Stage 3 Archaeological Assessment
H1 (AfGv-174)
7253 Rainham Road

Part of Lot 15, Concession 1 North of Road,
Part of Lot 15 Concession 1 South of Road and
Part of Rainham Road Allowance,
Geographic Township of Dunn,
Haldimand County

Submitted to:
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and

Ontario's Ministry of Heritage, Sport, Tourism and Culture Industries

Submitted by:

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ORIGINAL REPORT

December 6, 2019

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Robert Lucchetta of Lucchetta Homes ('the Proponent') to conduct a Stage 3 archaeological assessment at archaeological site H1 (AfGv-174), which spans portions of Lot 15, Concession 1 North of Road; Lot 15, Concession 1 South of Road; and part of Rainham Road Allowance within the Geographic Township of Dunn and historical Haldimand County, Ontario (Figure 1 and Tile 1 of the Supplementary Documentation). This investigation was undertaken in advance of a proposed 13 lot residential development at 7253 Rainham Road, in Dunnville (the 'Study Area'; Figure 5).

The investigation 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 H1 (AfGv-174) under archaeological consulting license P389 issued to Dr. Walter McCall by the Ministry of Heritage, Sport, Tourism and Culture 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).

H1 (AfGv-174) was identified during a Stage 1-2 assessment of the Study Area, conducted by Detritus in December 2018 and April 2019 (PIF# P389-0409-2018; Detritus 2019). The Study Area is an irregularly shaped parcel measuring approximately 3.8 hectares, located on the north side of Rainham Road, to the south and west of the Haldimand Trail (Figure 2). At the time of the assessment, most of the Study Area comprised a large agricultural field. The south end of the property was occupied by a house, barn, silo and several sheds along with gravel and asphalt laneways and parking areas. These 20th century structures and surfaces were surrounded by manicured lawn and overgrown grass, with mature trees throughout.

Based on the results of the Stage 1 background research, portions of the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. A Stage 2 assessment was recommended. This investigation consisted of a typical test pit survey of the grassy areas at the southern end of the Study Area, and a typical pedestrian survey of the large agricultural field (Figure 2). H1 (AfGv-174) was the only site documented during this investigation (Tile 2 of the Supplementary Documentation).

The Stage 2 assessment of the site yielded 665 Euro-Canadian artifacts covering an area of approximately 55 metres (m) by 90m in both the grassy lawn area to the east of the existing house, and the adjacent field beyond. Based on the analysis of these artifacts, H1 (AfGv-174) was interpreted as a middle to late 19th century domestic scatter associated with the occupancy of W. J. Aitken, who is illustrated as the landowner on the 1879 *Illustrated Historical Atlas of the County of Haldimand, Ont*. (Page & Co. 1879). The site was recommended for Stage 3 assessment.

The Stage 3 assessment of H1 (AgGs-410) was conducted between May 21 and June 26, 2019 under archaeological consulting license P389 issued to Dr. Walter McCall by the MHSTCI. This investigation resulted in the recovery of 5,338 primarily Euro-Canadian artifacts from the hand excavation of 51 Stage 3 test units; ten pre-contact Aboriginal were also represented in the artifact assemblage, including eight pieces of chipping detritus, one biface, and one preform. No Aboriginal pottery or fire cracked rock were observed (Figure 4).

Just under half of the artifacts within the assemblage were household artifacts, although these numbers were inflated by the high volume of glass bottle pieces. The majority of these specimens were clear and machine manufactured, suggestive of a late 19th to early 20th century occupation. Most of the remaining 243 household artifacts were faunal remains. Combined, glass bottle fragments and faunal remains comprised 99.5% of the household artifacts recovered during the Stage 3 investigation.

This period of occupation is supported also by the ceramic assemblage. Almost two thirds of the ceramic pieces recovered during the Stage 3 investigation were identified as refined white earthenware ('RWE'). Ironstone, porcelain, and various utilitarian wares were also represented in the ceramic assemblage; the remainder comprised ten sherds of yellowware. Most of these pieces were undecorated. Blue patterns were encountered most often among the decorated pieces, although many examples of late 19th century Late Palette colours were also present.

Three edged RWE sherds within the assemblage demonstrated evidence of early 19th century manufacture. These sherds, however, represent only 0.22% of the ceramic total and are considered to be heirloom items, particularly when compared to the 81 artifacts within the artifact assemblage as a whole that date to the 20th century.

Two Euro-Canadian activity areas were identified in all. The first was observed among the test units excavated in the lawn area to the east of the existing house, generally bound by rows of bushes to the north and south. Two cultural features were observed among these units, including a portion of a rubble stone foundation wall in the southwestern corner 190E, 325N. Although fragmentary, this wall portion appears to be the northeast corner of a larger structure. No additional wall remains were observed anywhere else on site.

Unit 180E, 325N, meanwhile, featured an irregularly shaped surface stain in its southern half. This unit produced 359 artifacts, including two pieces of chipping detritus. Unlike the assemblage as a whole, almost one third of the Euro-Canadian finds from this unit were structural. Just under half of the nails were wire drawn, and the rest were machine cut. Over two thirds of the window glass, meanwhile, was thick. None of the brick fragments were handmade. Household artifacts were also well represented in the unit. Most of these items, however, were clear machine manufactured bottle glass sherds. This deposit, when considering also the 38 pieces of miscellaneous metal and 35 items that date to the 20th century that were also recovered from Unit 180E, 325N, resembles a late 19th to early 20th century refuse deposit mixed with middle to late 19th century demolition material.

The same observation may be made for Unit 185E, 330N, to the north. Although no cultural features or in tact architecture were observed, this unit produced 374 Euro-Canadian artifacts and a single pre-contact Aboriginal bifacial tool. Once again, the Euro-Canadian artifacts were dominated by structural remains, with a similar proportion of wire drawn nails to cut nails. Likewise, a similar proportion of household artifacts were observed in the assemblage from this unit. Most of the remaining artifacts within the assemblage from Unit 185E, 330N were late 19th and early 20th century ceramic sherds, although ten artifacts classified as either miscellaneous metal or recent 20th century material were also recovered. This evidence suggests that the entire activity area represented the remains of a 19th century structure, which was demolished sometime in the early 20th century.

A second activity area was observed in the agricultural field to the northeast of this early building, centred on the two highest yielding test units at the site located at 335N and 340N along the 200E gridline. These two units produced 943 and 923 Euro-Canadian artifacts respectively. Collectively, these two units yielded 35.0% of the entire Stage 3 assemblage. Unlike the activity area to the southwest, however, these artifacts were dominated by bottle glass, the majority of which were clear and machine manufactured. Ceramic sherds were also well represented among the two highest yielding units. Conversely, only 17% of the artifacts from these two units were structural artifacts. Furthermore, only 37 additional household or personal items were recovered, representing under 2% of the entire assemblage.

Given the very high percentage of broken bottle and ceramic dish pieces within the two units, the activity area centred on test units 335N, 200E and 340N, 200E has been interpreted as a large refuse deposit dating from the late 19th to early 20th century. This period of occupation suggests that this material was deposited during the occupancy of the building to the southwest, or immediately following its demolition.

Finally, an isolated high yielding Stage 3 unit producing 307 artifacts was observed at 175E, 340N, along the western edge of the site, between a line of bushes to the east and the gravel laneway to the west. Given the location of this unit, these artifacts are thought to represent material

associated with the middle 19th to early 20th century occupation of the site, deposited following the abandonment and demolition of the structure.

Based on the results of the Stage 3 assessment, the Euro-Canadian component of H1 (AfGv-174) has been interpreted as a middle to late 19th to early 20th century homestead with two activity areas associated with the tenure of W. J. Aikens. Given an absence of black, fatty soil anywhere on site, as well as a dearth of faunal remains, personal artifacts, or artifacts related to food production within the artifact assemblage, no midden areas were identified.

This occupation range does not trigger a mitigation of developmental impacts according to Section 3.4, Standard 1f, or Section 3.4.2, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011). Given the presence of early and middle 19th century material within the Stages 2 and 3 assemblages, however, it is currently unknown if an earlier occupation is represented at the site, and if this earlier occupation is associated with the observed wall foundation in Unit 190E, 325N.

Given the potential for material culture dating to the first generation of settlement in Dunn Township, H1 (AfGv-174) fulfills the criteria for a Stage 4 mitigation of impacts, as per Section 3.4.2, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011) and retains further CHVI. **A Stage 4 archaeological mitigation of impacts to the site is recommended.** For the complete recommendations, see Section 5.0 below.

Finally, the pre-contact Aboriginal component comprised eight pieces of pre-contact Aboriginal chipping detritus, one biface, and one preform from six units scattered throughout the site. These lithic artifacts comprise 0.19% of the Stage 3 assemblage and are not considered to represent an earlier, pre-contact occupation of the site. Instead they are thought to bear witness to the communities that were active throughout the region prior to European settlement, as evidenced by the 21 pre-contact Aboriginal sites registered within 1km of H1 (AfGv-174).

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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Acknowledgments

Generous contributions by the following individuals and agencies made this report possible.

- Mr. Robert Lucchetta of Lucchetta Homes

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Robert Lucchetta of Lucchetta Homes ('the Proponent') to conduct a Stage 3 archaeological assessment at archaeological site H1 (AfGv-174), which spans portions of Lot 15, Concession 1 North of Road; Lot 15, Concession 1 South of Road; and part of Rainham Road Allowance within the Geographic Township of Dunn and historical Haldimand County, Ontario. This investigation was undertaken in advance of a proposed 13 lot residential development at 7253 Rainham Road, in Dunnville (the 'Study Area'; Figure 5).

The investigation 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 H1 (AfGv-174) under archaeological consulting license P389 issued to Dr. Walter McCall by the Ministry of Heritage, Sport, Tourism and Culture 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 a 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 at H1 (AfGv-174) are:

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

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 earliest recorded history of Haldimand County began in 1626, when French Recollet Father Daillon travelled the entire length of the Grand River and documented 28 Neutral villages in the area (Harper 1950; White 1978). In Haldimand County, a dozen possible Neutral sites were identified along the Lower Grand River in the general location of a possible Neutral community known as the Antouaronon (White 1978; cf. Poulton *et al*. 1996). In 1647, the Seneca attacked one eastern group of the Neutral (White 1978); by 1653, the Neutral had been assimilated by the Five Nations (Jamieson 1992; Noble 1978). The Five Nations relinquished the Niagara Peninsula and northern Lake Ontario area before 1700.

The late 17th and early 18th centuries represent a turning point in the evolution of the post-contact Aboriginal occupation of southern Ontario. It was at this time that 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).

In 1722, the Five Nations adopted the Tuscarora in New York becoming the Six Nations (Pendergast 1995). 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 (Weaver 1978). 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 (Weaver 1978). 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; Weaver 1978).

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; Tanner 1987; Weaver 1978). Following the population decline and the surrender of most of their lands along the Credit River, the Mississaugas were given 6,000 acres of land on the Six Nations Reserve, establishing the Mississaugas of the New Credit First Nation in 1847 (now the Mississaugas of the Credit First Nation ('MCFN'; Smith 2002).

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

H1 (AfGv-174) is located within the Geographic Township of Dunn, Haldimand County, Ontario. The history of this area began on July 24, 1788, when 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 former 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).

In July 1792, Simcoe divided Upper Canada into 19 counties 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. H1 (AfGv-174) is situated in the

historic Home District, which comprised lands obtained in the 'Between the Lakes Purchases' of 1784 and 1792 (Archives of Ontario 2009).

As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships. As part of this realignment, the boundaries of the Home and Western Districts were shifted and the London and Niagara Districts were established. Under this new territorial arrangement, the Study Area became part of Haldimand County within the Niagara District. Haldimand County was named after Sir Frederick Haldimand, who had served as the Governor of the Province of Québec from 1777 to 1789. The original county lands stretched from the mouth of the Grand River to the southern limits of the Township of Dumfries (Archives of Ontario 2009).

