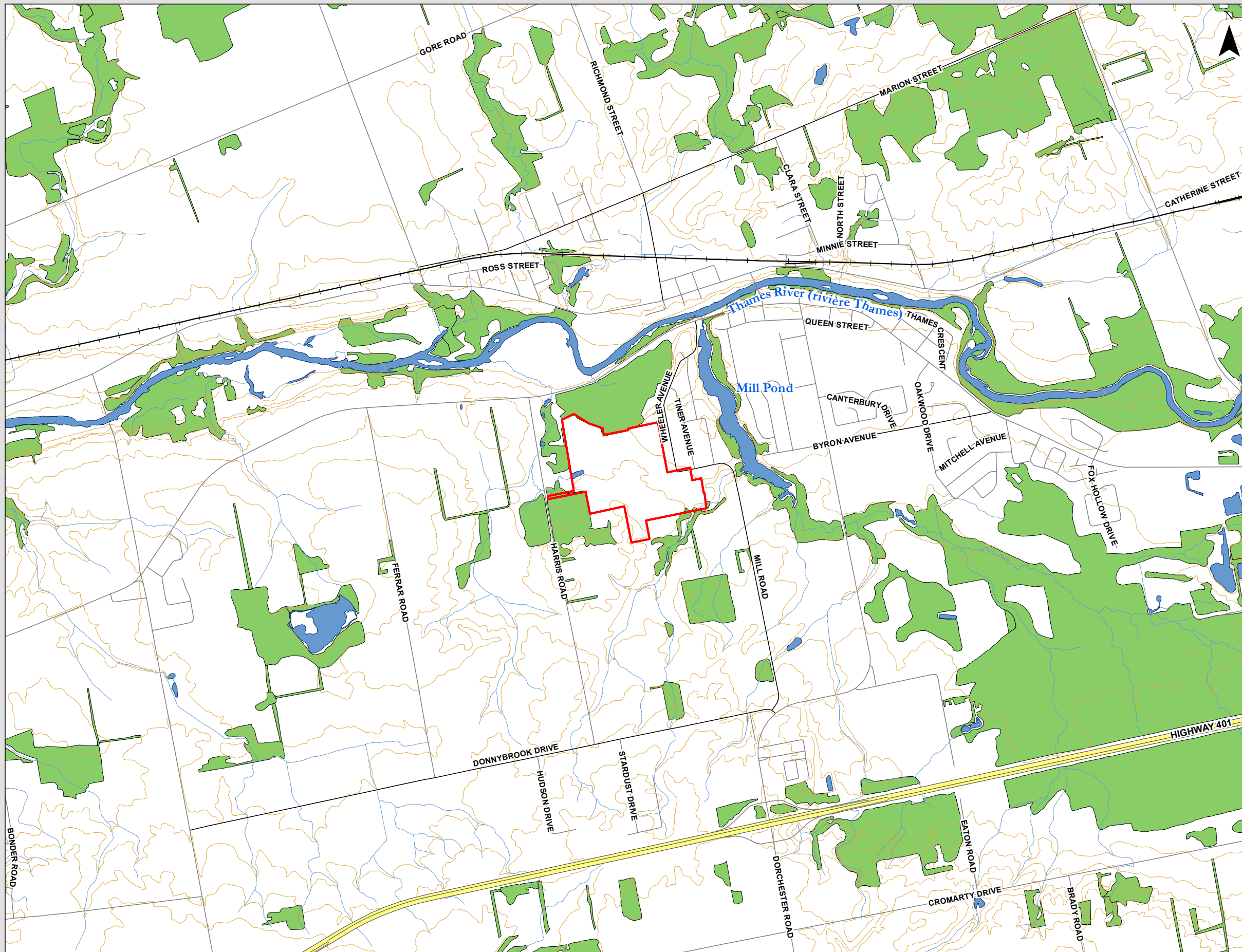
8.3 ARTIFACTS



Plate 1: Sample of Artifacts Recovered from Location 15 (AfHg-17)

9.0 MAPS

All maps will follow on succeeding pages. Maps identifying exact site locations do not form part of this public report; they may be found in the Supplementary Documentation.



