

**Stage 3 Archaeological Assessment,
Location 1 (AiHc-500),
Whistle Bare Campground,
1898 Whistle Bare Road**

Part of Lot 28, Concession 12,
Geographic Township of North Dumfries,
Historical Waterloo County, now Region of Waterloo

Submitted to:

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ORIGINAL REPORT

February 12, 2020

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Ms. Sarah Code of GSP Group Inc. ('the Proponent') to conduct a Stage 3 archaeological assessment for archaeological site Location 1 (AiHc-500), located on Lot 28, Concession 12 within the Geographic Township of North Dumfries and historical Waterloo County, now in the Region of Waterloo, Ontario (Figure 1). This investigation was conducted in advance of the proposed Whistle Bare Campground development located at 1898 Whistle Bare Road, in North Dumfries (the 'Study Area'; Figure 5).

An archaeological assessment of the site was triggered by the Provincial Policy Statement ('PPS') 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* (Government of Ontario 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." To meet the conditions of this legislation, a Stage 3 assessment was conducted at Location 1 (AgGt-257) during the pre-approval phase of the proposed development under archaeological consulting license P017, issued to Mr. Garth Grimes by the Ministry of Heritage, Sport, Culture, and Heritage Industries ('MHSTCI'), and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011).

The Study Area is a rectangular parcel measuring 38.2 hectares, located on the north side of Whistle Bare Road, to the west of the Whistle Bare Golf Club. Location 1 (AiHc-500) was one of four archaeological sites and four findspots identified during a Stage 1-2 of the Study Area, conducted by Detritus between June 4 and September 11, 2019 (PIF# P389-0446-2019; Detritus 2020).

At the time of the previous assessment, the northern half of the Study Area was occupied by the existing Whistle Bare Campground, which comprised grass and treed areas throughout, as well as various trailers, small sheds, gravel laneways and parking areas, and three structures (Figure 2). Furthermore, various artificial ponds and drainage ditches were observed throughout the campground that were created as a result of aggregate extraction during the construction of Highway 401.

A one-storey house; a two-storey house with an attached garage; a number of landscaped gardens; a patio and stone walkway; three sheds; a garage; a silo; a gravel walkway; and two gravel laneways occupied the southern end of the Study Area, surrounded by a grassy lawn area with trees throughout. The remainder of the southern half of the Study Area comprised two large agricultural fields, separated by the long stone walkway. Additionally, a Hydro One Corridor transects the Study Area from the southeast corner, running in a northwesterly direction towards the campground, before crossing over to the neighbouring property to the west.

Location 1 (AiHc-500) was identified during the pedestrian survey of the large field occupying the southwest quadrant of the Study Area (Tile 2 of the Supplementary Documentation). The Stage 2 assessment of the site resulted in the documentation of 38 pre-contact Aboriginal artifacts scattered across an area of approximately 30 metres (m) north-south by 22m east-west at the north end of the field, adjacent to the Whistle Bare Campground to the north (Tile 4 of the Supplementary Documentation). Location 2 (AiHc-501) and Findspot 2 were also documented in the vicinity of Location 1 (AiHc-500); Findspot 1 was observed in the same field, approximately 165m to the southwest of the site. Location 3, Findspot 3 (AiHc-502) and Findspot 4 were documented at the northern end of the southeastern field. All seven of these sites and findspots produced pre-contact Aboriginal artifacts. Location 4 (AiHc-503), the only Euro-Canadian site observed within the Study Area, was discovered during the test pit survey of the lawn area to the south and southeast of the one-storey house.

Chipping detritus was encountered most often at Location 1 (AiHc-500) (n=38); the remainder of the Stage 2 artifact assemblage comprised two bifacial tools and a single unifacial tool. Most of these artifacts were manufactured from Onondaga chert; three of the chert flakes were

manufactured from Fossil Hill chert. Morphological analysis of the chipping detritus suggested that late stage lithic reduction occurred at the site for the production and maintenance of formal tools and projectile points. This conclusion was supported by the two bifacial tools within the Stage 2 assemblage, both of which resemble broken projectile points, and the unifacial tool, which may have been retouched and utilised a scraper. Based on the results of the Stage 2 assessment, Detritus determined that Location 1 (AiHc-500) fulfilled the criteria for a Stage 3 archaeological assessment.

The Stage 3 investigation of Location 1 (AiHc-500) was conducted on October 24 and November 8, 2019. This investigation resulted in the recovery of 84 pre-contact Aboriginal artifacts from a controlled surface pick-up and the hand excavation of 18 test units (Figure 4). Artifact yields ranged from 0 to 12 with the highest counts occurring in the centre of the site, in the vicinity of the highest artifact concentration of Stage 2 and Stage 3 surface finds. All of the artifacts within the Stage 3 assemblage were identified as pieces of chipping detritus manufactured from Onondaga chert.

Morphological analysis of the Stage 3 flake assemblage supports the previous conclusion that late stage lithic reduction was the primary activity undertaken at the site. A single primary flake may indicate that limited early stage lithic reduction also occurred the site. No formal tools, diagnostic material, Aboriginal ceramics, or fire cracked rock were recovered during any stage of assessment, nor were any subsurface features observed.

Given all the available evidence, Location 1 (AiHc-500) has been interpreted as a medium sized activity area occupied seasonally by pre-contact Aboriginal people and characterized by late stage lithic reduction for the production and maintenance of formal tools and projectile points. Based on the results of the Stage 3 assessment, wherein three test units yielded ten or more artifacts, Location 1 (AiHc-500) fulfills the criteria for a Stage 4 mitigation of impacts, as per Section 3.4.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011) and retains further cultural heritage value or interest. **A Stage 4 archaeological mitigation of impacts is recommended at Location 1 (AiHc-500).**

In consultation with the Proponent, the Stage 4 mitigation of Location 1 (AiHc-500) by avoidance and protection is not a viable option. As such, a Stage 4 mitigation by hand excavation is recommended at the site, conducted according to Sections 4.2.1 and 4.2.2 of the *Standards and Guidelines* (Government of Ontario 2011). This investigation will consist of a hand excavated block of 1m units surrounding the highest yielding Stage 3 test units at the site. The extent of the excavation block will be determined according to Section 4.3, Table 4.1 of the *Standards and Guidelines* (Government of Ontario 2011).

The soil excavated from the Stage 4 units will be screened through six-millimetre hardware cloth to facilitate the recovery of any small artifacts that may be present. All artifacts will be bagged and tagged by provenience. The exposed subsoil surface across the excavation block will be cleaned by shovel or trowel and examined for cultural features. If any subsurface cultural features are encountered, they will be recorded and excavated by hand in accordance with Section 4.2.2, Standard 7 of the *Standards and Guidelines* (Government of Ontario 2011). Block excavation will continue to 2m beyond any cultural feature identified in accordance with Section 4.2.2, Standard 7c of the *Standards and Guidelines* (Government of Ontario 2011).

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

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- Ms. Sarah Code of GSP Group Inc.

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Ms. Sarah Code of GSP Group Inc. ('the Proponent') to conduct a Stage 3 archaeological assessment for archaeological site Location 1 (AgGt-257), located on Lot 28, Concession 12 within the Geographic Township of North Dumfries and historical Waterloo County, now in the Region of Waterloo, Ontario (Figure 1). This investigation was conducted in advance of the proposed Whistle Bare Campground development located at 1898 Whistle Bare Road, in North Dumfries (the 'Study Area'; Figure 5).

An archaeological assessment of the site was triggered by the Provincial Policy Statement ('PPS') 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* (Government of Ontario 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." To meet the conditions of this legislation, a Stage 3 assessment was conducted at Location 1 (AgGt-257) during the pre-approval phase of the proposed development under archaeological consulting license P017, issued to Mr. Garth Grimes by the Ministry of Heritage, Sport, Culture, and Heritage Industries ('MHSTCI'), and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011).

The purpose of a Stage 3 Site-Specific Assessment is to assess the cultural heritage value or interest ('CHVI') of a site through a controlled collection of material. This information is used to support the determination of whether the site has been sufficiently documented or if further measures are required to protect or document it fully. In compliance with the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the following Stage 3 assessment are:

- To collect a representative sample of artifacts;
- to determine the extent of the archaeological site and the characteristics of the artifacts;
- to assess the CHVI of the archaeological site; and
- to determine the need for mitigation of development impacts and recommend appropriate strategies for mitigation and future conservation.