European settlement began in Haldimand County in 1784, starting with the land fronting Lake Erie. Most of the county at the time was an unbroken forest, punctuated by large areas of swamp with very few roads. Settlement inland was limited to localities accessible by boat along the banks of the Grand River and Oswego Creek. When the first survey of Haldimand County was completed by Thomas Walsh in 1798, much of the inland areas of Haldimand County remained sparsely populated. The population of Haldimand County began to grow after the War of 1812 and the establishment of a Naval Depot at the mouth of the Grand River. Many of the earliest immigrants here were of German descent, although additional settlers arrived from England, Ireland, and Scotland. The boundaries of Haldimand County remained constant until 1816, at which time the northernmost townships were incorporated into to the newly-formed Wentworth County in the Gore District. In 1826, the county was enlarged through the addition of Walpole and Rainham Townships from Norfolk County in the southwest (Page & Co 1879).

The aforementioned treaty concluded between Six Nations and the Crown in 1832 allowed for most of the remaining lands within the Haldimand Tract to be made available Euro-Canadian settlement, excluding Tuscarora Township and a small portion of Oneida Township (Page & Co 1879). In 1833, the Grand River Navigation Company initiated improvements along the Grand River between Brantford and Indiana resulting in local population growth as company employees settled along the river banks. Inland, infrastructural improvements followed shortly afterwards, including the establishment Talbot Road between 1834 and 1840 and the Hamilton & Port Dover Plank Road between 1839 and 1843 (Page & Co 1879).

The latter half of the 19th century witnessed vast improvements in transportation and shipping through the establishment of railways such as the Buffalo, Brantford & Goderich Railway (later incorporated by the Grand Trunk Railway) in 1852 as well as the Great Western Loop Line and the Canada Southern Railway in 1870. The Hamilton & Lake Erie Railway (later amalgamated with the Hamilton & North Western Railway) followed in 1878, linking Haldimand County to Barrie on Lake Simcoe (Page & Co 1879)

In 1841, Haldimand County became part of Canada West in the new United Province of Canada. Four years later, the Townships of Oneida and Seneca were transferred to Wentworth County and the Townships of Walpole and Rainham were returned to Norfolk County. Following the abolition of the district system in 1849, the counties of Canada West were reconfigured once again. Many of the former townships of Haldimand County were restored, and the county emerged as an independent municipality. From this point onwards, Haldimand County consisted of the Townships of Walpole, Oneida, Seneca, North Cayuga, South Cayuga, Rainham, Canborough, Moulton, Dunn and Sherbrooke (Page & Co 1879).

Dunn Township was open for settlement in 1833 and was organized as a municipality in 1850. At that time Colonel A.P. Farrell, the first settler of the township, was elected Reeve. Early settlers were English and Irish gentlemen who worked hard to clearing the land, working the ground and building their homes. By 1845 1,500 acres were under cultivation and by 1850 it had grown to 7000 (Cowell 1967). The early community of Byng, which is located to the east of H1 (AfGv-174), was known originally as the Village of Haldimand. At one time it had two or three taverns, two stores, a blacksmith, a cider mill, a grist mill and had a population of approximately 150 (Cowell 1967).

The *Illustrated Historical Atlas of the County of Haldimand, Ont. ('Historical Atlas')*, demonstrates the extent to which Dunn Township had been settled by 1879 (Page & Co 1879;

Figure 3). Landowners are listed for a large majority of the lots within the township, many of which had been subdivided multiple times into smaller parcels to accommodate an increasing population throughout the late 19th century. Structures and orchards are prevalent throughout the township, almost all of which front early roads.

According to current lot designations, H1 (AfGv-174) spans parts of Lot 15, Concession 1 North of Road; part of Lot 15 Concession 1 South of Road; and part of Rainham Road Allowance. These lot designations, however, are based on the original road and lot arrangement in the township, established in the 1830s. By 1865 various lands within Dunn Township had been resurveyed, including the lots in the vicinity of the Study Area. According to *Historical Atlas* map of Dunn Township, under this new arrangement the site was located entirely on Lot 29 in the Haldimand Tract. Prior to this lot and road realignment, Rainham Road continued on its angled course to the Grand River, cutting across the southeast corner of Lot 29. This road allowance divided Lot 15, Concession 1 North of Road from Lot 15, Concession 1 South of Road. Additionally, the lots south of the Village of Haldimand Byng were realigned, although many of the original lot borders are still visible in the form of field breaks. It is unknown when these original lots and concessions were reintroduced.

According to the *Historical Atlas*, in 1879 all of Lot 29, Haldimand Tract was owned by W.J. Aikens, along with additional land to the west. A single structure and orchard are visible in the southeast corner of the lot, on a portion of the property that has since been severed from 7253 Rainham Road. It should be recognised, however, that although significant and detailed landowner information is available on the current *Historical Atlas*, historical county atlases were funded by subscriptions 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).

1.2.3 Land Registry Record

According to the Land Registry Records for Dunn Township (Government of Ontario 2019), the Crown Patent for the originally designated Lot 15, Concession 1 South of Road and Lot 15, Concession 1 North of Road were granted to Samuel Street on September 23, 1835. The first instrument of the newly surveyed Lot 29 in the Haldimand Tract took place on September 7, 1865; however, the grantor and grantee names are illegible. On September 10th 1866, the lot was granted to John Aikens; the majority of the grantor's names, however are illegible save for that of Thomas Clark Street. In 1879, John Aikens' will granted the lot to William John Aikens, whom is listed as the owner on the 1879 *Historical Atlas* map of Dunn Township. In 1886 William John Aikens released the lot to Her Majesty the Queen. Two transactions took place between 1932 and 1939, however, they are crossed out. In 1940 a supplemental indenture took place and the Western Ontario Natural Gas Co. Ltd. granted the lot to Montreal Trust Co.

Various people or companies owned the lot through the early 20th century including, the Western Ontario Natural Gas Co. Ltd., Peter Inglis, Ralph E. Still.

1.2.4 Recent Reports

H1 (AfGv-174) was discovered during a Stage 1-2 assessment of the Study Area, conducted by Detritus in December 2018 and in April 2019 (PIF# P389-0409-2018). The results of this investigation have been documented in the following assessment report;

> *Stage 1-2 Archaeological Assessment 7253 Rainham Road Part of Lot 15, Concession 1 North of Road, Part of Lot 15 Concession 1 South of Road and Part of Rainham Road Allowance, Geographic Township of Dunn, Haldimand County* (Detritus 2019).

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

H1 (AfGv-174) covers an area of approximately 55 metres (m) by 90m and spans parts of the grassy lawn area to the east of the existing house at 7253 Rainham Road, and the adjacent field beyond. 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 located within Haldimand Clay Plain physiographic region (Chapman and Putnam 1984). During pre-contact and early contact times, this area comprised a mixture of deciduous trees and open areas. In the early 19th century, Euro-Canadian settlers began to clear the forests for agricultural purposes, which have been ongoing in the vicinity of the Study Area for over 100 years.

Haldimand Clay is slowly permeable, imperfectly drained with medium to high water-holding capacities. Surface runoff is usually rapid, but water retention of the clayey soils can cause it to be droughty during dry periods (Kingston and Presant 1989). According to Chapman and Putnam,

> *...although it was all submerged in Lake Warren, the till is not all buried by stratified clay; it comes to the surface generally in low morainic ridges in the north. In fact, there is in that area a confused intermixture of stratified clay and till. The northern part has more relief than the southern part where the typically level lake plains occur.*
>
> Chapman and Putnam 1984:156

Huffman and Dumanski add that the soil within the region is suitable for corn and soy beans in rotation with cereal grains as well as alfalfa and clover (Huffman and Dumanski 1986).

The closest source of potable water is the Grand River, located approximately 292m to the northeast of H1 (AfGv-174).

1.3.2 Pre-Contact Aboriginal Land Use

This portion of southwestern Ontario was 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 Dunn Township, based on Ellis and Ferris (1990).

Table 1: Cultural Chronology for Dunn 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, the registered archaeological site records kept by the MHSTCI were consulted. In Ontario, information concerning archaeological sites stored in the ASDB (Government of Ontario n.d.) 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 13kilometres (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. The Study Area under review is within Borden Block AfGv.

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, 30 archaeological sites have been registered within a 1km radius of the Study Area (Table 2). Of the 30 sites, 21 are pre-contact Aboriginal dating from the Archaic to Woodland periods, one is post-contact Euro-Canadian and one is multi-component. No information was available for the remaining seven sites.

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

Borden Number	Site Name	Time Period	Affinity	Site Type
AfGv-41	-	-	-	-
AfGv-42	MULTITUDE	-	-	-
AfGv-43	BYCON 4	-	-	-
AfGv-44	BYCON 3	-	-	-
AfGv-92	-	Pre-Contact	Aboriginal	scatter
AfGv-93	-	Pre-Contact	Aboriginal	scatter
AfGv-95	-	Pre-Contact	Aboriginal	findspot
AfGv-104	09TS-059-P5	Pre-Contact	Aboriginal	scatter
AfGv-105	AfGv-105 P7-P9	Pre-Contact, Woodland, Late	Aboriginal	scatter
AfGv-106	AfGv-106-P12	Pre-Contact	No artifacts recovered during Stage 3	unknown
AfGv-107	AfGv-107-P13	-	-	-
AfGv-108	AfGv-108-P18	Archaic, Late, Pre-Contact	Aboriginal	scatter
AfGv-109	AfGv-109-P22	-	-	-
AfGv-110	AfGv-110-P26	Pre-Contact	Aboriginal	scatter
AfGv-111	AfGv-111-P28	Woodland, Late	Aboriginal	findspot
AfGv-112	AfGv-112-P31	Pre-Contact		scatter
AfGv-113	AfGv-113-P32	Archaic, Late	Aboriginal	scatter
AfGv-114	AfGv-114-P35	Pre-Contact	Aboriginal	scatter
AfGv-115	AfGv-115-P47	Pre-Contact	Aboriginal	scatter
AfGv-116	AfGv-116-P48	Archaic, Middle		unknown
AfGv-117	AfGv-117-P51	Archaic, Middle	Aboriginal	findspot
AfGv-118	AfGv-118-P79	Woodland, Middle	Aboriginal	findspot

Borden Number	Site Name	Time Period	Affinity	Site Type
AfGv-119	AfGv-119-P83	Post-Contact, Pre-Contact	Aboriginal, Euro-Canadian	dump, scatter
AfGv-120	AfGv-120-P86	-	-	-
AfGv-121	AfGv-121-P23-P25, P38-P43, P45, P46, P58, P60-P76	Archaic, Late	Aboriginal	scatter
AfGv-122	Camby Site	Archaic, Late	Aboriginal	short term
AfGv-123	Dickhout Site	Post-Contact	-	midden
AfGv-155	-	Pre-Contact	Aboriginal	camp / campsite
AfGv-156	-	Archaic, Early	-	findspot
AfGv-157	-	Archaic, Middle	Aboriginal	findspot

To the best of Detritus' knowledge, no other assessments have been conducted and no sites are registered within 50m of the Study Area.

1.3.4 Summary of Previous Investigations

H1 (AfGv-174) was identified during a Stage 1-2 assessment of the Study Area, conducted by Detritus in December 2018 and in April 2019 (PIF# P389-0409-2018; Detritus 2019). The Study Area is an irregularly shaped parcel measuring approximately 3.8 hectares, located on the north side of Rainham Road, to the south and west of the Haldimand Trail. At the time of the assessment, most of the Study Area comprised a large agricultural field. The south end of the property was occupied by an existing house, barn, and silo along with several sheds, gravel and asphalt laneways, and parking areas. These modern structures and surfaces were surrounded by manicured lawn and overgrown grass, with mature trees throughout.

Based on the results of the Stage 1 background research, portions of the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. A Stage 2 assessment was recommended. This investigation consisted of a typical test pit survey of the grassy areas at the southern end of the Study Area, and a typical pedestrian survey of the large agricultural field (Figure 2). H1 (AfGv-174) was the only site documented during this investigation (Tile 2 of the Supplementary Documentation).