Stage 4 Mitigation of Location 15 (AfHg-17) 83 Christie Street, Dorchester, Ontario

Figure 1: Topographic
Map of Study Area

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Date: February, 2023

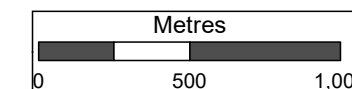
Source: OBM
<http://www.geographynetwork.ca/website/obm/viewer.htm>

Scale 1:25,000

Datum: NAD 1983 UTM Zone 17N

Legend

- | | |
|------------|---------------|
| Study Area | Contour Lines |
| Local Road | Watercourse |
| Major Road | Waterbody |
| Highway | Wooded Area |
| Railroad | |





**Stage 4 Mitigation of
Location 15 (AfHg-17)
83 Christie Street,
Dorchester, Ontario**

Figure 2: Study Area

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Date: February, 2023

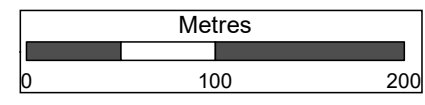
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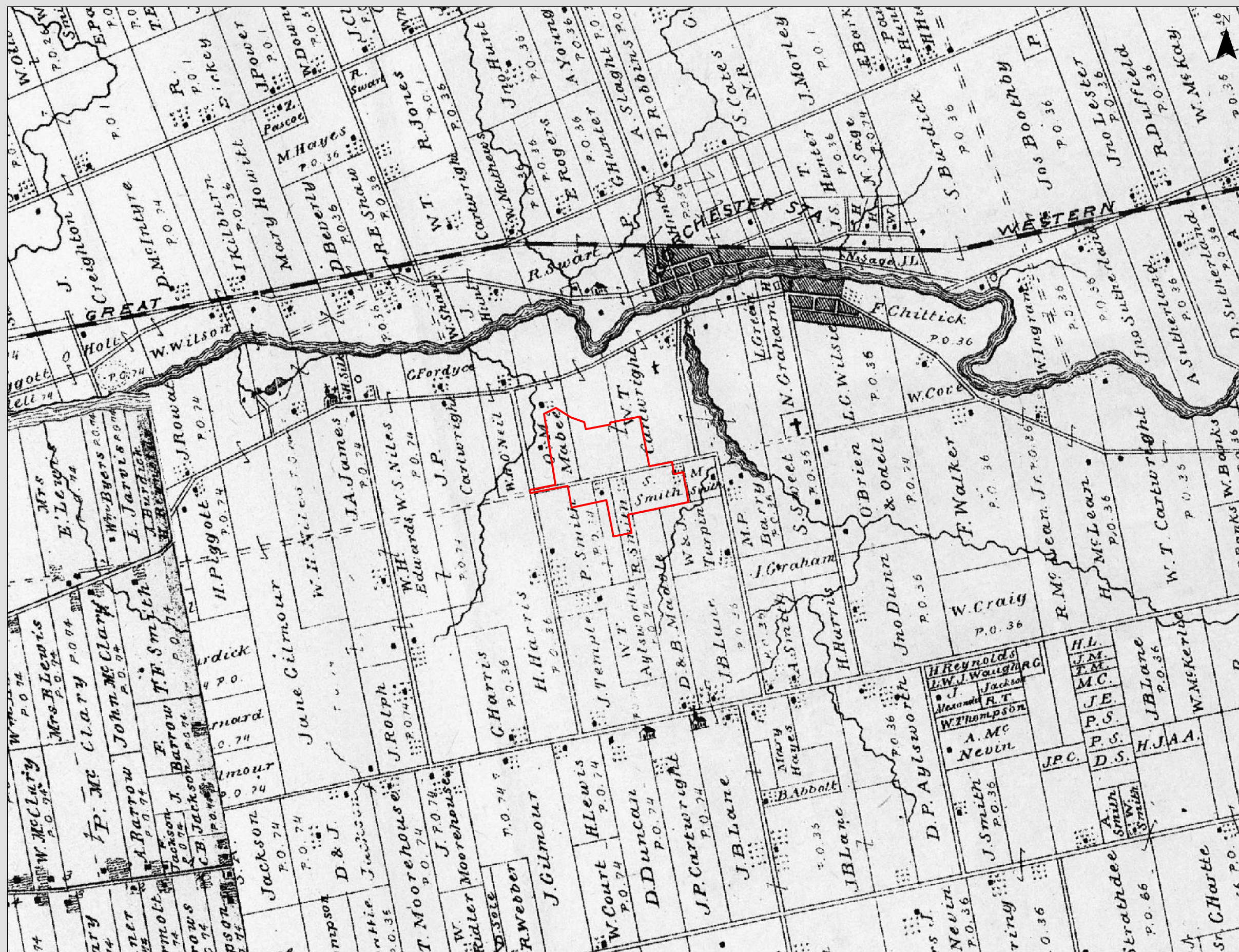
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Datum: NAD 1983 UTM Zone 17N