Stage 3 assessments typically consist of detailed documentary research of the land use and occupation history, a controlled surface pick-up ('CSP') of surface artifacts for sites located in ploughed fields, and test unit excavation. The licensee received permission from the Proponent to enter the land and conduct all required archaeological fieldwork activities, including the recovery of artifacts.

1.2 Historical Context

1.2.1 Post-Contact Aboriginal Resources

The late 17th and early 18th centuries represent a watershed moment in the evolution of the post-contact Aboriginal occupation of Southern Ontario. At this time, various Iroquoian-speaking communities began migrating into southern Ontario from New York State, followed by the arrival of Algonkian-speaking groups from northern Ontario (Konrad 1981; Schmalz 1991). This period also marks the arrival of the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes.

The oral traditions of the Mississaugas, as told by Chief Robert Paudash and recorded in 1904, suggest that the Mississaugas defeated the Mohawk Nation, who retreated to their homeland south of Lake Ontario. Following this conflict, a peace treaty was negotiated between the two groups and, at the end of the 17th century, the Mississaugas settled permanently in Southern Ontario, including within the Niagara Peninsula (Praxis Research Associates n.d.). Around this

same time, members of the Three Fires Confederacy (Chippewa, Ottawa, and Potawatomi) began immigrating from Ohio and Michigan into southwestern Ontario (Feest and Feest 1978:778-79).

In 1722, the Five Nations adopted the Tuscarora in New York becoming the Six Nations (Pendergast 1995:107). Sir Frederick Haldimand, Governor of Québec, made preparations to grant a large plot of land in south-central Ontario to those Six Nations who remained loyal to the Crown during the American War of Independence. More specifically, Haldimand arranged for the purchase of the Haldimand Tract in south-central Ontario from the Mississaugas. The Haldimand Tract, also known as the 1795 Crown Grant to the Six Nations, was provided for in the Haldimand Proclamation of October 25th, 1784 and was intended to extend a distance of six miles on each side of the Grand River from mouth to source. By the end of 1784, representatives from each member nation of the Six Nations, as well as other allies, relocated to the Haldimand Tract with Joseph Brant (Tanner 1987: 77-78; Weaver 1978: 525).

The Study Area first enters the Euro-Canadian historical record as part of the Haldimand Tract, which is documented as,

...is a parcel or tract of land given to the Six Nations Indians, by Governor Haldimand October 25th, 1784, ...and conveyed by Grant the 14th of January, 1793. ... This Grant was composed of the following Townships: Dunn, Sherbrooke, Moulton, Canborough, North and South Cayuga, Oneida and Seneca in Haldimand County; Tusc[aro]ra, Onondaga, Brantford and South Dumfries in Brant County; North Dumfries, Waterloo and Woolwich in Waterloo County; Pilkington and Nichol in Wellington County; and is described as a parcel or tract of land six miles on each side of the Ouse or Grand River from it's mouth toward its source, to be bounded by the tract of land deeded December the 7th, 1792 by the Mississa[u]ga Chiefs and people to the Crown. This part was set aside as a suitable retreat for the Six Nation Indians who had shewn attachment and Fidelity to the British Government during the troublous times 1759 to 1783 and was granted to the Chiefs, Warriors, Women and People of the Six Nations and their heirs forever.

Morris 1943:19-21

The size and nature of the pre-contact settlements and the subsequent spread and distribution of Aboriginal material culture in Southern Ontario began to shift with the establishment of European settlers in Southern Ontario. By 1834, it was accepted by the Crown that losses of portions of the Haldimand Tract to Euro-Canadian settlers were too numerous for all lands to be returned. Lands in the Lower Grand River area were surrendered by the Six Nations to the British Government in 1832, at which point most Six Nations people moved into Tuscarora Township in Brant County and a narrow portion of Oneida Township (Page & Co. 1879:8; Tanner 1987:127; Weaver 1978:526). Following the population decline and the surrender of most of their lands along the Credit River, the Mississaugas were given 6000 acres of land on the Six Nations Reserve, establishing the Mississaugas of New Credit First Nation in 1847 (Smith 2002:119).

Despite the inevitable encroachment of European settlers on previously established Aboriginal territories, “written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian systems of ideology and thought” (Ferris 2009:114). As Ferris observes, despite the arrival of a competing culture, First Nations communities throughout Southern Ontario have left behind archaeologically significant resources that demonstrate continuity with their pre-contact predecessors, even if they have not been recorded extensively in historical Euro-Canadian documentation.

1.2.2 Euro-Canadian Resources

Location 1 (AgGt-257) is located within the Geographic Township of North Dumfries and historical County of Waterloo, now the Region of Waterloo, Ontario.

On July 24, 1788, Sir Guy Carleton, the Governor-General of British North America, divided the Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg and Lunenburg (Archives of Ontario 2009). Further change came in December 1791 when the Province of Québec was rearranged into Upper Canada and Lower Canada under the Constitutional Act. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada; he initiated several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them (Coyne 1895:33).

In July 1792, Simcoe divided Upper Canada into 19 counties, including Waterloo County, stretching from Essex in the west to Glengarry in the east. Later that year, the four districts originally established in 1788 were renamed as the Western, Home, Midland and Eastern Districts.

Official settlement of North Dumfries Township began in 1816, although Euro-Canadian settlers and squatters were present before the registered survey (Byerly 1935). Prior to this, the area remained an undeveloped parcel, identified as Block One within the northern part of the Haldimand Tract. In 1795, under authority from the Six Nations' chiefs, Joseph Brant began to sell these parcels of undeveloped land, including Block One to Phillip Steadman. Steadman died shortly after taking possession of the land and it was transferred to his sister, Mrs. Sparkman. In 1811, Mr. and Mrs. Sparkman conveyed the land to Mr. Thomas Clarke who then passed it on to his cousin Mr. William Dickson in 1816. Dickson was a prominent Niagara merchant and land speculator. He established and named the township and initiated official survey for settlement (Moyer 1971).

The survey was led by Deputy Provincial Surveyor Adrian Marlett between October 1816 and May 1817 (Taylor 1970). It was completed according to the single front survey system with multiple modifications likely resulting from the challenging terrain and heavy bush encountered upon arrival (Dean 1969). The standard single front system divides the land into five lots containing 200-acre parcels surrounded by roads. The survey team accessed the land from East River Road beginning in Paris and ending in Galt (Taylor 1970).

Generally, settlement of the township was slow with the exception of the area between Galt and Branchton. A member of the original survey party from New York State, William Mackenzie, along with approximately seven others, returned to settle the area shortly after the survey was completed (Taylor 1970). By the end of 1817, 38 families were living in Dumfries Township (Walker & Miles 1877). Subsequent municipal acts in 1849 and 1852 saw the township divided into two entities; the northern half was renamed North Dumfries and was amalgamated with the County of Waterloo. By this time Galt had already been established and was a thriving town (Waterloo Regional Museum 2018). By the 1880s, settlement within North Dumfries Township had been complete for more than a generation. The population by this time had climbed to 3,283 residents (Ontario Agricultural Commission 1881).

The *Illustrated Historical Atlas of Waterloo and Wellington Counties, Ontario* ('*Historical Atlas*'), demonstrates the extent to which North Dumfries Township had been settled by 1877 (Walker & Miles 1877; Figure 3). Very few landowners are listed throughout the township, while the majority of the rural lots remained undivided. Nevertheless, an increasing population at this time is suggested by the number of villages and small towns depicted throughout, including the larger communities of Ayr and Galt (now Cambridge), as well as the two railways transecting the township, including branches of the Grand Trunk Railway and the Credit Valley and Great Western Railway.

Location 1 (AiHc-500) occupies the northern half of Lot 28, Concession 12. No landowners are listed for this lot in the *Historical Atlas* map of North Dumfries, nor are any structures or orchards illustrated. The early community of Whistlebare is visible to the east of the site on Lots 23, 24, and 25, Concession 12. The early community of Galt is illustrated farther to the southeast, accessed by both railway lines to the south and east of the site.