The Stage 2 assessment of the site yielded 665 Euro-Canadian artifacts covering an area of approximately 55m by 90m. The Stage 2 assemblage was dominated by household artifacts, most of which are clear bottle glass fragments dating to the late 19th and early 20th century. A large number of ceramics were recovered, including RWE, red earthenware, stoneware, ironstone and porcelain. Twenty-one ceramic sherds were decorated using a number of surface treatments including transfer printing, hand painting, flow transfer printing, and sponging. The ceramic assemblage was determined to be indicative of a middle to late 19th century occupation. Additionally, 19 cut nails, 1 wire nail, and 6 pieces of window glass measuring greater than 1.6 millimetres (mm) supported this middle to late 19th century occupation. Based on the analysis of these artifacts, H1 (AfGv-174) was interpreted as a medium size, middle to late 19th century domestic scatter associated with the occupancy of W. J. Aitken. Given the presence of at least 20 artifacts that dated the period of use to before 1900, H1 (AfGv-174) was determined to meet the criteria for a Stage 3 Site Specific Assessment as per Section 2.2, Standard 1c of the *Standards and Guidelines* (Government of Ontario 2011) and was recommended for Stage 3 assessment.

The existing house, barn, sheds and silo, as well as the various gravel and asphalt laneways and parking areas were evaluated as having no potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources, as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011). These areas of disturbance, as confirmed during a Stage 2 property inspection, conducted according to Section 2.1.8 of the *Standards and Guidelines* (Government of Ontario 2011), were mapped and photographed only.

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 throughout Study Area, focusing on the vicinity of H1 (AfGv-174). 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, when 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.

As was noted above, the closest source of potable water is the Grand River, located approximately 292m to the northeast of H1 (AfGv-174).

Soil texture is also an important determinant of past settlement, usually in combination with other factors such as topography. H1 (AfGv-174) is situated within the Haldimand Clay Plain physiographic region. As was discussed earlier, the soils within this region are suitable for pre-contact and post contact Aboriginal agricultural. Overall, the potential for pre-contact Aboriginal, post-contact Aboriginal material culture within the Study Area is deemed 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 4msettlements; 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* map demonstrates the extent to which Dunn Township had been settled by 1879 (Page & Co 1879; Figure 3). Landowners are listed for a large majority of the lots within the township, many of which had been subdivided multiple times into smaller parcels to accommodate an increasing population throughout the late 19th century. Structures and orchards are prevalent throughout the township, almost all of which front early roads. Also depicted on the *Historical Atlas* are the early Village of Haldimand, also known as Byng. Much of the established road system and agricultural systems throughout the township is still visible today. Based on the lot arrangement at that time, the site was located on Lot 29, within the Haldimand Tract. W. J. Aitken is listed as the landowner, although land registry records suggest that the property may have been occupied as early as the 1830s. Given these findings, the Euro-Canadian archaeological potential of the Study Area is judged to be moderate to high.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area (Wilson and Horne 1995). According to the Stage 1-2 assessment (Detritus 2019), the existing house, barn, sheds, and silo within, as well as the various gravel and asphalt laneways and parking areas within the Study Area, were evaluated as having no potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources, as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011). H1 (AfGv-174) is located to the east of

the existing house and south of an existing shed. The easternmost laneway forms the eastern boundary of the site. No other visible signs of disturbance were observed within the site limits.

2.0 Field Methods

The Stage 3 assessment of H1 (AfGv-174) was conducted between May 21 and June 26, 2019, under archaeological consulting license P389 issued to Dr. Walter McCall 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 assessment, the weather was generally hot and sunny with periods of overcast. The soil was dry and screened easily. At no time during the investigation were field or weather conditions detrimental to the recovery of archaeological material, as per Section 3.2, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011). Lighting and soil conditions were suitable and visibility was excellent, as per Section 7.11.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011). Table 3 provides a summary of the weather and field conditions during the Stage 3 archaeological assessment; Photos 1 to 12 illustrate field conditions.

Table 3: Field and Weather Conditions

Date	Activity	Weather	Field Conditions
May 21, 2019	unit excavation	sunny 17˚C	soil dry and screens easily
May 22, 2019	unit excavation	overcast 15˚C	soil dry and screens easily
May 27, 2019	unit excavation	sunny 20˚C	soil dry and screens easily
May 31, 2019	unit excavation	sunny 16˚C	soil dry and screens easily
June 19, 2019	unit excavation	sunny 23˚C	soil dry and screens easily
June 24, 2019	unit excavation	partly cloudy 23˚C	soil dry and screens easily
June 25, 2019	unit excavation	sunny 21˚C	soil dry and screens easily
June 26, 2019	unit excavation	sunny 26˚C	soil dry and screens easily

Upon arrival at the site, geographic reference markers that were established during the Stage 2 archaeological assessment were relocated using a Garmin eTrex 10 handheld GPS unit, with a minimum accuracy 1-2.5m (North American Datum 1983 and Universal Transverse Mercator ('UTM') Zone 17T) in tandem with an optical theodolite. Two permanent datum stakes were placed in the ground and a 5m by 5m grid was established across the Stage 2 site limits. All coordinates taken during the Stage 3 assessment are listed in the Supplementary Documentation that accompanies this report.

For archaeological sites documented through a pedestrian survey of open ploughed fields, a Stage 3 field investigation typically begins with a CSP, conducted as per Section 3.2.1 of the *Standards and Guidelines* (Government of Ontario 2011). As was discussed earlier, however (Section 1.3.4), Detritus conducted the Stage 2 pedestrian survey at H1 (AfGv-174) according to Section 3.2.1, Standard 3 of the *Standards and Guidelines* (Government of Ontario 2011; Detritus 2019). Thus, the conditions for a Stage 3 CSP were met during the Stage 2 assessment.

In total, the Stage 3 assessment at H1 (AfGv-174) included the hand excavation of 51 test units strategically positioned to test the nature and density of the subsurface artifact distribution at the site. Given that it was evident that the level of CHVI at H1 (AfGv-174) would result in a recommendation to proceed to Stage 4, the Stage 3 assessment consisted of the hand excavation of 29 1m square test units every 10m across the site limits, as determined by the Stage 2 surface collection, as per Table 3.1, Standard 3 of the *Standards and Guidelines* (Government of Ontario 2011). An additional 22 units amounting to 75.9% of the grid total were planned for areas of interest within the site extent as per Table 3.1, Standard 4 of the *Standards and Guidelines* (Government of Ontario 2011). The high percentage of infill units served to offset the grid units that were unable to be excavated due to the presence of trees and bushes.

All test units were excavated in systematic levels, into the first five centimetres (cm) of subsoil. Each test unit excavated in the agricultural field contained a single stratigraphic layer (the 'plough zone') and ranged in depth from 15cm to 50cm; considering that each test unit was excavated 5cm into subsoil, the plough zone ranged in depth from 10cm to 45cm. Each test unit excavated in the manicured lawn contained a single stratigraphic layer (the 'topsoil') and ranged in depth from 15cm to 60cm; considering that each test unit was excavated 5cm into subsoil, the plough zone

ranged in depth from 10cm to 55cm. 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 Stage 3 excavations were recorded and catalogued with reference to their corresponding 1m unit number and 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, two of which were observed.

Unit 190E, 325N contained a portion of a stone foundation wall in the southwestern corner, and two additional stones, believed to be misplaced rubble stones, in the northwestern corner (Photo 11). Unit 180E, 325N contained a possible feature in the bottom, which resembled an irregularly shaped dark soil in the southern half of the unit (Photo 12). The exposed plans were recorded and geotextile fabric was placed over the possible features and the units were backfilled as per Section 3.2.2 Standard 6 of the *Standards and Guidelines* (Government of Ontario 2011).

Additionally, two units were determined to be disturbed. Unit 180E, 315N is likely part of the septic system, a pipe is visible to the west of the unit (Photo 2). This unit was able to be excavated to a depth of 26cm when it started to fill with water and was unable to be excavated further. Unit 190E, 360N had a pipe in the bottom of the unit and was able to be excavated to a depth of 30cm when the pipe was encountered.

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 archaeological assessment of H1 (AfGv-174) was conducted employing the methods described in Section 2.0. 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 4 below.

Table 4: 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
5 Field Maps	Detritus office	stored digitally in project file
40 Digital Photographs	Detritus office	stored digitally in project file

All of the material culture collected during the Stage 3 archaeological assessment of H1 (AfGv-174) is contained in three boxes and will be temporarily housed in a Detritus office 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 H1 (AfGv-174) produced 5,338 primarily Euro-Canadian; eight pieces of pre-contact Aboriginal chipping detritus, one biface and one preform were also identified in the artifact assemblage (Table 5). No subsurface features or fire cracked rock were observed. A sample of the artifacts recovered from the Stage 3 assessment is depicted in Section 9.2 of this report.

Table 5: H1 (AfGv-174) Artifact Summary

Artifact	Freq.	%
household	2,394	44.85
ceramics	1,344	25.18
structural	1,289	24.15
miscellaneous metal	193	3.62
recent material	81	1.52
personal	27	0.51
pre-contact Aboriginal	10	0.19
Total	**5,338**	**100.00**

3.2.1 Household Artifacts (see Appendix 10.2.1)

A total of 2,394 household artifacts were observed within the Stage 3 assemblage. Just under 90% of these (89.85%; n=2,151) were bottle glass fragments, four of which were external threaded finishes. Three of these specimens resemble Mason jar fragments; the other is from a small glass bottle. Furthermore, two glass dish fragments, two glass handle fragments, and one glass canning lid made up the remainder of the glass assemblage.

The remainder of the household assemblage comprised faunal remains (n=242), none of which were able to be classified beyond mammalian, avian or shell; and none of which revealed evidence of cooking or butchering. The remainder of the household assemblage consisted of a fork with a bone handle, a utensil handle fragment, a bone utensil handle, two pieces of coal, and one fire brick fragment. None of these are considered to be diagnostic (Table 6).

Table 6: Household Artifact Summary

Artifact	Freq.	%
bottle glass	2,151	89.85
faunal remains, mammalian	192	8.02
shell	24	1.00
faunal remains, avian	16	0.67
utensil	3	0.13
coal	2	0.08
glass dish	2	0.08
glass handle	2	0.08
fire brick	1	0.04
glass canning lid	1	0.04
Total	**2,394**	**100.00**

Over 80% of the bottle glass pieces (83.91%; n=1,805) were clear, which are indicative of a post 1870 date of occupation. The remaining sherds were brown, green, blue, white (milk), yellow, royal blue, pink, olive, light purple, light pink, light green, light blue, dark blue, and dark green.

3.2.2 Ceramics (see Appendix 10.2.2)

A quarter of the Stage 2 assemblage were ceramic pieces (25.18%; n=1,344). Most of these were pieces of refined white earthenware ('RWE'). Additionally, 198 ironstone fragments, 107 stoneware fragments, 99 earthenware fragments, 83 porcelain fragments and 10 pieces of yellowware were also represented. Table 7 provides a summary of ceramic assemblage by ware type and Table 8, by surface decoration technique.

Table 7: Ceramic Assemblage by Ware Type (see Appendix 10.2.2)

Ceramics	Freq.	%
RWE	847	63.02
utilitarian	206	15.33
ironstone	198	14.73
porcelain	83	6.18
yellowware	10	0.74
Total	**1,344**	**100.00**

Table 8: Ceramic Assemblage by Decorative Style (see Appendix 10.2.3)

Ceramics	Freq.	%
RWE	736	54.76
ironstone	179	13.32
stoneware	107	7.96
red earthenware	90	6.70
porcelain	76	5.65
RWE, transfer printed	60	4.46
RWE, painted	28	2.08
RWE, banded	17	1.26
ironstone, painted	12	0.89

Ceramics	Freq.	%
yellowware	10	0.74
earthenware	8	0.60
ironstone, decal ware	3	0.22
ironstone, transfer printed	3	0.22
RWE, edged	3	0.22
porcelain, decal ware	2	0.15
porcelain, painted	2	0.15
porcelain, transfer printed	2	0.15
RWE, flow transfer print	2	0.15
ironstone, banded	1	0.07
porcelain, moulded	1	0.07
RWE, moulded	1	0.07
yellow earthenware	1	0.07
Total	**1,344**	**100.00**

The predominance of undecorated RWE and ironstone within the ceramic assemblage as well as the stoneware and earthenware suggest a middle to late 19th century occupation. Furthermore, the presence of porcelain within an archaeological assemblage is generally indicative of a late 19th to 20th century occupation.