Legend

-  Study Area
-  Watercourse





**Stage 4 Mitigation of
Location 15 (AfHg-17)
83 Christie Street,
Dorchester, Ontario**

Figure 3: Portion of the 1878 Illustrated Historical Atlas of the County of Middlesex, Dorchester Township

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Date: February, 2023

Source: Illustrated Historical Atlas
of the County of Middlesex, Ont.
Toronto: H.R. Page & Co., 1878.

NOT TO SCALE

Datum: NAD 1983 UTM Zone 17N

Legend

 Study Area

**Stage 4 Mitigation of
Location 15 (AfHg-17),
83 Christie Street,
Dorchester, Ontario**

Figure 4: Stage 4 Results

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Date: February, 2023

Scale 1:350

Datum: NAD 1983 UTM Zone 17N

- Legend**
- Chipping Detritus
 - ⊗ Datum Stake
 - ▲ Pottery
 - Photo Location
 - Excavation Grid (5m)
 - Stage 3 Excavation Unit (1m)
 - Feature
 - Stage 2 Polygon
 - Limits of Mechanical Topsoil Removal
 - Stage 4 Excavation Unit (1m)**
 - 0-6
 - 7-13
 - 14-21

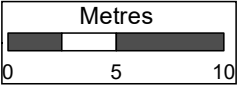
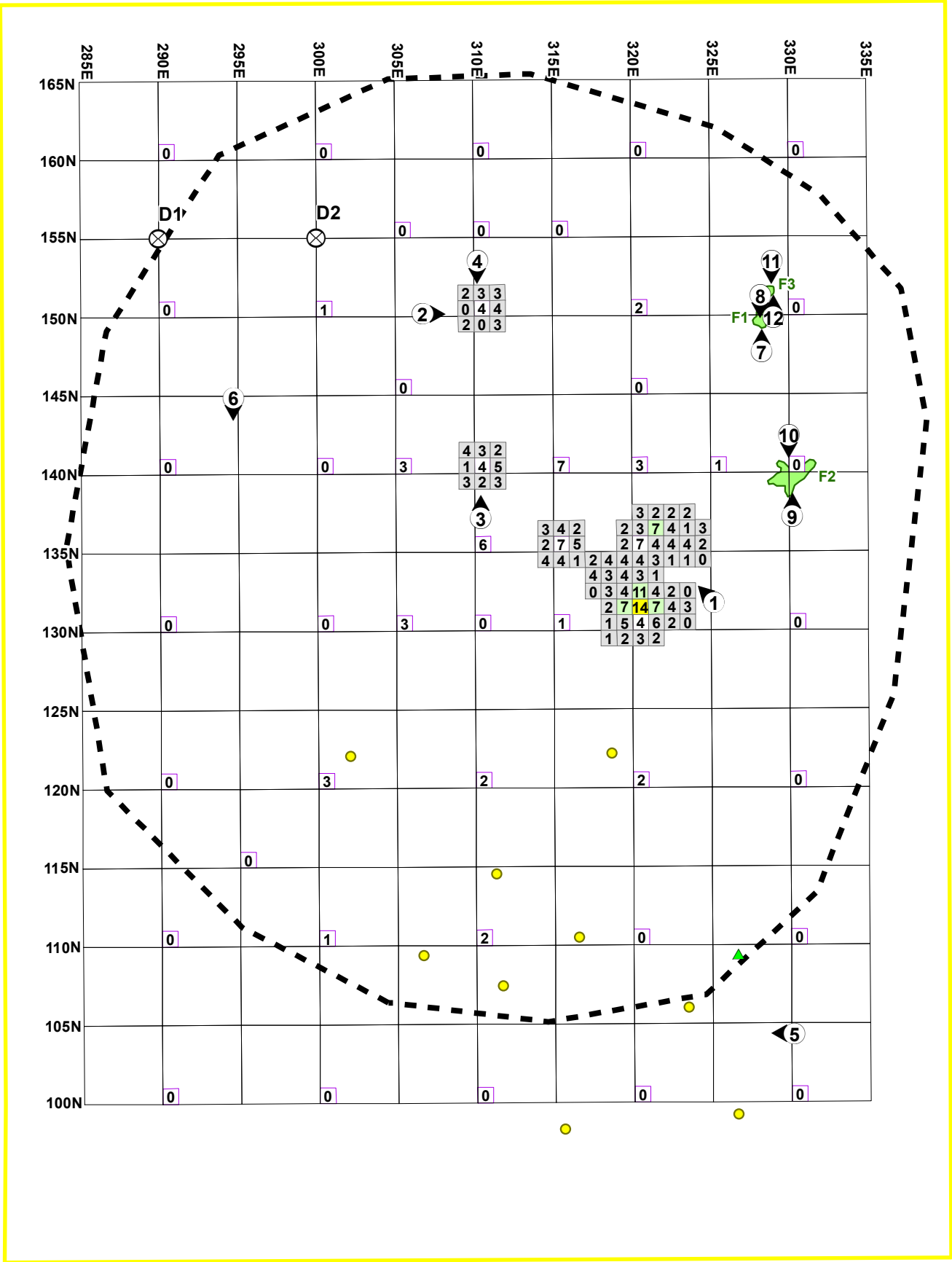
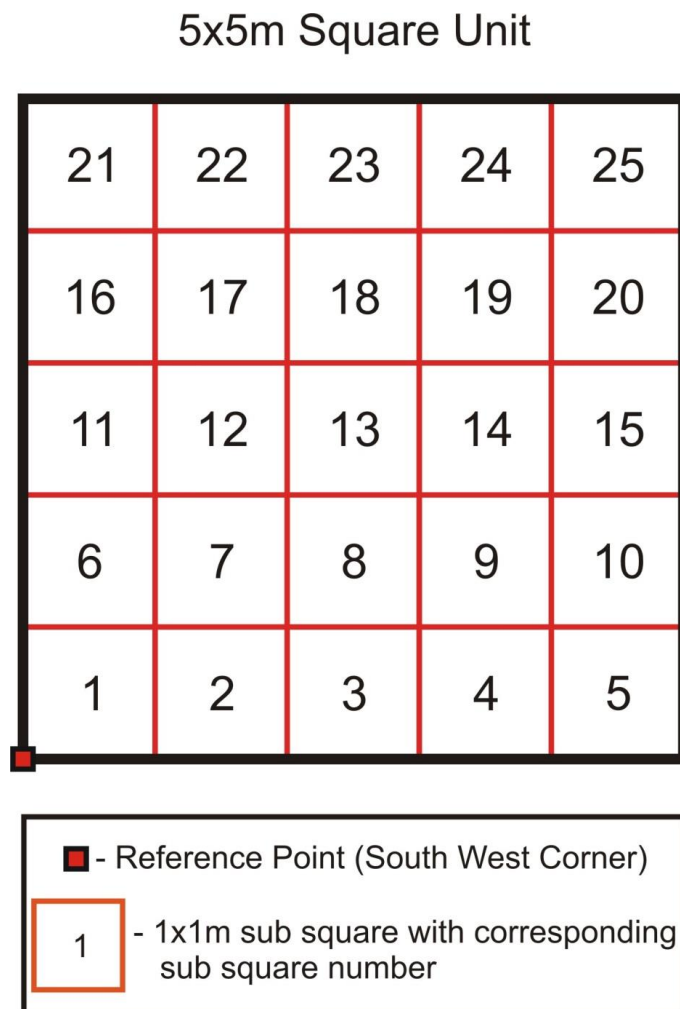