Although significant and detailed landowner information is available on the current *Historical Atlas* map of North Dumfries Township, it should be recognized that historical county atlases were funded by subscription fees and were produced primarily to identify factories, offices, residences and landholdings of subscribers. Landowners who did not subscribe were not always

listed on the maps (Caston 1997). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

1.2.4 Recent Reports

Location 1 (AiHc-500) was first documented during the Stage 1-2 assessment of the Study Area, conducted by Detritus in November of 2017 (PIF# P017-0643-2017; Figure 2) and documented in the following assessment report;

Stage 3 Archaeological Assessment, Location 1 (AiHc-500), Whistle Bare Campground, 1898 Whistle Bare Road, Part of Lot 28, Concession 12, Geographic Township of North Dumfries, Historical Waterloo County, now Region of Waterloo (Detritus 2020).

The results of this investigation will be discussed in greater detail below in Section 1.3.4.

1.3 Archaeological Context

1.3.1 Property Description and Physical Setting

Location 1 (AiHc-500) was identified during the pedestrian survey of a large field occupying the southwest quadrant of the Study Area (Tile 2 of the Supplementary Documentation).

The Study Area is a rectangular parcel measuring 38.2 hectares (ha), located on the north side of Whistle Bare Road, to the west of Whistle Bare Golf Club. At the time of the assessment, the northern half of the Study Area was occupied by the existing Whistle Bare Campground, which comprised grass and treed areas throughout, as well as various trailers, small sheds, gravel laneways and parking areas, and three structures. Furthermore, various artificial ponds and drainage ditches were observed throughout the campground that were created as a result of aggregate extraction during the construction of Highway 401.

A one-storey house; a two-storey house with an attached garage; a number of landscaped gardens; a patio and stone walkway; three sheds; a garage; a silo; a gravel walkway; and two gravel laneways occupied the southern end of the Study Area, surrounded by a grassy lawn area with trees throughout. The remainder of the southern half of the Study Area comprised two large agricultural fields, separated by the long stone walkway. Additionally, a Hydro One Corridor transects the Study Area from the southeast corner, running in a northwesterly direction towards the campground, before crossing over to the neighbouring property to the west.

The majority of the region surrounding the Study Area has been subject to European-style agricultural practices for over 100 years, having been settled by Euro-Canadian farmers by the mid-19th century. Much of the region today continues to be used for agricultural purposes.

The Study Area is situated within the Guelph Drumlin Field. According to Chapman and Putnam,

...the Guelph drumlin field occupies an area of 320 square miles lying northwest, or in front of the Paris Moraine. Within this area, including parts of the Regional Municipalities of Hamilton-Wentworth, Waterloo, and Halton, and part of Wellington County, there are approximately 300 drumlins of all sizes. For the most part these hills are of the broad oval type with slopes less steep than those of the Peterborough drumlins.

Chapman and Putnam 1984:174-176

Drumlins can be formed of till (the unsorted debris of glaciers) or sand and gravel, soils varying from moderate to well drained and suitable to agriculture. The original forest cover consisted of a mix of pines and hardwoods, such as sugar maple, oak, beech and cherry. This pattern of forest cover is characteristic of areas of clay soil within the Maple - Hemlock Section of the Great Lakes - St. Lawrence Forest Province - Cool Temperate Division (McAndrews and Manville 1987:43).

The closest source of potable water is a tributary of Blair Creek, which spans the northern half of the Study Area, approximately 124m north of Location 1 (AiHc-500).

1.3.2 Pre-Contact Aboriginal Land Use

This portion of Southern Ontario has been occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of North Dumfries Township, based on Ellis and Ferris (1990).

Table 1: Cultural Chronology for North Dumfries Township

Time Period	Cultural Period	Comments
9500 – 7000 BC	Paleo Indian	First human occupation Hunters of caribou and other extinct Pleistocene game Nomadic, small band society
7500 - 1000 BC	Archaic	Ceremonial burials Increasing trade network Hunter gatherers
1000 - 400 BC	Early Woodland	Large and small camps Spring congregation/fall dispersal Introduction of pottery
400 BC – AD 800	Middle Woodland	Kinship based political system Incipient horticulture Long distance trade network
AD 800 - 1300	Early Iroquoian (Late Woodland)	Limited agriculture Developing hamlets and villages
AD 1300 - 1400	Middle Iroquoian (Late Woodland)	Shift to agriculture complete Increasing political complexity Large palisaded villages
AD 1400 - 1650	Late Iroquoian	Regional warfare and Political/tribal alliances Destruction of Huron and Neutral

1.3.3 Previous Identified Archaeological Work

In order to compile an inventory of archaeological resources, Detritus consulted the registered archaeological site records maintained by the MHSTCI. In Ontario, these records are stored in the ASDB (Government of Ontario n.d.). 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 kilometres (km) east to west and approximately 18.5km 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.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information and Protection of Privacy Act* (Government of Ontario 1990c). 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 MHSTCI 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.

According to the ASDB, 16 archaeological sites have been registered within a 1km radius of the Study Area (Table 2 on the following page). Most of these, 14 in all, were identified as pre-contact Aboriginal sites spanning the Early Paleo-Indian through Late Woodland periods. The remaining two were identified as Euro-Canadian sites.

Table 2: Registered Archaeological Sites within 1km of the Study Area

Borden Number	Site Name	Time Period	Affinity	Site Type
AiHc-127	Whistle Bare 1	Archaic, Late, Woodland, Early	Aboriginal	findspot
AiHc-128	Whistle Bare 2	Post-Contact	Euro-Canadian	blacksmith shop, homestead
AiHc-129	Whistle Bare 3	Woodland, Middle	Aboriginal	findspot
AiHc-130	Whistle Bare 4	Archaic, Middle	Aboriginal	findspot
AiHc-131	Whistle Bare 5	Paleo-Indian, Paleo-Indian, Early	Aboriginal	findspot
AiHc-132	Whistle Bare 6	Woodland, Middle	Aboriginal	findspot
AiHc-267	Rhona (P2)	Pre-Contact	Aboriginal	scatter
AiHc-276	-	Pre-Contact	Aboriginal	scatter
AiHc-334	-	Archaic, Late	Aboriginal	scatter
AiHc-335	-	Woodland, Late	Aboriginal	findspot
AiHc-365	Asparagus 1	Woodland, Early	Aboriginal	findspot
AiHc-366	Asparagus 2	Archaic, Middle	Aboriginal	findspot
AiHc-367	Asparagus 3	Pre-Contact	Aboriginal	findspot
AiHc-431	-	Post-Contact	Euro-Canadian	unknown
AiHc-432	-	Pre-Contact	Aboriginal	-
AiHc-474	Location 1	Woodland, Middle	Aboriginal	transient visit

In addition to the sites tabulated above, four archeological sites, including Location 1 (AiHc-500), and four findspots were identified during the Stage 1-2 of the current Study Area, conducted by Detritus between June 4 and September 11, 2019 (PIF# P389-0446-2019; Detritus 2020). Among these, Location 2 (AiHc-501) and Findspot 2 were located within 50m of Location 1 (AiHc-500). The results of this investigation will be discussed in greater detail in Section 1.3.4 below. To the best of Detritus' knowledge, no other assessments have been conducted on adjacent properties, and no other sites are registered within 50m of the Study Area.

1.3.4 Summary of Previous Investigations

The Stage 1-2 of the Study Area was conducted between June 4 and September 11, 2019 (PIF# P389-0446-2019; Detritus 2020). The Stage 1 background research indicated that portions of the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources, and were recommended for a Stage 2 field survey.

This investigation consisted of a typical pedestrian survey of the agricultural land; and a typical test pit survey of the lawn areas surrounding the house in the southern half of the Study Area and the grassy and treed areas throughout the campground to the north. Test pitting throughout the Whistle Bare Campground revealed that much of the property had been previously disturbed during the gravel extraction activities that were ongoing prior to the founding of the campground. A number of quarry ponds are still visible throughout the campground. Likewise, two areas of steep slope were observed on the southern periphery of the quarry area. The permanently wet and steeply sloping areas were excluded from assessment. Finally, the various structures, gravel surfaces, and stone paths throughout the Study Area were determined to be previously disturbed and were mapped and photo-documented only.

This investigation resulted in the documentation of four archaeological sites, identified in the field as Locations 1-4, and four findspots, designated Findspots 1-4. Most of these sites and findspots were clustered at the northern end of the large agricultural field occupying the southern half of the Study Area, adjacent to the campground. Location 1 (AiHc-500), Location 2 (AiHc-501), and Findspot 2 were positioned to the west of the long stone walkway that bisected the

field; Location 3, Findspot 3 (AiHc-502), and Findspot 4 were located to the east. Findspot 1 was positioned farther to the southeast, approximately 165m to the south of Location 1.