A total of 65 sherds were decorated using transfer printing technique; of these 60 are RWE, 3 are ironstone and 2 are porcelain. Colours observed were blue, black, tan, brown, green, pink, and purple. The transfer printed ceramic assemblage dates from the 19th century to the early 20th century.

A total of 42 ceramic sherds were hand painted including 28 RWE sherds, 12 ironstone sherds, and 2 porcelain sherds. Colours observed on within the hand painted assemblage include black, blue, green, gold, brown, yellow, orange, pink, red, grey, and purple, which area indicative of a late 19th to 20th century occupation.

A total of 17 banded fragments were recovered including 17 RWE sherds, and 1 ironstone sherd. The banded fragments were decorated in green, black, blue, purple, and light blue, which area indicative of a middle to late 19th century occupation.

Five pieces of decal ware were recovered, including three ironstone sherds and two porcelain sherds, these pieces were decorated using yellow, green, orange, red, black, yellow, and grey. These fragments are indicative of a 20th century occupation.

Three edged RWE sherds were recovered two are blue fragments, and one is a scalloped rim green fragment. The scalloped fragment is indicative of an early 19th century occupation and was likely an heirloom piece.

Lastly, two blue flow transfer printed RWE fragments were recovered, which are indicative of a middle to late 19th century occupation.

In terms of form, and function most sherds were fragmentary and unable to be identified. Five fragments were determined to be unknown handle fragments and one a tea cup handle fragment. Table 9 provides a summary of the ceramic assemblage by form and

Ceramic	Flat	Hollow	Unknown
earthenware		1	7
ironstone	17	2	160
ironstone, banded			1

Ceramic	Flat	Hollow	Unknown
ironstone, decal ware			3
Ironstone, painted		1	11
ironstone, transfer printed	1		2
porcelain	1	20	55
porcelain, decal ware			2
porcelain, moulded		1	
porcelain, painted			2
porcelain, transfer printed			2
red earthenware		38	52
RWE	31	18	687
RWE, banded	5	1	11
RWE, edged			3
RWE, flow transfer print			2
RWE, moulded		1	
RWE, painted	2		26
RWE, transfer printed	5	1	54
stoneware		37	70
yellow earthenware		1	
yellowware			10
Total	**62**	**122**	**1160**

Table 10, by function.

Table 9: Ceramic Assemblage by Form

Ceramic	Flat	Hollow	Unknown
earthenware		1	7
ironstone	17	2	160
ironstone, banded			1
ironstone, decal ware			3
Ironstone, painted		1	11
ironstone, transfer printed	1		2
porcelain	1	20	55
porcelain, decal ware			2
porcelain, moulded		1	
porcelain, painted			2
porcelain, transfer printed			2
red earthenware		38	52
RWE	31	18	687
RWE, banded	5	1	11
RWE, edged			3
RWE, flow transfer print			2

Ceramic	Flat	Hollow	Unknown
RWE, moulded		1	
RWE, painted	2		26
RWE, transfer printed	5	1	54
stoneware		37	70
yellow earthenware		1	
yellowware			10
Total	**62**	**122**	**1160**

Table 10: Ceramic Assemblage by Function

Ceramic	Base	Handle	Rim	Tea Cup Handle	Unknown
earthenware			1		7
ironstone	8		11		160
ironstone, banded					1
ironstone, decal ware			3		
ironstone, painted					12
ironstone, transfer printed					3
porcelain	6	1	8	1	60
porcelain, decal ware					2
porcelain, moulded					1
porcelain, painted					2
porcelain, transfer printed					2
red earthenware					90
RWE		4	34		698
RWE, banded			6		11
RWE, edged			1		2
RWE, flow transfer print					2
RWE, moulded					1
RWE, painted			3		25
RWE, transfer printed			3		57
stoneware	1		1		105
yellow earthenware					1
yellowware					10
Total	**15**	**5**	**71**	**1**	**1252**

3.2.3 Structural Artifacts (see Appendix 10.2.4)

Just under 50% of the structural artifacts in the Stage 2 assemblage are window glass (43.44%; n=560). The remainder of the assemblage comprised 347 cut nails, 192 wire nails, 110 pieces of mortar, 78 pieces of red brick, 1 metal hinge, and 1 screw (

Table 11).

Table 11: Structural Artifact Summary

Artifact	Freq.	%
window glass	560	43.44
cut nail	347	26.92
wire nail	192	14.90
mortar	110	8.53
brick	78	6.05
metal hinge	1	0.08
screw	1	0.08
Total	**1,289**	**100.00**

Over 80% of the window glass pieces (83.75%; n=469) measured greater than 1.6mm thick, suggestive of a post-1845 occupation. This date is supported by the predominance of machine cut and wire drawn nails, which extend this period of occupation into the early 20th century. The remainder of the structural assemblage comprises 110 pieces of mortar, 78 pieces of red brick, 1 metal hinge, and 1 screw, none of which are temporally diagnostic.

3.2.4 Miscellaneous Metal

Also included within the Stage 3 assemblage were 193 pieces of miscellaneous metal. Two were identified as tin pieces. None of the remaining pieces could be identified. None of the miscellaneous metal artifacts are temporally diagnostic.

3.2.5 Recent Material

A total of 81 pieces of recent material were recovered including modern ceramics, electrical insulator, plaster, a red plastic bead, and terracotta fragments. These items are indicative of 20th century occupation.

3.2.6 Personal Items (see Appendix 10.2.5)

A total of 27 personal items were represented in the Stage 2 artifact assemblage including the eight white clay pipe stem fragments, two white clay pipe bowl fragments, and five slate tablet fragments, which can be dated to the 19th century. Two coins were recovered, one is a 1921 American 1 cent piece and one is a 1933 Canadian penny.

Additionally, four shotgun shell fragments, two metal buttons, one shell button, one brass medallion, one porcelain figurine fragment and one decorative horse tag. None of these items are considered to be diagnostic.

3.3 Pre-Contact Aboriginal Artifacts

In addition to the Euro-Canadian artifacts, the Stage 2 assemblage featured eight pieces of pre-contact Aboriginal chipping detritus, one biface and one preform all manufactured from Onondaga chert. Chert type identifications were accomplished visually using reference materials located in the Detritus 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. It is a high-quality raw material frequently utilized by pre-contact Aboriginal 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 exclusive use of Onondaga chert indicates that the people at H1 (AfGv-174) were largely relying on a single source of raw material. Outcrops of Onondaga chert are found along the north shore of Lake Erie, approximately 6km to the southeast of the site.

3.3.1 Chipping Detritus (see Appendix 10.3.1)

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). In total, seven of the chipping detritus pieces were fragments and one was a primary flake.

Primary and secondary flakes are produced during the initial reduction phases of raw material and tend to exhibit minimal dorsal flake scarring. Primary flakes are characterized by the presence of cortex, or original, unflaked material on their dorsal surfaces and proximal ends; secondary flakes contain little to no cortex. Thinning flakes are produced during the latter stages of reduction when raw material in the form of blanks and bifaces are shaped into preforms and formal tools. Given the small sample size, however, no conclusions can be drawn regarding on-site activities.

3.3.3 Biface and Preform (see Appendix 10.3.2 and 10.3.3)

One biface and one preform were recovered. The biface measures 44.26mm long by 24.24mm wide by 8.68mm thick and is manufactured from Onondaga chert. It has a broken tip and broken base; however, it appears to have likely been a projectile point. The preform measures 41.36mm long by 36.43mm wide by 10.24mm thick.

Due to the long span of production of biface tools they cannot be used to determine the cultural affiliation or time period of the occupation of a site.

3.4 Artifact Distribution and Settlement Pattern

The Stage 3 assessment of H1 (AgGs-410) produced 5,338 primarily Euro-Canadian artifacts from the hand excavation of 51 Stage 3 test units; ten pre-contact Aboriginal artifacts were also present in the Stage 3 assemblage, including eight pieces of chipping detritus, one biface, and one preform, all of which were manufactured Onondaga chert. No Aboriginal pottery or fire cracked rock were observed. Two activity areas were identified in all.

The first was located in the lawn area at the southern end of the site, generally bound by rows of bushes to the north and south, between the 320N and 330N grid lines to the north and south, and the 180E and 200E grid lines to the east and west. A total of nine test units were excavated in this area, with artifact yields ranging from 11 to 375. Seven of the nine, however, yielded between 82 and 375 artifacts, including four of the pre-contact Aboriginal specimens. The test unit at 185E, 315N, just south of this area, yielded an additional 96 artifacts. The remaining three units to the south of this activity area yielded between 5 and 27 artifacts, including another piece of pre-contact Aboriginal chipping detritus. Additionally, artifact yields among the 13 test units excavated east of the 200E grid line ranged from 0 to 22, with eight producing two or less artifacts and only one more than nine. The west side was bound by the existing gravel laneway.

Two features were observed among these units, including a portion of a rubble stone foundation wall in the southwestern corner 190E, 325N. Two more stones, believed to be additional rubble stones, were observed in the northwestern corner. Although fragmentary, this wall portion appears to be the northeast corner of a larger structure. No additional wall remains were observed anywhere else on site.

Unit 180E, 325N, meanwhile, featured an irregularly shaped dark surface stain in its southern half. This unit produced 359 artifacts, including two pieces of chipping detritus. Almost one third (31.4%) of the Euro-Canadian finds were structural, including 72 nails, 37 window glass shards, and 9 brick pieces. Almost half of the nails were wire drawn (n=31), and the rest were machine cut. Over two thirds of the window glass, meanwhile, was thick. None of the brick fragments were handmade. Household artifacts were also well represented in Unit 185E, 325N, comprising 28.6% of the Euro-Canadian assemblage. Most of these items, however, were bottle glass sherds (n=80), over three quarters of which appeared to be clear and machine manufactured. This deposit, when considering also the 38 pieces of miscellaneous metal and 35 items that date to the 20th century that were also recovered from Unit 180E, 325N, resembles a refuse deposit mixed with demolition material.

This occupation range was supported by the ceramic assemblage. Most of the ceramic pieces from Unit 185E, 325N were sherds of RWE (77.1%; n=54), most of which were undecorated (n=45). The remainder of the ceramic assemblage comprised ironstone and porcelain, suggestive of a middle 19th to early 20th century occupation. One of the decorated RWE sherds featured a scalloped rim with edged design and was assigned to the early 19th century. Based on these observations, the stone wall within Unit 185E, 325N has been interpreted as the remains of a middle to late 19th century structure, with significant late 19th to 20th century refuse mixed among the structural remains.

The same observation may be made for Unit 185E, 330N, to the immediate north. Although no cultural features or in tact architecture were observed, this unit produced 374 Euro-Canadian artifacts and a single pre-contact Aboriginal bifacial tool. Once again, the Euro-Canadian artifacts were dominated by structural remains (45.4%; n=170), with a similar proportion of wire drawn nails (n=61) to cut nails (n=74). Likewise, a similar proportion of household artifacts were observed in the assemblage (25.4%; n=95) from this unit, almost half of which were bottle glass fragments (n=47). Finally, the ceramic assemblage featured 34 sherds of RWE, only three of which were decorated, along with eight pieces of porcelain, five of ironstone, and three of stoneware. These rest of the artifacts from Unit 185E, 330N were classified as either miscellaneous metal (n=48), or recent, 20th century material (n=10). This evidence suggests that the entire activity area represented the remains of a middle to late 19th century structure, which was demolished sometime in the early 20th century, and used as an area of refuse.

A second activity area was observed in the agricultural field to the northeast of this early building, centred on the two highest yielding test units at the site 335N and 340N along the 200E gridline. These two units produced 943 and 923 Euro-Canadian artifacts respectively. Collectively, these two units yielded 35.0% of the entire Stage 3 assemblage. Unlike the activity area to the southwest, however, these two units were dominated by bottle glass fragments (51.6%; n=962), the majority of which (81.6%; n=785) were clear and machine manufactured; conversely, only 17% of the artifacts (n=318) from these two units were structural artifacts. Furthermore, only 37 additional household or personal items were recovered, representing under 2% of the entire assemblage.