Figure 5: Grid Orientation



APPENDIX A: LOCATION 15 (AFHG-17) ARTIFACT CATALOGUE

Cat. #	East	North	SS	Artifact	Qty	Chert	Morphology	Comments
1	310	150	2	chipping detritus	3	onondaga	flake fragment	
2	310	150	2	chipping detritus	1	onondaga	secondary knapping flake	
3	310	150	7	chipping detritus	3	onondaga	flake fragment	
4	310	150	6	chipping detritus	2	onondaga	flake fragment	
5	310	150	6	chipping detritus	1	onondaga	secondary knapping flake	
6	305	145	25	chipping detritus	1	onondaga	flake fragment	
7	305	145	25	chipping detritus	1	onondaga	secondary knapping flake	
8	305	150	10	chipping detritus	2	onondaga	flake fragment	
9	310	145	22	chipping detritus	2	onondaga	flake fragment	
10	310	145	22	chipping detritus	1	onondaga	secondary knapping flake	
11	310	140	6	chipping detritus	2	onondaga	flake fragment	
12	310	140	6	chipping detritus	1	onondaga	secondary knapping flake	
13	310	140	2	chipping detritus	5	onondaga	secondary knapping flake	
14	305	140	10	chipping detritus	2	onondaga	secondary knapping flake	
15	305	140	10	chipping detritus	1	onondaga	flake fragment	
16	305	140	10	chipping detritus	1	kettle point	secondary knapping flake	
17	305	140	5	chipping detritus	1	onondaga	flake fragment	
18	310	135	21	chipping detritus	2	onondaga	flake fragment	
19	310	135	22	chipping detritus	2	onondaga	flake fragment	
20	310	135	22	chipping detritus	1	onondaga	secondary knapping flake	
21	310	140	7	chipping detritus	2	onondaga	flake fragment	
22	305	135	25	chipping detritus	2	onondaga	flake fragment	
23	305	135	25	chipping detritus	1	onondaga	secondary knapping flake	
24	320	130	6	chipping detritus	4	onondaga	flake fragment	
25	320	130	6	chipping detritus	4	onondaga	secondary knapping flake	
26	320	130	6	chipping detritus	2	onondaga	biface thinning flake	
27	320	130	6	fragmentary sherd	4			
28	320	130	21	chipping detritus	2	onondaga	flake fragment	
29	320	130	21	chipping detritus	2	onondaga	secondary knapping flake	
30	315	135	2	chipping detritus	3	onondaga	flake fragment	
31	315	135	2	chipping detritus	1	onondaga	secondary knapping flake	
32	315	135	2	chipping detritus	1	kettle point	secondary knapping flake	
33	310	130	25	chipping detritus	4	onondaga	flake fragment	
34	310	135	10	chipping detritus	2	onondaga	secondary knapping flake	
35	310	135	10	chipping detritus	1	onondaga	flake fragment	
36	320	135	11	chipping detritus	1	onondaga	flake fragment	
37	320	135	11	chipping detritus	1	onondaga	secondary knapping flake	
38	320	135	11	chipping detritus	1	onondaga	biface thinning flake	
39	315	135	10	chipping detritus	2	onondaga	flake fragment	