The Stage 2 assessment of Location 1 (AiHc-500) resulted in the documentation of 35 pieces of pre-contact Aboriginal chipping detritus, 2 bifacial tools, and 1 unifacial tool scattered across an area of approximately 30m north-south by 22m east-west. Morphological analysis of the chipping detritus suggested that late stage lithic reduction occurred at the site for the production and maintenance of formal tools and projectile points. This conclusion was supported by the two bifacial tools within the Stage 2 assemblage, both of which resemble broken projectile points, and the unifacial tool, which may have been retouched and utilised as a scraper. Based on the results of the Stage 2 assessment, Location 1 (AiHc-500) fulfilled the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1ai(3) of the *Standards and Guidelines* (Government of Ontario 2011). None of the remaining sites documented in this cluster were recommended for additional assessment.

Location 2 (AiHc-501) was located approximately 23m east of Location 1 (AiHc-500). The Stage 2 assessment of the site resulted in the documentation of nine pieces of pre-contact Aboriginal chipping detritus, one projectile point, and one chert core scattered across an area of approximately 50m north-south by 44m east-west. Morphological analysis of the chipping detritus suggested that late stage lithic reduction occurred at the site for the production and maintenance of formal tools and projectile points. This conclusion is supported by the projectile point observed in the Stage 2 assemblage. This projectile point was fragmentary and unable to be classified, but demonstrated characteristics common among Meadowood points from the Early Woodland period. Given the results of the Stage 2 assessment, Location 2 (AiHc-501) was interpreted as a small activity area of unknown function, occupied by unspecified Aboriginal people during the pre-contact period, and characterised by late stages of lithic reduction.

Location 3 was part of the cluster to the east of the stone walkway, along with Findspot 3 (AiHc-502) and Findspot 4. The Stage 2 assessment of the site resulted in the documentation of five pieces of Onondaga chert chipping detritus scattered across an area of approximately 16m north-south by 40m east-west. Morphological analysis of the chipping detritus suggested that late stage lithic reduction occurred at the site. Given the small sample size, however, it was difficult to draw any useful conclusions regarding site function. Given the results of the Stage 2 assessment, Location 3 was interpreted as a small activity area of unknown function, occupied by briefly by unspecified Aboriginal people during the pre-contact period.

Collectively, Findspots 1 to 4 produced five pieces of Onondaga chipping detritus and a single projectile point, manufactured from Fossil Hill chert. Findspot 1 was an isolated utilized flake, located approximately 165m to the southwest of Location 1 (AiHc-500); Findspot 2 comprised two thinning flakes, located approximately 40m to the west of Location 1 (AiHc-500); Findspot 3 (AiHc-502) was a fragmentary, reworked projectile point base that was unable to be classified, located 37m to the north of Location 3; and Findspot 4 comprised two pieces of Onondaga chert chipping detritus located 24m to the northeast of Location 3.

Lastly, Location 4 (AiHc-503) was identified during the test pit survey of the lawn area adjacent Whistle Bare Road, to the south and south east of the one-storey house at 1898 Whistle Bare Road, approximately 260m to the southeast of Findspot 1. Location 4 was the only Euro-Canadian site encountered within the Study Area. The Stage 2 assessment of the site yielded 59 artifacts from 15 test pits, scattered across an area of 17m east-west by 16m north-south. The assemblage included primarily ceramics (n=30) and structural artifacts (n=19); the remainder of the assemblage comprised trace amounts of household items, personal objects, and miscellaneous metal pieces. The ceramic assemblage was dominated by ironstone (n=25); four pieces of red earthenware and a single porcelain sherd were also recovered. The structural items, meanwhile comprised cut and wire nails, thick window glass, and red brick fragments. According to the available evidence, Location 4 (AiHc-503) was identified as a middle 19th century to early 20th century domestic artifact scatter. Given the presence of at least 20 artifacts within the Stage 2 assemblage that date the period of use at the site to before 1900, Location 4 (AiHc-503) was recommended for Stage 3 assessment. At the time of the current assessment, the Stage 3 investigation at Location 4 (AiHc-503) had not been conducted.

1.3.5 Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Detritus applied archaeological potential criteria commonly used by the MHSTCI (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential.

When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect sites locations and types to varying degrees. The MHSTCI (Government of Ontario 2011) categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, creeks;
- secondary water sources: intermittent streams and creeks, springs, marshes and swamps;
- past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes; and
- accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

The closest source of potable water is a tributary of Blair Creek, which spans the northern half of the Study Area, approximately 124m north of Location 1 (AiHc-500).

Soil texture is also an important determinant of past settlement, usually in combination with other factors such as topography. The Study Area is situated within the Guelph Drumlin Field Region. As was discussed earlier, the soils within this region are imperfectly drained, but suitable for pre-contact and post contact Aboriginal agricultural. Considering also the length of occupation of North Dumfries Township prior to the arrival of Euro-Canadian settlers, as evidenced by the 14 pre-contact Aboriginal sites registered within 1km of the Study Area and the six additional pre-contact sites and findspots observed within the current Study Area, the pre-contact and post-contact Aboriginal archaeological potential of Location 1 (AiHc-500) is judged to be moderate to high.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario 1990b) or property that local histories or informants have identified with possible historical events.

The *Historical Atlas* (Walker & Miles 1877; Figure 3) map of North Dumfries Township has revealed that the Study Area is in close proximity to a number of historical roads, the early community of Galt as well as a branch of the Grand Trunk, the Credit Valley and Great Western Railways, which transect the township. Considering also the presence of two Euro-Canadian sites within 1km of the Study Area, and another documented within the current Study Area, approximately 370m south of Location 1 (AiHc-500), and the potential for post-contact Euro-Canadian archaeological resources at the site is judged to be moderate to high.

Additionally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area, as outlined in Section 1.3.2 of the *Standards and Guidelines* (Government of Ontario 2011). A number of areas identified as steep sloping, previous disturbed, or permanently wet were observed throughout the Study Area during the Stage 2 property inspection (Detritus 2020). Although none of these disturbance areas occur within the limits of Location 1 (AiHc-500), the field containing the site is bound by a stone path to the east

and northeast, and by a steeply sloping area to the southwest. Looking farther afield, the large sloping and disturbed areas that resulted from the previous quarrying on the property, meanwhile, were documented approximately 36m to the north of Location 1 (AiHc-500).

2.0 Field Methods

The Stage 3 assessment of Location 1 (AiHc-500) was conducted on October 24 and November 8, 2019 under archaeological consulting license P017 issued to Mr. Garth Grimes by the MHSTCI. This investigation began with a review of all relevant reports of previous fieldwork on the property as per Section 3.2, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011).

During the Stage 3 assessment, the weather was a mix of sun and cloud with temperatures ranging from 0° to 8° C. The soil was dry and screened easily. 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, as required by Section 3.2, Standard 2 and Section 7.9.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011). Photos 1 to 8 illustrate the field and soil conditions during the Stage 3 assessment, as per Section 7.9.6, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011).

Location 1 (AiHc-500) was relocated in the field by means of geographic reference markers that were established during the Stage 2 assessment. Two permanent datum stakes were placed in the ground, and a typical CSP was conducted (Photos 1 and 2) across the limits of the Stage 2 surface scatter according to Section 3.2.1 of the *Standards and Guidelines* (Government of Ontario 2011). The purpose of the CSP was to gather information that would assist in documenting the characteristics and extent of the archaeological site. The CSP consisted of accurately mapping the location of all surface artifacts as per Section 3.2.1, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011), using a Garmin eTrex 10 GPS unit, with a minimum accuracy 1-2.5m (North American Datum 1983 ('NAD83') and Universal Transverse Mercator ('UTM') Zone 17T), thereby tying this information to the sites. All coordinates taken during the Stage 3 assessment are listed in the Supplementary Documentation to this report. The surface artifacts were then collected for laboratory analysis, thus meeting the conditions of Section 3.2.1, Sections 4-6 of the *Standards and Guidelines* (Government of Ontario 2011).