Ceramic sherds, conversely, were well represented among the two units (n=487), comprising just over one quarter (26.1%) of the total artifacts from the two units, and over half (53.9%) of the remaining artifacts other than bottle glass pieces. Sherds of RWE were encountered most often (n=391), most of which (n=336) were undecorated. Porcelain (n=48), ironstone (n=28), and stoneware (n=19) were also well represented; a single sherd of yellowware was also observed. The remainder of the artifacts from 335N, 200E and 340N, 200E consisted of 52 pieces of miscellaneous metal and 10 recent artifacts.

Given the high percentage of broken bottle and ceramic dish pieces within the two units (77.7%; n=1,449), the activity area centred on test units 335N, 200E and 340N, 200E has been interpreted as a large refuse deposit dating from the late 19th to early 20th century. This period of occupation suggests that this material was deposited during the occupancy of the building to the southwest, or immediately following its demolition.

Finally, an isolated high yielding Stage 3 unit producing 307 artifacts was observed at 175E, 340N, along the western edge of the site, between a line of bushes to the east and the gravel laneway to the west. Structural artifacts (n=102), ceramic pieces (n=84), bottle glass pieces (n=67), and faunal remains (n=32) were represented most often in this unit. Only seven pieces of miscellaneous metal and 3 personal items were observed. The remainder of the assemblage comprised 12 artifacts that date to the 20th century. Given the location of this unit, 5m to the west and 15m to the north of the observed wall foundations in Unit 180E, 325N, these artifacts are thought to represent material associated with the middle 19th to early 20th century occupation of the site, deposited following the abandonment and demolition of the structure.

Finally, the site appears to have been disturbed by the laneway and septic system, of which two cisterns are visible; one in the centre of the site and one in the southern portion. Unit 180E, 315N was only able to be excavated 26cm when it began to fill with water, likely due to its proximity to

the cistern, and was unable to be completely excavated; and a pipe was observed at 30cm in Unit 190E, 360N.

The pre-contact Aboriginal component, meanwhile, comprised eight pieces of pre-contact Aboriginal chipping detritus, one biface and one preform from six units scattered throughout the site. These pre-contact Aboriginal artifacts comprise 0.19% of the Stage 3 assemblage and are not considered to be an earlier, pre-contact occupation of the site. These artifacts are considered to be individual findspots within the larger Euro-Canadian site limits that bear witness to the length of occupation of the Study Area prior to the arrival of Euro-Canadian settlers.

3.5 Artifact Catalogue

Appendix 10.1 below provides a complete catalogue of the Stage 3 artifact assemblage recovered from H1 (AfGv-174).

4.0 Analysis and Conclusions

Detritus was retained by the Proponent to conduct a Stage 3 archaeological assessment at archaeological site H1 (AfGv-174), in advance of a proposed 13 lot residential development at 7253 Rainham Road, in Dunnville.

As was discussed above, H1 (AfGv-174) was identified during a Stage 1-2 assessment of the Study Area, conducted by Detritus in December 2018 and in April 2019. At the time of the assessment, most of the Study Area comprised a large agricultural field. The south end of the property was occupied by an existing house, barn, and silo along with several sheds, gravel and asphalt laneways, and parking areas. These modern structures and surfaces were surrounded by manicured lawn and overgrown grass, with mature trees throughout.

Based on the results of the Stage 1 background research, portions of the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. A Stage 2 assessment was recommended. This investigation consisted of a typical test pit survey of the grassy areas at the southern end of the Study Area, and a typical pedestrian survey of the large agricultural field (Figure 2). H1 (AfGv-174) was the only site documented during this investigation (Tile 2 of the Supplementary Documentation).

The Stage 2 assessment of the site yielded 665 Euro-Canadian artifacts covering an area of approximately 55m by 90m in both the grassy lawn area to the east of the existing house, and the adjacent field beyond. Based on the analysis of these artifacts, H1 (AfGv-174) was interpreted as a middle to late 19th century domestic scatter associated with the occupancy of W. J. Aitken, who is illustrated as the landowner on the 1879 *Historical Atlas* map (Page & Co. 1879). The site was recommended for Stage 3 assessment.

The Stage 3 assessment of H1 (AfGv-174) was conducted between May 21 and June 26, 2019. This investigation resulted in the recovery of 5,338 primarily Euro-Canadian artifacts from the hand excavation of 51 Stage 3 test units; ten pre-contact Aboriginal were also represented in the artifact assemblage, including eight pieces of chipping detritus, one biface, and one preform. No Aboriginal pottery or fire cracked rock were observed.

Just under half of the artifacts within the assemblage (44.9%; n=2,394) were household artifacts, although these numbers were inflated by the high volume of glass bottle pieces (n=2,151). The majority of these were clear and machine manufactured, suggestive of a late 19th to early 20th century occupation. Most of the remaining 243 household artifacts were faunal remains (n=232). Combined, glass bottle fragments and faunal remains comprised 99.5% of the household artifacts recovered during the Stage 3 investigation.

This period of occupation is supported also by the ceramic assemblage. Almost two thirds (63.0%) of the ceramic pieces recovered during the Stage 3 investigation were identified as RWE. Ironstone, various utilitarian wares, and porcelain were also represented in the ceramic assemblage; the remainder comprised ten sherds of yellowware. Most of these pieces (89.8%) were undecorated. Blue patterns were encountered most often among the decorated pieces, although many examples of late 19th century Late Palette colours were also present. Three edges RWE sherds within the assemblage demonstrated evidence of early 19th century manufacture. These sherds represent only 0.22% of the ceramic total and are considered to be heirloom items, particularly when compared to the 81 artifacts within the artifact assemblage as a whole that date to the 20th century.

Two Euro-Canadian activity areas were identified in all. The first was observed among the test units excavated in the lawn area to the east of the existing house, generally bound by rows of bushes to the north and south. Two cultural features were observed among these units, including a portion of a rubble stone foundation wall in the southwestern corner 190E, 325N. Although fragmentary, this wall portion appears to be the northeast corner of a larger structure. No additional wall remains were observed anywhere else on site.

Unit 180E, 325N, meanwhile, featured an irregularly shaped surface stain in its southern half. This unit produced 359 artifacts, including two pieces of chipping detritus. Unlike the assemblage as a whole, almost one third (31.4%) of the Euro-Canadian finds from this unit were structural.

Almost half of the nails were wire drawn (n=31), and the rest were machine cut. Over two thirds of the window glass, meanwhile, was thick. None of the brick fragments were handmade. Household artifacts were also well represented in the unit. As expected, however, most of these items were clear and machine manufactured bottle glass sherds. This deposit, when considering also the 38 pieces of miscellaneous metal and 35 items that date to the 20th century that were also recovered from Unit 185E, 325N, resembles a refuse deposit mixed with demolition material.

The same observation may be made for Unit 185E, 330N, to the north. Although no cultural features or in tact architecture were observed, this unit produced 374 Euro-Canadian artifacts and a single pre-contact Aboriginal bifacial tool. Once again, the Euro-Canadian artifacts were dominated by structural remains, with a similar proportion of wire drawn nails to cut nails. Likewise, a similar proportion of household artifacts were observed in the assemblage from this unit. The remainder of the assemblage from Unit 185E, 330N comprised primarily ceramic sherds, although ten artifacts classified as either miscellaneous metal or recent, 20th century material were also recovered. This evidence suggests that the entire activity area represented the remains of the earlier collapsed middle to late 19th century structure, which was demolished sometime in the early 20th century.

A second activity area was observed in the agricultural field to the northeast of this early building, centred on the two highest yielding test units at the site 335N and 340N along the 200E gridline. These two units produced 943 and 923 Euro-Canadian artifacts respectively. Collectively, these two units yielded 35.0% of the entire Stage 3 assemblage. Unlike the activity area to the southwest, however, these two units were dominated by bottle glass, the majority of which were clear and machine manufactured. Ceramic sherds were also well represented among the two highest yielding units. Conversely, only 17% of the artifacts from these two units were structural artifacts. Furthermore, only 37 additional household or personal items were recovered, representing under 2% of the entire assemblage.

Given the very high percentage of broken bottle and ceramic dish pieces within the two units, the activity area centred on test units 335N, 200E and 340N, 200E has been interpreted as a large refuse deposit dating from the late 19th to early 20th century. This period of occupation suggests that this material was deposited during the occupancy of the building to the southwest, or immediately following its demolition.

Finally, an isolated high yielding Stage 3 unit producing 307 artifacts was observed at 175E, 340N, along the western edge of the site, between a line of bushes to the east and the gravel laneway to the west. Given the location of this unit, these artifacts are thought to represent material associated with the middle 19th to early 20th century occupation of the site, deposited following the abandonment and demolition of the structure.

Based on the results of the Stage 3 assessment, the Euro-Canadian component of H1 (AfGv-174) has been interpreted as a late 19th to early 20th century homestead with two activity areas representing the remains of the historical house itself, located to the east of the existing house, as well as a large refuse deposit to the northeast. Given an absence of black, fatty soil anywhere on site, as well as a dearth of faunal remains or artifacts related to food production within the artifact assemblage, no midden areas were identified.

Finally, the pre-contact Aboriginal component comprised eight pieces of pre-contact Aboriginal chipping detritus, one biface, and one preform from six units scattered throughout the site. These lithic artifacts comprise 0.19% of the Stage 3 assemblage and are not considered to represent an earlier, pre-contact occupation of the site. Instead they are thought to bear witness to the communities that were active throughout the region prior to European settlement, as evidenced by the 21 pre-contact Aboriginal sites registered within 1km of H1 (AfGv-174).

5.0 Recommendations

Based on the results of the Stage 3 assessment, H1 (AfGv-174) has been interpreted as a late 19th century domestic site, associated with the tenure of W. J. Aikens. This occupation range does not trigger additional assessment according to Section 3.4, Standard 1f, or Section 3.4.2, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011). Given the presence of early 19th century material within the Stages 2 and 3 assemblages, however, it is currently unknown if an earlier occupation occurred at the site, and if this earlier occupation is associated with the observed wall foundation in Unit 190E, 325N.

Given the presence of material culture dating to the first generation of settlement in Dunn Township, H1 (AfGv-174) fulfills the criteria for a Stage 4 mitigation of impacts, as per Section 3.4.2, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011) and retains further CHVI. **A Stage 4 archaeological mitigation of impacts to the site is recommended.**

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 Study Area, excluding the archaeological site area from the Study Area, or incorporating the area of the archaeological site into the Study Area 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 client, the Stage 4 mitigation of H1 (AfGv-174) by avoidance and protection is not a viable option. As such, a Stage 4 archaeological mitigation by hand excavation is recommended, conducted according to Section 4.2 of the *Standards and Guidelines* (Government of Ontario 2011).

According to Section 4.2.7, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011), the Stage 4 mitigation of archaeological sites that mostly date after 1830 must include the hand excavation of all midden areas, followed by mechanical topsoil removal ('MTR') across the remainder of the site. Based on the results of the Stage 3 assessment, however, no midden areas were identified on site.

Therefore, it is recommended that the Stage 4 excavation at H1 (AfGv-174) comprise MTR only in order to identify any potential cultural features or evidence of original architecture relating to the earliest occupation of the property. The Stage 4 MTR must be completed in accordance with Section 4.2.3 and Table 4.1 of the *Standards and Guidelines* (Government of Ontario 2011). The entire limits of the site, as determined by the previous Stage 2 and Stage 3 assessments, will be subject to MTR employing a straight-edged ditching bucket that pulls the soil away from the exposed surface. The subsoil surface will then be immediately shovel shined and examined for any evidence of subsurface 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). Any additional architectural or structural remains that are encountered will be documented with scale drawings and photographs as per Section 4.2.7, Standard 5 of the *Standards and Guidelines* (Government of Ontario 2011).

The pre-contact Aboriginal component comprised eight pieces of Onondaga chipping detritus, one biface and one preform from six units scattered throughout the site. Given the results of the Stage 3 assessment, wherein no Stage 3 test unit produced more than four pre-contact Aboriginal artifact, the pre-contact Aboriginal component of H1 (AfGv-174) does not meet any of the criteria for additional assessment, as outlined in Section 3.4 of the *Standards and Guidelines* (Government of Ontario 2011), and retains no further CHVI.

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 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.

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.

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

Adams, Nick. 1994. *Field Manual for Avocational Archaeologists in Ontario*. Ontario Archaeological Society Inc., Archaeological Stewardship Project.