40	320	125	22	chipping detritus	2	onondaga	flake fragment	
41	320	130	7	chipping detritus	1	onondaga	secondary knapping flake	
42	320	130	7	fragmentary sherd	6			
43	320	135	13	chipping detritus	1	onondaga	flake fragment	
44	320	135	13	chipping detritus	1	onondaga	secondary knapping flake	
45	320	135	2	chipping detritus	1	onondaga	flake fragment	
46	320	135	2	fragmentary sherd	3			
47	310	135	5	chipping detritus	1	onondaga	flake fragment	
48	310	135	5	chipping detritus	1	onondaga	secondary knapping flake	
49	315	130	23	chipping detritus	2	onondaga	flake fragment	
50	315	130	19	chipping detritus	1	onondaga	flake fragment	
51	315	130	19	fragmentary sherd	2			
52	315	125	24	chipping detritus	1	onondaga	flake fragment	
53	315	125	25	chipping detritus	1	onondaga	flake fragment	
54	315	125	25	chipping detritus	1	onondaga	secondary knapping flake	
55	320	130	11	chipping detritus	3	onondaga	secondary knapping flake	
56	320	130	11	chipping detritus	1	kettle point	secondary knapping flake	
57	320	130	11	projectile point	1	kettle point		missing base
58	320	130	11	fragmentary sherd	6			
59	320	125	21	chipping detritus	2	onondaga	flake fragment	
60	320	125	21	chipping detritus	1	onondaga	secondary knapping flake	
61	315	130	5	chipping detritus	2	onondaga	flake fragment	
62	315	130	5	projectile point	1			missing base
63	315	130	5	fragmentary sherd	2			
64	315	130	15	fragmentary sherd	2			
65	315	130	15	projectile point	1	local		Glen Meyer
66	315	130	15	chipping detritus	1	onondaga	flake fragment	
67	320	135	7	chipping detritus	2	onondaga	secondary knapping flake	
68	320	135	7	chipping detritus	1	onondaga	flake fragment	
69	320	135	7	fragmentary sherd	4			
70	320	135	3	fragmentary sherd	3	onondaga	flake fragment	
71	320	135	3	chipping detritus	1	onondaga	secondary knapping flake	
72	315	130	10	chipping detritus	2	onondaga	flake fragment	
73	315	130	10	chipping detritus	1	onondaga	secondary knapping flake	
74	315	130	10	chipping detritus	1	kettle point	secondary knapping flake	
75	315	130	10	fragmentary sherd	3			
76	320	130	2	chipping detritus	2	onondaga	secondary knapping flake	
77	320	130	2	chipping detritus	3	onondaga	flake fragment	
78	320	130	2	chipping detritus	1	onondaga	biface thinning flake	
79	315	135	6	chipping detritus	3	onondaga	flake fragment	
80	315	135	6	chipping detritus	1	onondaga	secondary knapping flake	
81	315	135	7	chipping detritus	2	onondaga	flake fragment	
82	315	135	5	chipping detritus	2	onondaga	flake fragment	

83	320	135	6	chipping detritus	2	onondaga	flake fragment	
84	320	135	6	chipping detritus	1	onondaga	secondary knapping flake	
85	320	135	10	chipping detritus	3	onondaga	flake fragment	
86	320	130	16	chipping detritus	1	onondaga	flake fragment	
87	320	130	16	fragmentary sherd	2			
88	315	130	24	chipping detritus	2	onondaga	secondary knapping flake	
89	315	130	24	chipping detritus	1	onondaga	flake fragment	
90	315	130	24	retouched flake	1	onondaga	secondary knapping flake	retouching along left distal lateral, ventral face
91	315	130	4	chipping detritus	1	onondaga	secondary knapping flake	
92	315	130	21	chipping detritus	3	onondaga	flake fragment	
93	315	130	21	chipping detritus	1	onondaga	secondary knapping flake	
94	315	130	22	chipping detritus	1	onondaga	secondary knapping flake	
95	315	130	9	chipping detritus	1	onondaga	secondary knapping flake	
96	315	130	9	chipping detritus	1	onondaga	flake fragment	
97	315	130	20	chipping detritus	1	onondaga	primary flake	
98	315	130	20	fragmentary sherd	3			
99	320	135	12	chipping detritus	2	onondaga	flake fragment	
100	320	135	4	chipping detritus	2	onondaga	flake fragment	
101	320	135	4	chipping detritus	2	onondaga	secondary knapping flake	
102	320	130	8	chipping detritus	2	onondaga	secondary knapping flake	
103	320	130	8	fragmentary sherd	2			
104	320	130	9	chipping detritus	2	onondaga	secondary knapping flake	
105	320	130	9	chipping detritus	1	kettle point	secondary knapping flake	
106	320	130	22	chipping detritus	2	onondaga	secondary knapping flake	
107	320	130	22	retouched flake	1	onondaga	secondary knapping flake	retouching along both lateral, dorsal face
108	320	130	24	chipping detritus	1	onondaga	secondary knapping flake	
109	315	130	25	chipping detritus	4	onondaga	flake fragment	
110	315	130	18	chipping detritus	2	onondaga	flake fragment	
111	315	130	18	chipping detritus	1	onondaga	secondary knapping flake	
112	315	130	18	chipping detritus	1	onondaga	biface thinning flake	
113	315	130	14	chipping detritus	2	onondaga	flake fragment	
114	315	130	14	chipping detritus	1	onondaga	secondary knapping flake	
115	320	130	3	chipping detritus	1	onondaga	flake fragment	
116	320	130	3	chipping detritus	1	onondaga	secondary knapping flake	
117	320	130	12	chipping detritus	2	onondaga	flake fragment	
118	320	130	12	chipping detritus	1	onondaga	secondary knapping flake	
119	320	130	12	utilized flake	1	onondaga	flake fragment	usewear along left lateral
120	320	135	8	chipping detritus	3	onondaga	flake fragment	