Following the CSP at Location 1 (AiHc-500), a 5m by 5m grid of 1m square test units was established across the limits of the site, as identified through the Stage 2 and Stage 3 surface collections. The grid was established using hand tapes and an optical theodolite.

In total, the Stage 3 assessment at Location 1 (AiHc-500) involved the hand excavation of 18 test units strategically positioned to test the nature and density of the subsurface artifact distribution at the site (Photos 3 to 8). Given that it was not yet evident that the level of CHVI at the site would result in a recommendation to proceed to Stage 4, the Stage 3 assessment initially consisted of the hand excavation of 1m square test units every 5m across the site limits, as per Table 3.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011). Additional 1m test units amounting to 20% of the grid total were planned for areas of interest within each site extent as per Table 3.1, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011).

Over the course of the Stage 3 grid unit excavation, it became clear that the level of CHVI at Location 1 (AiHc-500) would result in a recommendation to proceed to Stage 4. As a result, the test unit placement strategy outlined in Table 3.1, Standards 3 and 4 of the *Standards and Guidelines* (Government of Ontario 2011) was followed and 11 test units were positioned at 10m intervals across the site. Following this, seven additional units amounting to over 60% of the grid unit total were excavated, focusing on areas of interest within the site extent.

All test units were excavated in systematic levels, into the first five centimetres (cm) of subsoil. Each test unit contained a single stratigraphic layer (the 'plough zone'; Photos 7 and 8) and ranged in depth from 26cm to 35cm; considering that each test unit was excavated 5cm into subsoil, the plough zone ranged in depth from 21cm to 30cm. All soil from the units was screened through six-millimetre (mm) hardware cloth to facilitate the recovery of small artifacts. All artifacts recovered during the test unit excavations were recorded and catalogued with reference to their corresponding grid coordinate and were retained for laboratory analysis and description. The subsoil surface of each excavated unit was shovel shined, trowelled, and examined for any evidence of subsurface cultural features, none of which were identified. Photographs of the Stage 3 test unit excavation are provided in Section 9.1 of this report.

3.0 Record of Finds

3.1 Introduction

The Stage 3 assessment of Location 1 (AiHc-500) was conducted employing the methods described in Section 2.0 above. Figure 4 provides the results of this investigation. Maps indicating the exact site location of the site, and all UTM coordinates recorded during the assessment, are included in the Supplementary Documentation to this report. An inventory of the documentary record generated by the fieldwork is provided in Table 3 below.

Table 3: Inventory of Document Record

Document Type	Current Location of Document Type	Additional Comments
3 Page of Field Notes	Detritus office	stored digitally in project file
1 Map provided by the Client	Detritus office	stored digitally in project file
1 Field Map	Detritus office	stored digitally in project file
51 Digital Photographs	Detritus office	stored digitally in project file

All of the material culture collected during the Stage 3 archaeological assessment is contained in one box and will be temporarily housed in the office of Detritus until formal arrangements can be made for its transfer to Her Majesty the Queen in right of the Province of Ontario or another suitable public institution acceptable to the MHSTCI and the site's owners.

3.2 Cultural Material

The Stage 3 assessment of Location 1 (AiHc-500) produced 84 pieces of chipping detritus, including 11 from the CSP and another 73 from the test units. A sample of the artifacts recovered from the Stage 3 assessment is depicted in Section 9.2 of this report.

Chert type identifications were accomplished visually using reference materials located online or in personal collections. All of the flakes recovered from Location 1 (AiHc-500) were manufactured from Onondaga chert.

Onondaga chert is a dense non-porous rock that derives from the Middle Devonian age, with outcrops occurring along the north shore of Lake Erie between Long Point and the Niagara River, approximately 70km to the south of the site (Eley and von Bitter 1989). Primary outcrops have also been reported along the banks of the Grand River (Ellis and Ferris. 1990). Onondaga chert typically occurs in nodules or irregular thin beds. It can appear light to dark grey, bluish grey, brown, black, or mottled, with a dull to vitreous or waxy lustre. Onondaga chert represented a high-quality raw material that was frequently utilized by pre-contact people, and is often found at archaeological sites in southern Ontario (Eley and von Bitter 1989). The predominance of Onondaga chert in both the Stage 2 and Stage 3 assemblages from Location 1 (AiHc-500) indicates that the occupants of the site were largely relying on a single source of raw material.

Furthermore, due to the size of the Stage 3 assemblage all pieces of chipping detritus were subject to morphological analysis following the classification scheme described by Lennox *et al.* (1986:79-81) and expanded upon by Fisher (1997: 41-49). Flake types identified during the morphological analysis of the Stage 3 chipping detritus assemblage from Location 1 (AiHc-500) include primary, secondary, and thinning flakes. Primary and secondary 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 unflaked area, on their dorsal surfaces and proximal ends. For primary flakes, cortex makes up less than half of the dorsal surface, while secondary flakes may not contain any. Thinning flakes are produced during the latter stages of reduction when raw material blanks are shaped into preforms and formal tools. They are the result of precise flake removal through pressure flaking, where the maker applies direct pressure onto a specific part of the tool in order to facilitate flake removal. Pressure flaking generally produces smaller, thinner flakes than does percussion flaking. Thinning flakes also exhibit more flake scars on their dorsal surface than do primary or secondary flakes. Fragmentary flakes are flakes that may have some identifiable flake characteristic, but cannot be classified with certainty into a specific category.

Stage 3 Archaeological Assessment, Location 1 (AiHc-500)

Chert Type	Primary		Secondary		Thinning		Fragment		Total Analyzed	
	n	%	n	%	n	%	n	%	n	%
Onondaga	1	1.19	50	59.52	32	38.10	1	1.19	84	100.00

According to the morphological analysis presented above, secondary and thinning flakes were encountered most often during the Stage 3 assessment (97.6%). A single primary flake and a single fragmentary flake were also observed. Combined, the Stage 2 and 3 assessments of the site produced almost exclusively secondary and thinning/micro flakes (n=95.8%), suggesting that late stage lithic reduction activities were actively undertaken at the site for the production and maintenance of formal tools and projectile points. The single primary flake in the Stage 2 assemblage suggests that limited early stage lithic reduction may also have occurred at the site, but this flake represents less than 1% of the combined Stage 2 and Stage 3 assemblages.

3.2.2 Artifact Distribution and Settlement Pattern

The CSP of Location 1 (AiHc-500) resulted in the documentation of 11 pieces of Onondaga chert debitage scattered across an area of approximately 26m by 17m. The subsequent Stage 3 test unit excavation produced an additional 73 Onondaga chert flakes from 18 test units. Artifact yields ranged among the test units from 0 to 12, with the highest counts occurring in the centre of the site in the vicinity of the highest density of Stage 2 and Stage 3 surface artifacts. Artifact yields among the edge units ranged from 0 to 4, with only two units producing more than two artifacts. No subsurface cultural features, Aboriginal ceramics, or fire cracked rock were observed anywhere on the site.

Given the lack of features, formal tools, or diagnostic artifacts, it is difficult to define the site as more than a small activity area occupied seasonally by pre-contact Aboriginal people and characterized by late stage lithic reduction.

3.2.3 Artifact Catalogue

The complete Stage 3 artifact catalogue from Location 1 (AiHc-500) is provided in Appendix 1 below.

4.0 Analysis and Conclusions

Detritus was retained by the Proponent to conduct a Stage 3 archaeological assessment for archaeological site Location 1 (AgGt-257) in advance of the proposed Whistle Bare Campground development at 1898 Whistle Bare Road, in North Dumfries.

Location 1 (AiHc-500) was one of four archeological sites and four findspots documented during a Stage 1-2 of the Study Area, conducted by Detritus between June 4 and September 11, 2019. It was identified during the pedestrian survey of the large field occupying the southwest quadrant of the Study Area. The Stage 2 assessment of the site resulted in the documentation of 38 pre-contact Aboriginal artifacts scattered across an area of approximately 30m north-south by 22m east-west at the north end of the field, adjacent to the Whistle Bare Campground to the north. Location 2 (AiHc-501) and Findspot 2 were also documented in the vicinity of Location 1 (AiHc-500); Findspot 1 was observed in the same field, approximately 165m to the south of the site. Location 3, Findspot 3 (AiHc-502) and Findspot 4 were documented at the northern end of the southeastern field. All seven of these sites and findspots produced pre-contact Aboriginal artifacts. Location 4 (AiHc-503), the only Euro-Canadian site observed within the Study Area, was discovered during the test pit survey of the lawn area to the south and southeast of the one-storey house.