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, May 6, 2019.

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*. Third Edition. Ontario Geological Survey. Special Volume 2. 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.

Cowell, Mrs. Roy A. Mabel. 1967. *History of Dunn Township*. Electronic Source: https://archive.org/details/localhistory_2lv. Last accessed: May 21, 2019.

Davies, Peter. 2005. Writing Slates and Schooling in *Australian Historical Archaeology* vol. 23: 63-69.

Detritus. 2019. *Stage 1-2 Archaeological Assessment 7253 Rainham Road Part of Lot 15, Concession 1 North of Road, Part of Lot 15 Concession 1 South of Road and Part of Rainham Road Allowance, Geographic Township of Dunn, Haldimand County*. Report on file with the MHSTCI, Toronto.

Ellis, Chris J. and Neal Ferris (editors). 1990. T*he Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

Evening Standard. 1891. How Slate Pencils Are Made in *Evening Standard* vol. 41, issue 70. Electronic Source: https://paperspast.natlib.govt.nz/newspapers/EP18910228.2.61. Last Accessed September 13, 2019.

Feest, Johanna E. and Christian F. Feest 1978. The Ottawa. *In Handbook of North American Indians. Vol.15 Northeast*, pp. 772-786. B.G. Trigger, ed. Washington: Smithsonian Institute.

Ferris, Neal. 2009. The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes. Tucson: University of Arizona Press.

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. 9, Sched. 12. Electronic documents https://www.ontario.ca/laws/statute/90p13. Last accessed September 30, 2019.

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 September 30, 2019.

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 September 30, 2019.

Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists*. Toronto: Ministry of Heritage, Sport, Tourism and Culture Industries.

Government of Ontario. 2019. *Ontario Land Registry Access*. Electronic Source: https://www.onland.ca/ui/. Last accessed August 28, 2019.

Government of Ontario. n.d. *Archaeological Sites Database Files*. Toronto: Culture Services Unit, Ministry of Heritage, Sport, Tourism and Culture Industries.

Harper, Russell. 1950. *The Early History of Haldimand County*. Caledonia: Grand River Sachem.

Huffman, E and J. Dumanski. 1986. *Agricultural Land Use Systems in the Regional Municipality of Niagara*. Ottawa: Land Resource Research Institute.

Hunter, Robert and George L. Miller. 2009.Suitable for Framing: Decorated Shell-edged Earthenware, *Early American Life* August, 8-19.

Jervis, William Percival. 1911. *A Pottery Primer*. The O'Gorman Publishing Company, New York.

Jamieson, S. M. 1992 Regional Interaction and Ontario Iroquois Evolution. *Canadian Journal of Archaeology* 16:70-88.

Kenyon, Ian. 1980. 19th Century Notes. *KEWA* (80-2).

Kingston, M.S. and E.W. Presant.1989. *The Soils of the Regional Municipality of Niagara*. Report No. 60 of the Ontario Institute of Pedology. Guelph: Ontario Ministry of Agriculture.

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.

Lamb, Lisa Nicole. 2003. *Historical Archaeology of the Indian Key* (8M015) warehouse: An analysis of nineteenth - Century ceramics. University of South Florida.

Lindsey, Bill. 2019. *Historic Glass Bottle Identification and Information Website*. Electronic document: http://www.sha.org/bottle/index.htm. Last accessed on September 13, 2019.

Majewski Teresita and Michael J. O'Brien. 1987. "The Use and Misuse of Nineteenth-Century English and American Ceramics in Archaeological Analysis." In *Advances in Archaeological Method and Theory, Volume 11*, edited by Michael Schiffer, 98-209. Academic Press, New York.

Miller, George L. 1980a. *Ceramics - The ACO Guide to 19th C. Sites*. Ontario Ministry of Culture and Recreation, Historical Planning and Research Branch. London, Ontario.

Miller, George L. 1980b. "Classification and Economic Scaling of 19th Century Ceramics," *Historical Archaeology* 14: 1-40.

Noble, William. 1978 The Neutral Indians. In Essays in Northeastern Anthropology in Memory of Marian E. White, Occasional Publications in *Northeastern Anthropology* 5, pp. 152-164. William Engelbrecht and Donald Grayson, editors. Rindge, NH: Department of Anthropology, Franklin Pierce College.

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 *Origins of the People of the Longhouse: Proceedings of the 21st Annual Symposium of the Ontario Archaeological Society*, pp. 106-118. André Bekerman and Gary Warrick, editors. North York: Ontario Archaeological Society.

Poulton, D.R., C.F. Dodd, M.W. Spence and R.D. Fecteau. 1996. The Fradenburg Site: An Historic Neutral Village on the Lower Grand River. *KEWA* 96(4-5):2-51.

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.

Shaw, Simeon. 1829. *History of the Staffordshire Potteries and the Rise and Progress of the Manufacture of Pottery and Porcelain; with Reference to Genuine Specimens and Notices of Eminent Potters*. Reprinted 1968 by Beatrice C. Weinstock, Great Neck, New York.

Smith, Donald. 2002. "Their Century and a Half on the Credit: The Mississaugas." In *Mississauga: The First 10,000 Years*, edited by Frank Dieterman, 107-122. Easted Books, Toronto.

Tanner, Helen (ed.). 1987. *Atlas of Great Lakes Indian History*. Norman: University of Oklahoma Press.

Tharp, Lars. 2017. "The Origin of Ironstone." In *Stoke on Trent: Resources on the North Stafforshire Pottery Industry*. http://www.thepotteries.org/features/ironstone.htm. Last accessed September 13, 2019.

The Potteries.org. 2003. Ironstone. In *Stoke on Trent: Resources on the North Stafforshire Pottery Industry*. http://www.thepotteries.org/types/ironstone.htm. Last accessed September 13, 2019.

Weaver, Sally. 1978. Six Nations of the Grand River, Ontario. In *Handbook of North American Indians. Volume 15: Northeast*, pp. 525-536. Bruce G. Trigger, editor. Washington: Smithsonian Institution Press.

Wilson, J.A. and M. Horne 1995. City of London Archaeological Master Plan. London: City of London, Department of Planning and Development.

White, Marian. 1978. Neutral and Wenro. In *Handbook of North American Indians Volume 15: Northeast*, pp. 407-411. Bruce G. Trigger, editor. Washington: Smithsonian Institution Press.