121	320	135	8	chipping detritus	1	onondaga	secondary knapping flake	
122	320	135	14	chipping detritus	2	onondaga	secondary knapping flake	
123	320	135	9	chipping detritus	1	onondaga	secondary knapping flake	
124	320	130	13	chipping detritus	1	onondaga	secondary knapping flake	
125	320	130	13	chipping detritus	1	onondaga	flake fragment	
126	320	130	23	chipping detritus	1	onondaga	secondary knapping flake	
127	320	130	17	chipping detritus	1	onondaga	flake fragment	
128	320	135	5	chipping detritus	2	onondaga	flake fragment	
129	Feature 1 North Half			chipping detritus	2	onondaga	flake fragment	
130	Feature 1 North Half			chipping detritus	1	onondaga	secondary knapping flake	
131	Feature 1 North Half			fragmentary sherd	2			small fragments <2cm in diameter
132	Feature 1 South Half			chipping detritus	1	onondaga	secondary knapping flake	
133	Feature 1 South Half			fragmentary sherd	1			medium fragments, 2-5cm in diameter Glen Meyer
134	Feature 2 North Half			projectile point	1	onondaga		
135	Feature 2 North Half			chipping detritus	3	onondaga	secondary knapping flake	
136	Feature 2 North Half			chipping detritus	3	onondaga	flake fragment	
137	Feature 2 North Half			chipping detritus	1	onondaga	biface thinning flake	
138	Feature 2 North Half			fragmentary sherd	14			medium fragments, 2-5cm in diameter
139	Feature 2 South Half			fragmentary sherd	8			medium fragments, 2-5cm in diameter
140	Feature 2 Soil Sample			fragmentary sherd	2			small fragments
141	Feature 2 Soil Sample			chipping detritus	1	onondaga	flake fragment	
142	Feature 2 Soil Sample			light fraction				25grams, organics, granular pottery
143	Feature 2 Soil Sample			charcoal	4			small indeterminate fragments
144	Feature 3 North Profile			chipping detritus	12	onondaga	flake fragment	
145	Feature 3 North Profile			chipping detritus	6	onondaga	secondary knapping flake	
146	Feature 3 North Profile			chipping detritus	5	onondaga	biface thinning flake	
147	Feature 3 North Profile			chipping detritus	2	kettle point	secondary knapping flake	
148	Feature 3 North Profile			biface	1	onondaga		elliptical primary flake, worked on both sides to form cutting edge
149	Feature 3 North Profile			fragmentary sherd	15			medium fragment,

						2-5cm in diameter
150	Feature 3 North Profile	charcoal	2			small indeterminate fragments
151	Feature 3 South Profile	chipping detritus	7	onondaga	flake fragment	
152	Feature 3 South Profile	chipping detritus	3	onondaga	secondary knapping flake	
153	Feature 3 South Profile	chipping detritus	1	onondaga	biface thinning flake	
154	Feature 3 South Profile	fragmentary sherd	7			medium fragments, 2-5cm in diameter
155	Feature 3 South Profile	heavy fraction				67grams, granular pottery
156	Feature 3 South Profile	light fraction				18grams, powdered charcoal, granular ceramics
157	Feature 3 South Profile	fragmentary sherd	3			small fragments
158	Feature 3 South Profile	chipping detritus	3	onondaga	secondary knapping flake	
159	Feature 3 South Profile	charcoal	2			small, indeterminate