The Stage 3 assessment of Location 1 (AiHc-500) was conducted on October 24 and November 8, 2019. This investigation resulted in the recovery of 84 pre-contact Aboriginal artifacts from a CSP and the hand excavation of 18 test units. Artifact yields ranged from 0 to 12 with the highest count occurring in the centre of the site in the area of greatest surface artifact density during the Stage 2 and 3 surface collections. All of the artifacts within the Stage 3 assemblage were identified as pieces of chipping detritus manufactured from Onondaga chert.

Morphological analysis of the Stage 3 flake assemblage suggests that late stage lithic reduction was the primary activity undertaken at the site for the production and maintenance of formal tools and projectile points. This conclusion is supported by the two bifacial tools within the Stage 2 assemblage, both of which resemble broken projectile points, and the unifacial tool, which may have been retouched and utilised a scraper. A single primary flake in the Stage 3 assemblage may indicate that limited early stage lithic reduction also occurred the site. No formal tools, diagnostic material, Aboriginal ceramics, or fire cracked rock were recovered during any stage of assessment, nor were any subsurface features observed.

Given all the available evidence, Location 1 (AiHc-500) has been interpreted as a medium sized activity area occupied seasonally by pre-contact Aboriginal people and characterized by late stage lithic reduction for the production and maintenance of formal tools and projectile points. The additional sites and findspots documented in the vicinity during the Stage 2 assessment suggests that Location 1 (AiHc-500) occupied an area of significant activity during the pre-contact period. The only diagnostic artifact among these sites was the fragmentary projectile point recovered from Location 2 (AiHc-501). The specimen was fragmentary, but was reminiscent of Meadowood points from the Early Woodland period. Looking farther afield, 14 additional pre-contact sites spanning the Paleo-Indian through Late Woodland periods were documented within 1km of the site. This evidence suggests that Location 1 (AiHc-500) was one of many smaller activity areas occupied seasonally throughout the Paleo-Indian and Archaic Periods, in an area that would become one of more permanent occupation during the Woodland period.

5.0 Recommendations

Based on the results of the Stage 3 assessment, wherein three test units yielded ten or more artifacts, Location 1 (AiHc-500) fulfills the criteria for a Stage 4 mitigation of impacts, as per Section 3.4.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011) and retains further CHVI. **A Stage 4 archaeological mitigation of impacts is recommended at Location 1 (AiHc-500).**

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

In consultation with the Proponent, the Stage 4 mitigation of Location 1 (AiHc-500) by avoidance and protection is not a viable option. As such, a Stage 4 mitigation by hand excavation is recommended at the site, conducted according to Sections 4.2.1 and 4.2.2 of the *Standards and Guidelines* (Government of Ontario 2011a). This investigation will consist of a hand excavated block of 1m units surrounding the highest yielding Stage 3 test units at the site. The extent of the excavation block will be determined according to Section 4.3, Table 4.1 of the *Standards and Guidelines* (Government of Ontario 2011).

Soil from the Stage 4 units will be screened through 6mm hardware cloth to facilitate the recovery of any small artifacts that may be present. All artifacts will be bagged and tagged by provenience. The exposed subsoil surface across the excavation block will be cleaned by shovel or trowel and examined for cultural features. If any subsurface cultural features are encountered, they will be recorded and excavated by hand in accordance with Section 4.2.2, Standard 7 of the *Standards and Guidelines* (Government of Ontario 2011). Block excavation will continue to 2m beyond any cultural feature identified in accordance with Section 4.2.2, Standard 7c of the *Standards and Guidelines* (Government of Ontario 2011).

6.0 Advice on Compliance with Legislation

This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 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 Tourism, Culture and Sport, 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 archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of 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 Consumer Services.

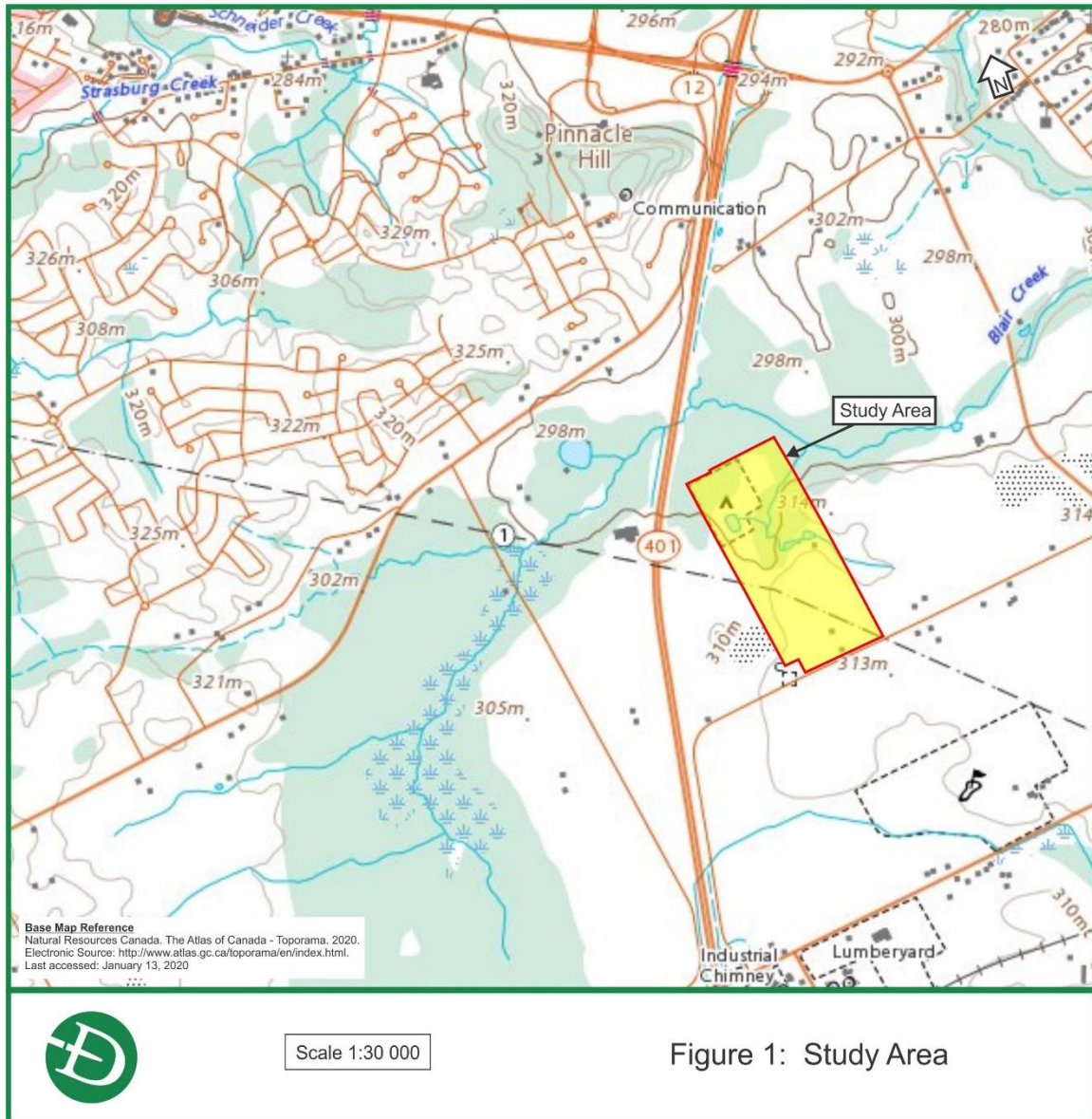
Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