8.0 Maps

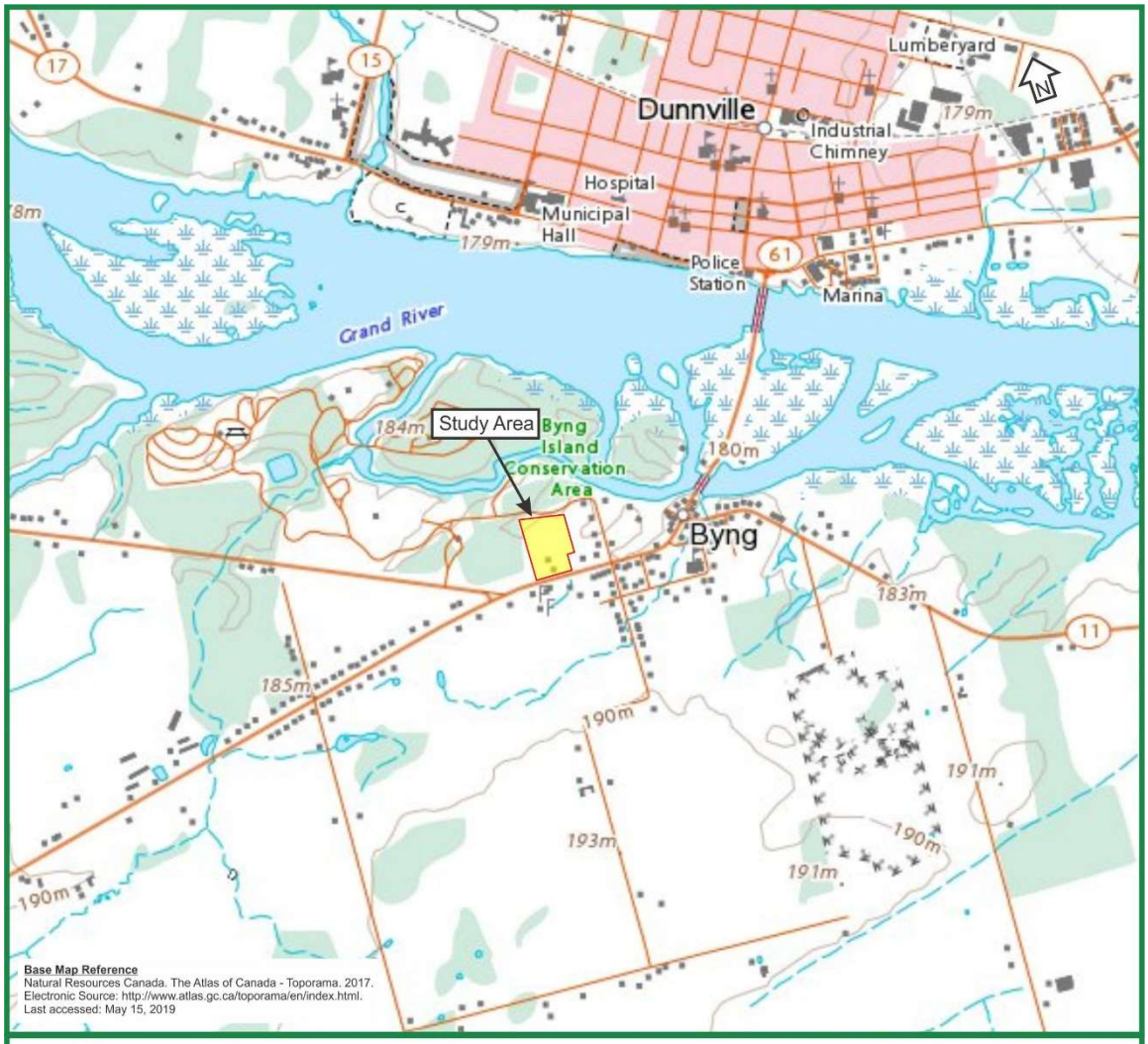

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Figure 1: Study Area

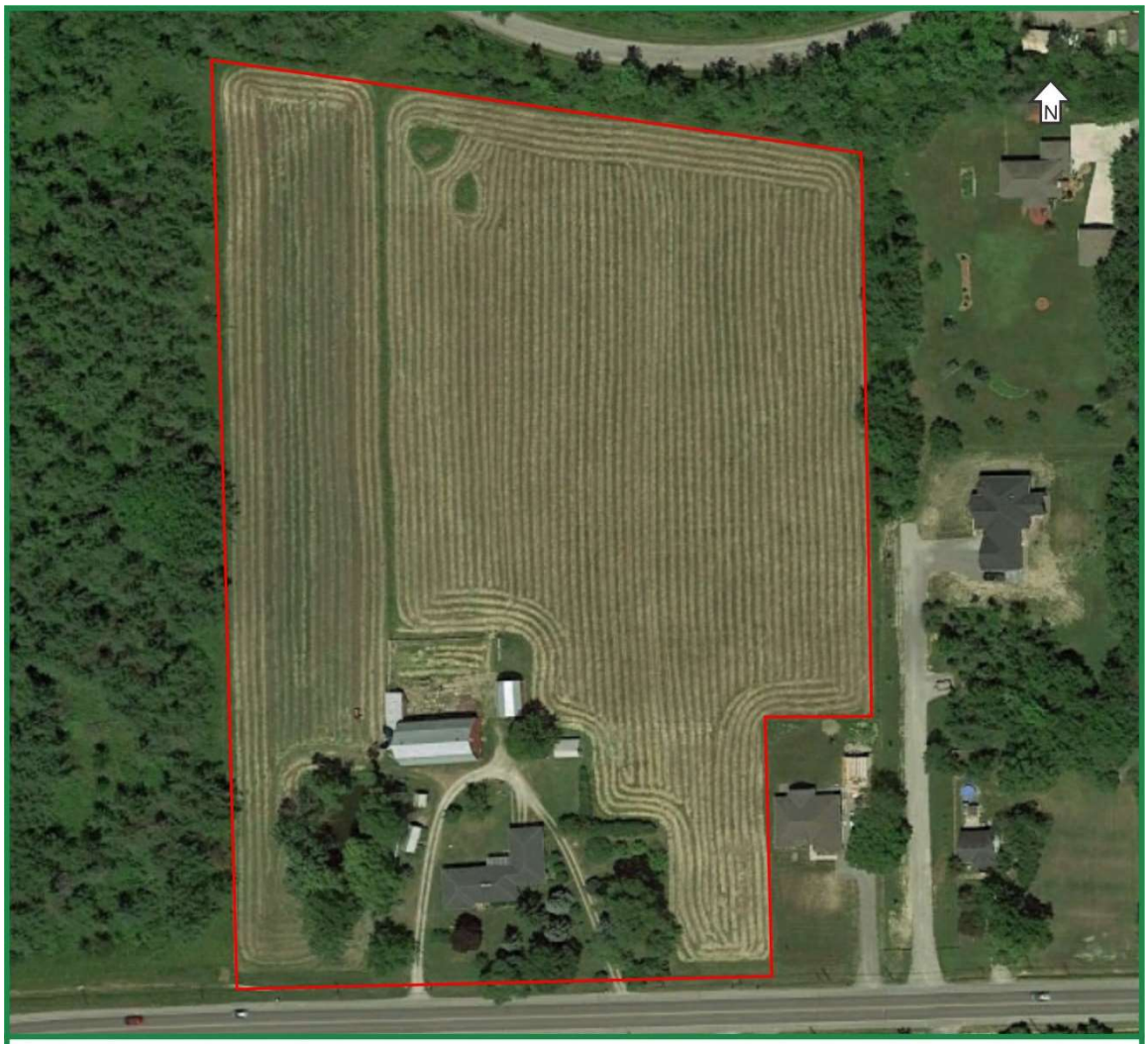
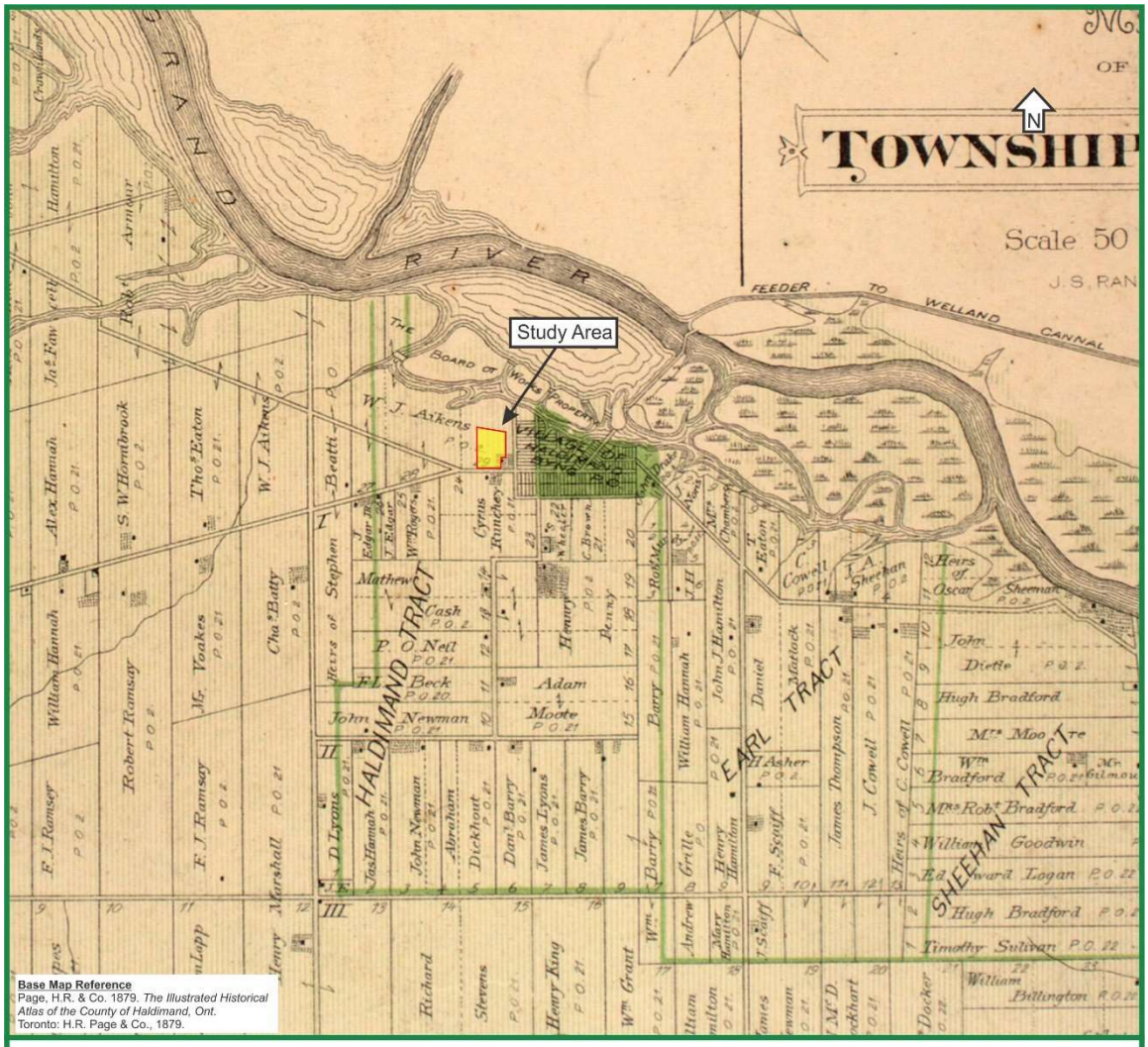


Figure 2: Previous Archaeological Assessment



Not to Scale

Figure 3: Portion of the 1879 *Historical Atlas* Map of Dunn Township

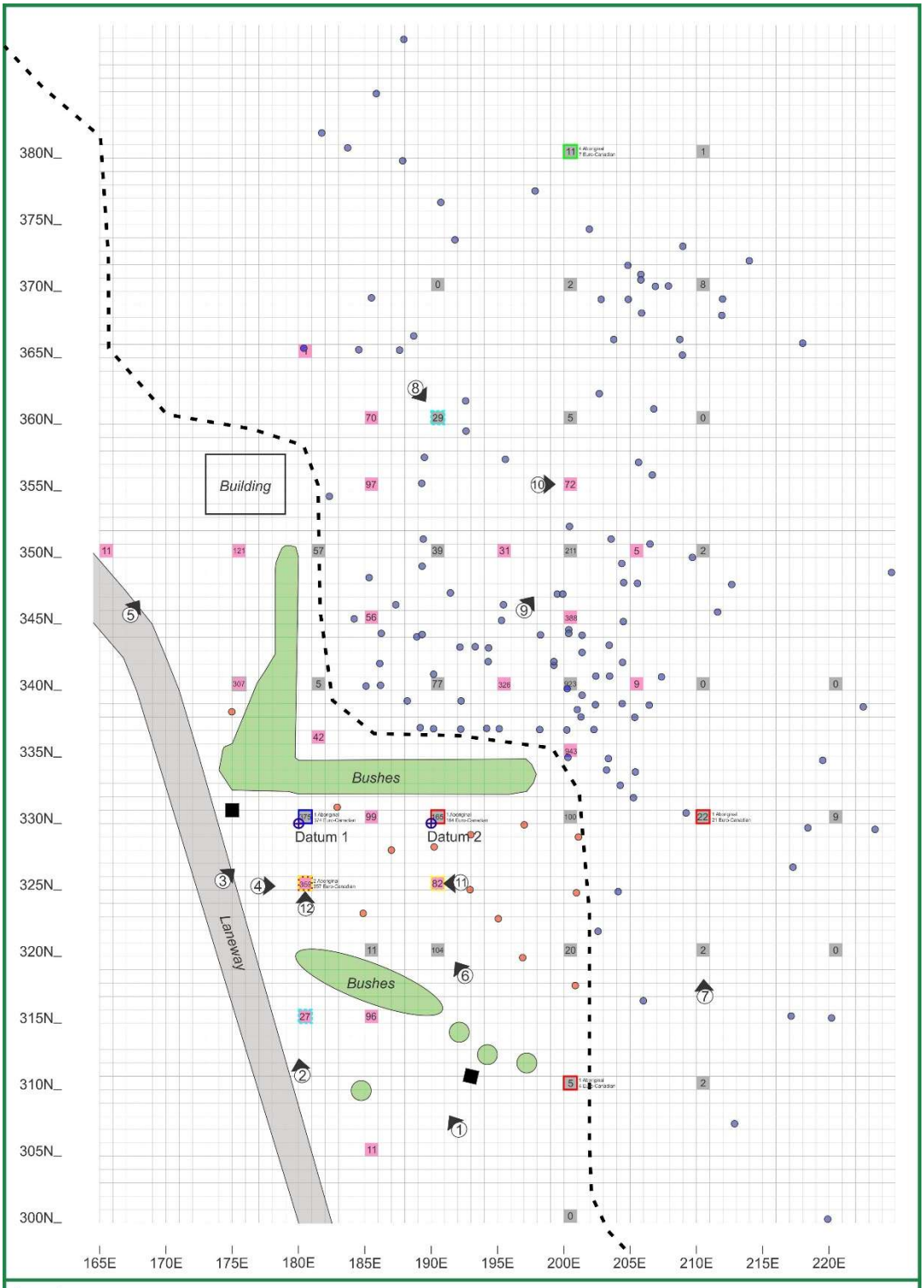


Figure 4: H1 (AfGv-174) Stage 3 Results

Figure 5 Development Map

9.0 Images

9.1 Photos

Photo 1: Stage 3 Test Unit Excavation; Cistern in foreground, facing northwest

Photo 2: Stage 3 Test Unit Excavation; Disturbed Laneway and Cistern Pipe, facing northwest

Photo 3: Stage 3 Test Unit Excavation; Disturbed Laneway and Cistern, facing northeast

Photo 4: Stage 3 Test Unit Excavation, facing east

Photo 5: Stage 3 Test Unit Excavation; Disturbed Laneway and Building, facing northeast

Photo 6: Stage 3 Test Unit Excavation, facing northwest

Photo 7: Stage 3 Test Unit Excavation, facing north

Photo 8: Stage 3 Test Unit Excavation, facing southeast

Photo 9: Stage 3 Test Unit Excavation, facing northeast

Photo 10: Typical Stratigraphy of the Units Excavated in the Agricultural Field, facing east

Photo 11: Portion of a Foundation Wall Observed in Unit 190E, 325N

Photo 12: Possible Feature in Unit 180E, 325N

9.2 Artifacts

Plate 1: Utensils Recovered from H1 (AfGv-174)

Plate 2: Sample of Refined Ceramics Recovered from H1 (AfGv-174)

Plate 3: Sample of Yellowware and Stoneware Recovered from H1 (AfGv-174)

Plate 4: Sample of Personal Items Including, a Brass Medallion; and Two White Clay Pipe Stem Fragments, one with Henderson Mark Recovered from H1 (AfGv-174)

Plate 5:Sample of Chipping Detritus Recovered from H1 (AfGv-174)

Plate 6: Preform and Biface (possible projectile point) Recovered from H1 (AfGv-174)