7.0 Bibliography and Sources

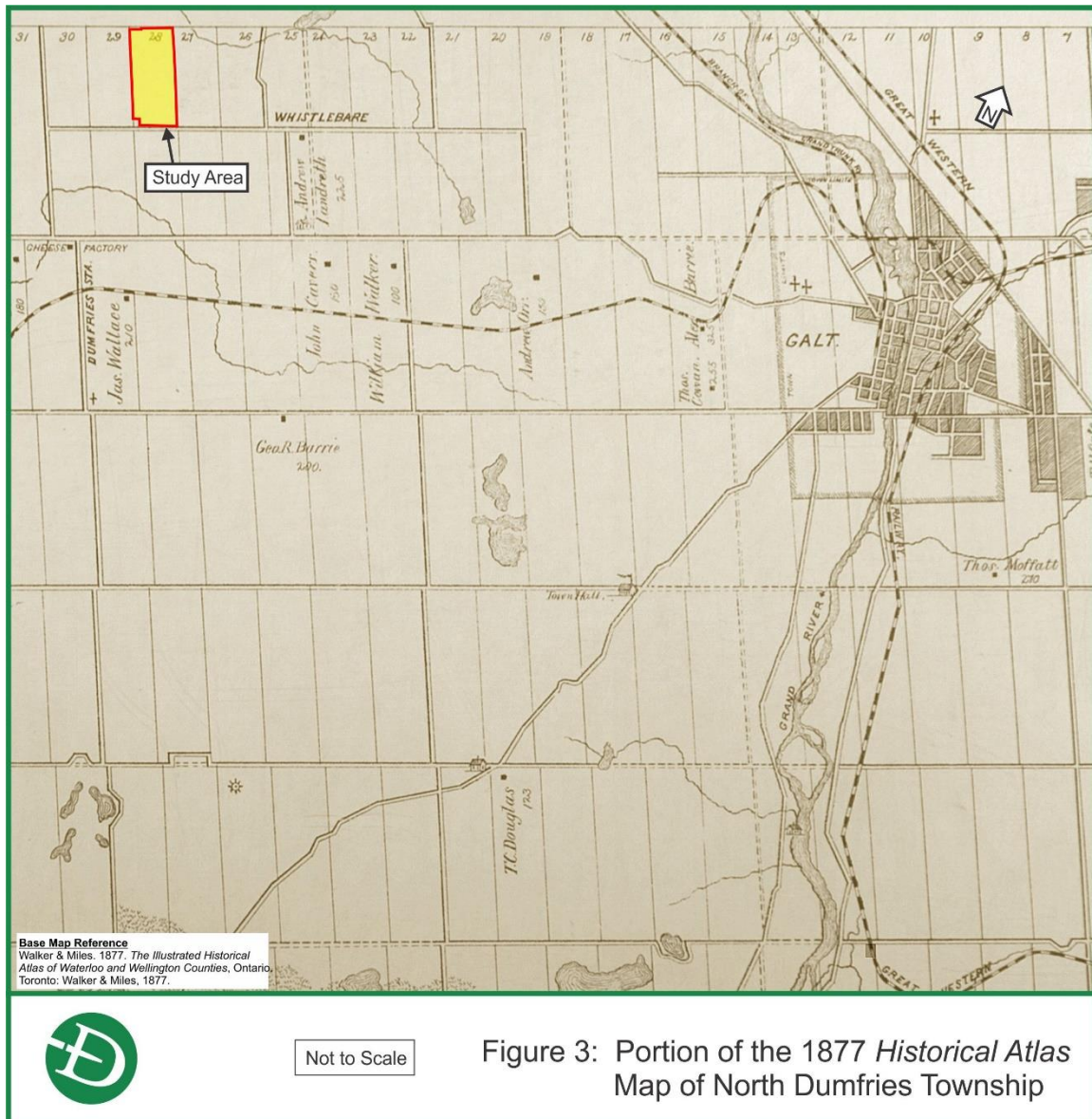
- Archives of Ontario. 2009. *The Evolution of the District and County System, 1788-1899*.
Electronic document: <http://www.archives.gov.on.ca/en/maps/ontario-districts.aspx>. Last accessed February 10, 2020.
- Byerly, A.E. 1935. *The Beginning of Things in Wellington and Waterloo Counties*. Guelph: Guelph Publishing Company.
- Caston, Wayne A. 1997. Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History* 10:91-106.
- Chapman, L.J. and D.F. Putnam. 1984. *The Physiography of Southern Ontario*. Ontario Geological Survey. Special Volume 2 (third edition). Toronto: Ontario Ministry of Natural Resources.
- Coyne, J. H. 1895. *The Country of the Neutrals (As Far as Comprised in the County of Elgin): From Champlain to Talbot*. St. Thomas: Times Print.
- Dean, W.G. (editor). 1969. *Economic Atlas of Ontario*. Toronto: University of Toronto Press.
- Detritus. 2020. *Stage 3 Archaeological Assessment, Location 1 (AiHc-500), Whistle Bare Campground, 1898 Whistle Bare Road, Part of Lot 28, Concession 12, Geographic Township of North Dumfries, Historical Waterloo County, now Region of Waterloo*. Report currently under review with the MHSTCI.
- Eley, Betty, and Peter H. von Bitter. 1989. *Cherts of Southern Ontario*. Toronto: Royal Ontario Museum.
- Ellis, Chris J. and Neal Ferris (editors). 1990. *The Archaeology of Southern Ontario to A.D. 1650. Occasional Papers, Number 5*. London: London Chapter, Ontario Archaeological Society, Number 5.
- Feest, Johanna E. and Christian F. Feest. 1978. In Trigger, B.G. ed *The Ottawa. In Handbook of North American Indians. Vol.15 Northeast*, pp. 772-786. Washington: Smithsonian Institute.
- Ferris, Neal. 2009. *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. Tucson: University of Arizona Press.
- Fisher, Jacqueline A. 1997. *The Adder Orchard Site: Lithic Technology and Spatial Organization in the Broadpoint Late Archaic. Occasional Publications Number 3, 1997*. London: London Chapter, Ontario Archaeological Society.
- Gentilcore, R. Louis and C. Grant Head. 1984. *Ontario's History in Maps*. Toronto: University of Toronto Press.
- Government of Ontario. 1990a. *Ontario Planning Act, R.S.O. 1990, CHAPTER P.13*. Last amendment: 2019, c. 15, Sched. 31. Electronic documents <https://www.ontario.ca/laws/statute/90p13>. Last accessed February 10, 2020.
- Government of Ontario. 1990b. *Ontario Heritage Act, R.S.O. 1990, CHAPTER O.18*. Last amendment: 2019, c. 9, Sched. 11. Electronic document: <https://www.ontario.ca/laws/statute/90o18>. Last accessed February 10, 2020.
- Government of Ontario. 1990c. *Freedom of Information and Protection of Privacy Act, R.S.O. 1990, CHAPTER F.31*. Last amendment: 2019, c. 7, Sched. 60, s. 9. Electronic document: <https://www.ontario.ca/laws/statute/90f31>. Last accessed February 10, 2020.
- Government of Ontario. 2011a. *Standards and Guidelines for Consultant Archaeologists*. Toronto: MHSTCI.
- Government of Ontario. n.d. *Archaeological Sites Database Files*. Toronto: Culture Services Unit, MHSTCI.

- Konrad, Victor. 1981. An Iroquois Frontier: The North Shore of Lake Ontario during the Late Seventeenth Century. *Journal of Historical Geography* 7(2):129-144.
- Lennox, P., C. Dodd and C. Murphy. 1986. *The Wiacek Site: A Late Middleport Component, Simcoe County*. London: Ontario Ministry of Transportation and Communications.
- McAndrews, J.H. and G.C. Manville. 1987. *Historical Atlas of Canada: Volume 1. From the Beginning to 1800*. Toronto: University of Toronto Press.
- Morris, J.L. 1943. *Indians of Ontario*. 1964 reprint. Toronto: Department of Lands and Forests, Government of Ontario.
- Moyer, Bill. 1971. *This Unique Heritage: The Story of Waterloo County*. Kitchener: Radio Station CHYM.
- Ontario Agricultural Commission. 1881. *Appendix B. Vol. II*. Toronto: C. Blackett Robinson.
- Page, H.R. & Co. 1879 *Illustrated Historical Atlas of the County of Haldimand, Ontario*. Toronto: H.R. Page & Co.
- Pendergast, James. 1995. The Identity of Jacques Cartier's Stadaconans and Hochelagans: The Huron-Iroquois Option. In Bekerman, André and Gary Warrick (editors), *Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeological Society*, pp. 106-118. North York: Ontario Archaeological Society.
- Praxis Research Associates. n.d. *The History of the Mississaugas of the New Credit First Nation. Hagersville: Lands, Research and Membership, Mississaugas of the New Credit First Nation*.
- Schmalz, Peter S. 1991. *The Ojibwa of Southern Ontario*. Toronto: University of Toronto Press.
- Tanner, Helen (editor). 1987. *Atlas of Great Lakes Indian History*. Norman: University of Oklahoma Press.
- Taylor, Andrew W. 1970. *Our Today's and Yesterdays: A History of the Township of North Dumfries and The Village of Ayr*. Galt: North Dumfries and Ayr Centennial Committee.
- Walker & Miles. 1877. *Illustrated Historical Atlas of the County of Waterloo, Ont.* Toronto: Walker & Miles Co.
- Waterloo Regional Museum. 2018. *North Dumfries Township*. Electronic document: <http://www.waterlooregionmuseum.ca/en/collections-and-research/north-dumfries-township.aspx>. Last accessed January 16, 2020.
- Weaver, Sally. 1978. Six Nations of the Grand River, Ontario. In Trigger, B.G. (editor), *Handbook of North American Indians. Volume 15: Northeast*, pp. 525-536. Washington: Smithsonian Institution Press.

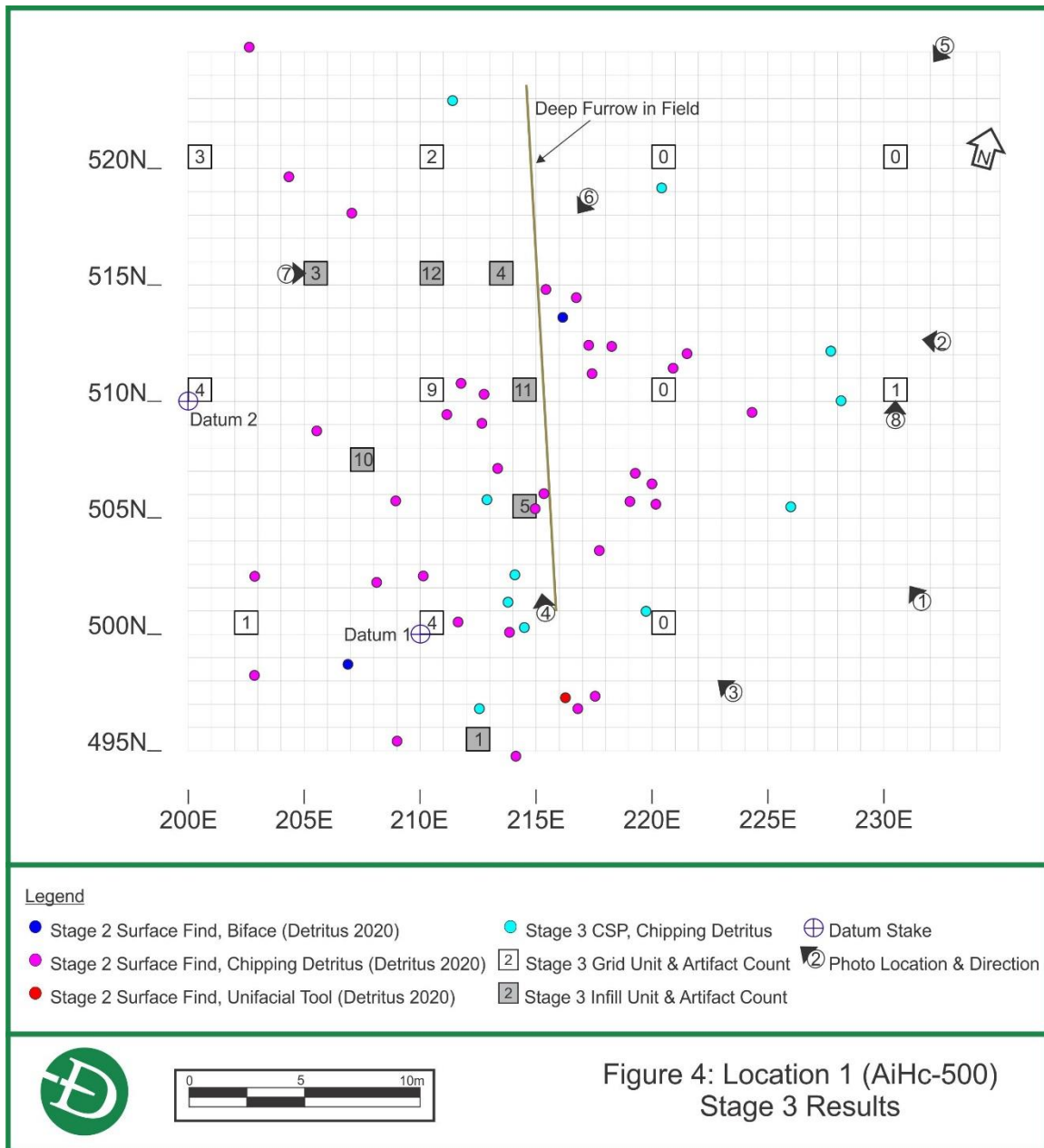
8.0 Maps







Stage 3 Archaeological Assessment, Location 1 (AiHc-500)



9.0 Images

9.1 Photos

Photo 1: Stage 3 CSP, facing northwest



Photo 2: Stage 3 CSP, facing west



Photo 3: Stage 3 Test Unit Excavation, facing west



Photo 4: Stage 3 Test Unit Excavation, facing northwest



Photo 5: Stage 3 Test Unit Excavation, facing south



Photo 6: Stage 3 Test Unit Excavation, facing south



Photo 7: Test Unit 205E, 515N, facing grid east



Photo 8: Test Unit 230E, 510N, facing grid north



9.2 Artifacts

Plate 1: Sample of Chipping Detritus from Location 1 (AiHc-500)



10.0 Appendix

10.1 Location 1 Stage 3 Artifact Catalogue

Cat #	Context	Easting	Northing	Unit Depth	Artifact	Frequency	Morphology	Chert
1	CSP 1				chipping detritus	1	secondary	Onondaga
2	CSP 2				chipping detritus	1	secondary	Onondaga
3	CSP 3				chipping detritus	1	secondary	Onondaga
4	CSP 4				chipping detritus	1	secondary	Onondaga
5	CSP 5				chipping detritus	1	secondary	Onondaga
6	CSP 6				chipping detritus	1	tool thinning	Onondaga
7	CSP 7				chipping detritus	1	secondary	Onondaga
8	CSP 8				chipping detritus	1	secondary	Onondaga
9	CSP 9				chipping detritus	1	secondary	Onondaga
10	CSP 10				chipping detritus	1	thinning	Onondaga
11	CSP 11				chipping detritus	1	thinning	Onondaga
12		207	507	30	chipping detritus	1	primary	Onondaga
13		207	507	30	chipping detritus	2	secondary	Onondaga
14		207	507	30	chipping detritus	7	thinning	Onondaga
15		210	500	29	chipping detritus	4	thinning	Onondaga
16		212	495	33	chipping detritus	1	thinning	Onondaga
17		202	500	30	chipping detritus	1	thinning	Onondaga
18		200	510	32	chipping detritus	4	thinning	Onondaga
19		215	510	13	chipping detritus	3	secondary	Onondaga
20		215	510	13	chipping detritus	1	tool thinning	Onondaga
21		210	520	26	chipping detritus	1	secondary	Onondaga
22		210	520	23	chipping detritus	1	tool thinning	Onondaga
23		230	510	27	chipping detritus	1	tool thinning	Onondaga
24		213	515	27	chipping detritus	1	secondary	Onondaga
25		213	515	27	chipping detritus	3	tool thinning	Onondaga
26		214	505	31	chipping detritus	3	secondary	Onondaga
27		214	505	31	chipping detritus	2	tool thinning	Onondaga
28		205	515	22	chipping detritus	1	fragment	Onondaga
29		205	515	22	chipping detritus	2	tool thinning	Onondaga
30		214	510	28	chipping detritus	3	secondary	Onondaga
31		214	510	28	chipping detritus	8	tool thinning	Onondaga
32		205	515	27	chipping detritus	1	secondary	Onondaga
33		205	515	27	chipping detritus	1	tool thinning	Onondaga
34		210	510	21	chipping detritus	5	secondary	Onondaga
35		210	510	21	chipping detritus	4	tool thinning	Onondaga
36		210	515	29	chipping detritus	4	secondary	Onondaga
37		210	515	29	chipping detritus	8	tool thinning	Onondaga