10.0 Appendix

10.1 H1 (AfGv-174) Stage 3 Artifact Catalogue

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
1	190	320	0.30	mortar	23				
2	190	320	0.30	faunal remains, mammalian	3				unknown species
3	190	320	0.30	brick	4			red	
4	190	320	0.30	tag, decorative	1				horse head emblem, probably used on saddle
5	190	320	0.30	RWE	1	unknown	unknown		
6	190	320	0.30	porcelain	1	unknown	unknown		
7	190	320	0.30	bottle glass	1			yellow	
8	190	320	0.30	bottle glass	2			brown	
9	190	320	0.30	bottle glass	9			clear	
10	190	320	0.30	RWE, moulded	1	hollow	unknown		rim
11	190	320	0.30	shotgun shell	1				shell casing, 22. cal
12	190	320	0.30	stoneware	5	hollow	unknown		salt glaze
13	190	320	0.30	cut nail	2				
14	190	320	0.30	wire nail	1				
15	190	320	0.30	window glass	41				>1.6mm
16	190	320	0.30	window glass	6				<1.6mm
17	190	320	0.30	bottle glass	1			green	
18	190	320	0.30	bottle glass	1			clear	base frag
19	190	330	0.39	faunal remains, mammalian	8				unknown species
20	190	330	0.39	RWE	17	flat	unknown		
21	190	330	0.39	brick	13			red	
22	190	330	0.39	porcelain	2	unknown	unknown		
23	190	330	0.39	stoneware	1	hollow	unknown		salt glaze
24	190	330	0.39	stoneware	1	hollow	unknown		rim
25	190	330	0.39	RWE	1	flat	unknown		base
26	190	330	0.39	porcelain	1	hollow	unknown		base fragment
27	190	330	0.39	RWE	2	flat	unknown		base
28	190	330	0.39	RWE	3	hollow	unknown		
29	190	330	0.39	stoneware	2	hollow	unknown		
30	190	330	0.39	stoneware	2	hollow	unknown		
31	190	330	0.39	RWE, transfer printed	1	flat	unknown	blue	base; floral pattern
32	190	330	0.39	ironstone, transfer printed	1	unknown	unknown	black	
33	190	330	0.39	porcelain	1	hollow	tea cup handle		
34	190	330	0.39	ironstone	1	flat	unknown		embossed pattern, rim fragment
35	190	330	0.39	RWE	6	flat	unknown		rim fragment
36	190	330	0.39	RWE, transfer printed	1	unknown	unknown	brown	rim fragment
37	190	330	0.39	recent material	1				20th century ceramic fragment
38	190	330	0.39	Ironstone, painted	1	hollow	unknown	red and blue	
39	190	330	0.39	cut nail	9				
40	190	330	0.39	window glass	20				>1.6mm
41	190	330	0.39	wire nail	11				

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
42	190	330	0.39	miscellaneous metal	6				
43	190	330	0.39	bottle glass	32			clear	
44	190	330	0.39	button	1				shell
45	190	330	0.39	bottle glass	1			clear	
46	190	330	0.39	miscellaneous metal	2				
47	190	330	0.39	bottle glass	1			brown	
48	190	330	0.39	utensil	1				utensil handle, bone
49	190	330	0.39	bottle glass	1			brown	
50	190	330	0.39	bottle glass	6			green	
51	190	330	0.39	bottle glass	1			light green	embossed
52	190	330	0.39	bottle glass	1			green	base fragment
53	190	330	0.39	chipping detritus	1				Onondaga chert flake fragment
54	190	330	0.39	bottle glass	5			clear	
55	180	325	0.37	brick	9			red	
56	180	325	0.37	faunal remains, mammalian	15				unknown species
57	180	325	0.37	shell	1				
58	180	325	0.37	bottle glass	1			pink	
59	180	325	0.37	bottle glass	2			light blue	
60	180	325	0.37	bottle glass	1			clear	embossed
61	180	325	0.37	bottle glass	1			clear	embossed
62	180	325	0.37	bottle glass	2			clear	
63	180	325	0.37	bottle glass	2			light blue	
64	180	325	0.37	porcelain	3	unknown	unknown		
65	180	325	0.37	stoneware	1	hollow	unknown		
66	180	325	0.37	button	2				both metal
67	180	325	0.37	chipping detritus	2				Onondaga chert flake fragment
68	180	325	0.37	RWE, transfer printed	2	unknown	unknown	blue	
69	180	325	0.37	RWE, transfer printed	1	flat	unknown	green	rim
70	180	325	0.37	RWE, transfer printed	1	hollow	unknown	pink	
71	180	325	0.37	RWE, painted	1	unknown	unknown	brown	line decoration
72	180	325	0.37	RWE, painted	1	unknown	unknown	black,blue, green, gold, brown	
73	180	325	0.37	RWE, painted	1	unknown	unknown	brown, yellow, green	floral
74	180	325	0.37	RWE, transfer printed	1	unknown	unknown	green	
75	180	325	0.37	ironstone, painted	11	unknown	unknown	blue	
76	180	325	0.37	shotgun shell	1				shell casing, 22. cal
77	180	325	0.37	medallion, brass	1				embossed decoration
78	180	325	0.37	cut nail	35				
79	180	325	0.37	miscellaneous metal	38				
80	180	325	0.37	wire nail	31				
81	180	325	0.37	window glass	25				>1.6mm
82	180	325	0.37	window glass	12				<1.6mm
83	180	325	0.37	bottle glass	54			clear	
84	180	325	0.37	bottle glass	5			clear	embossed, lettering
85	180	325	0.37	RWE	3	unknown	unknown		base fragment
86	180	325	0.37	RWE, edged	1	unknown	unknown	green	scalloped rim

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
87	180	325	0.37	RWE	1	unknown	unknown		rim
88	180	325	0.37	RWE	41	unknown	unknown		
89	180	325	0.37	recent material	35				plaster / mortar
90	180	325	0.37	utensil	1				utensil handle
91	180	325	0.37	bottle glass	7			green	
92	180	325	0.37	bottle glass	4			brown	
93	180	325	0.37	bottle glass	1			brown	embossed
94	180	325	0.37	coal	1				
95	180	325	0.37	porcelain, painted	1	unknown	unknown	gold	rim
96	180	330	0.38	brick	8			red	
97	180	330	0.38	recent material	1				electrical insulator
98	180	330	0.38	bottle glass	2			clear	base fragment
99	180	330	0.38	utensil	1				utensil, fork, bone handle, decorated
100	180	330	0.38	RWE	4	unknown	unknown		rim
101	180	330	0.38	ironstone	1	flat	unknown		rim fragment
102	180	330	0.38	porcelain	2	unknown	unknown		rim fragment
103	180	330	0.38	bottle glass	3			green	
104	180	330	0.38	ironstone	1	flat	unknown		base fragment
105	180	330	0.38	porcelain	1	flat	unknown		base fragment
106	180	330	0.38	porcelain	1	hollow	handle		
107	180	330	0.38	bottle glass	11			clear	
108	180	330	0.38	shell	5				
109	180	330	0.38	window glass	14				>1.6mm
110	180	330	0.38	ironstone, transfer printed	1	flat	unknown	blue	base fragment
111	180	330	0.38	RWE	9	unknown	unknown		
112	180	330	0.38	ironstone	2	unknown	unknown		
113	180	330	0.38	porcelain	3	unknown	unknown		
114	180	330	0.38	RWE, transfer printed	1	unknown	unknown	brown	rim
115	180	330	0.38	RWE, transfer printed	1	unknown	unknown	blue	
116	180	330	0.38	RWE, transfer printed	1	unknown	unknown	blue	rim
117	180	330	0.38	porcelain, figurine	1			green	fragment
118	180	330	0.38	bottle glass	1			pink	almost complete, broken neck and rim, external thread finish
119	180	330	0.38	recent material	6				plaster
120	180	330	0.38	bottle glass	4			clear	
121	180	330	0.38	bottle glass	6			clear	embossed
122	180	330	0.38	bottle glass	1			clear	
123	180	330	0.38	bottle glass	4			light blue	
124	180	330	0.38	bottle glass	1			brown	
125	180	330	0.38	recent material	1				terracotta
126	180	330	0.38	white clay pipe stem	1				unmarked
127	180	330	0.38	coal	1				
128	180	330	0.38	miscellaneous metal	35				
129	180	330	0.38	fire brick	1				
130	180	330	0.38	slate	1				writing tablet fragment
131	180	330	0.38	stoneware	1	hollow	unknown		

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
132	180	330	0.38	stoneware	1	hollow	unknown		
133	180	330	0.38	faunal remains, mammalian	13				unknown species
134	180	330	0.38	stoneware	1	hollow	unknown		
135	180	330	0.38	wire nail	45				
136	180	330	0.38	cut nail	41				
137	200	330	0.24	cut nail	10				
138	200	330	0.24	porcelain	6	unknown	unknown		
139	200	330	0.24	bottle glass	2			brown	
140	200	330	0.24	bottle glass	2			blue	
141	200	330	0.24	bottle glass	1			green	
142	200	330	0.24	faunal remains, mammalian	4				unknown species
143	200	330	0.24	bottle glass	1			clear	mason jar, external thread finish
144	200	330	0.24	bottle glass	23			clear	
145	200	330	0.24	miscellaneous metal	1				
146	200	330	0.24	brick	1			red	
147	200	330	0.24	yellowware	8	unknown	unknown		
148	200	330	0.24	stoneware	1	unknown	unknown		
149	200	330	0.24	bottle glass	1			light blue	
150	200	330	0.24	bottle glass	1			green	
151	200	330	0.24	RWE	12	unknown	unknown		rim
152	200	330	0.24	stoneware	1	hollow	unknown		
153	200	330	0.24	window glass	3				<1.6mm
154	200	330	0.24	window glass	5				>1.6mm
155	200	330	0.24	slate	1				writing tablet fragment
156	200	330	0.24	RWE, transfer printed	3	unknown	unknown	blue	
157	200	330	0.24	RWE	2	unknown	unknown		rim
158	200	330	0.24	stoneware	1	hollow	unknown		floral decoration, part of undetermined maker's mark, rim fragment
159	200	330	0.24	stoneware	1	unknown	unknown		
160	200	330	0.24	red earthenware	3	hollow	unknown		
161	200	330	0.24	recent material	2				plaster
162	200	330	0.24	red earthenware	2	hollow	unknown		
163	200	330	0.24	bottle glass	2			light purple	
164	200	380	0.24	RWE	6	unknown	unknown		
165	200	380	0.24	window glass	1				<1.6mm
166	200	380	0.24	chipping detritus	3				Onondaga chert flake fragment
167	200	380	0.24	preform	1				Onondaga chert. thickness: 10.24mm; length: 41.36mm; width: 36.43mm
168	210	310	0.15	ironstone	1	unknown	unknown		
169	210	310	0.15	red earthenware	1	hollow	unknown		
170	200	370	0.32	RWE	1	unknown	unknown		
171	200	370	0.32	bottle glass	1			clear	
172	210	380	0.27	window glass	1				>1.6mm
173	210	320	0.25	bottle glass	1			blue	
174	210	320	0.25	ironstone	1	flat	unknown		rim fragment
175	210	350	0.23	RWE, transfer printed	1	unknown	unknown	blue	
176	210	350	0.23	bottle glass	1			clear	

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
177	210	330	0.30	porcelain	1	hollow	unknown		rim
178	210	330	0.30	bottle glass	2			clear	
179	210	330	0.30	window glass	5				>1.6mm
180	210	330	0.30	RWE	3	unknown	unknown		
181	210	330	0.30	RWE	1	unknown	unknown		
182	210	330	0.30	bottle glass	2			green	
183	210	330	0.30	porcelain	1	unknown	unknown		
184	210	330	0.30	bottle glass	1			clear	
185	210	330	0.30	RWE, edged	1	unknown	unknown	blue	rim fragment
186	210	330	0.30	RWE, transfer printed	1	unknown	unknown	blue	
187	210	330	0.30	brick	1			red	
188	210	330	0.30	wire nail	1				
189	210	330	0.30	cut nail	1				
190	210	330	0.30	chipping detritus	1				Onondaga chert flake fragment
191	220	370	0.30	stoneware	1	hollow	unknown		
192	220	370	0.30	bottle glass	1			clear	
193	220	370	0.30	bottle glass	3			clear	
194	220	370	0.30	window glass	1				>1.6mm
195	220	370	0.30	wire nail	1				
196	220	370	0.30	miscellaneous metal	1				
197	220	330	0.50	stoneware	1	hollow	unknown		
198	220	330	0.50	RWE	3	unknown	unknown		
199	220	330	0.50	bottle glass	2			clear	
200	220	330	0.50	white clay pipe stem	1				unmarked
201	220	330	0.50	shell	1				
202	220	330	0.50	yellow earthenware	1	hollow	unknown		rim fragment
203	200	320	0.35	RWE	10	unknown	unknown		
204	200	320	0.35	stoneware	2	hollow	unknown		
205	200	320	0.35	red earthenware	2	hollow	unknown		
206	200	320	0.35	window glass	1				<1.6mm
207	200	320	0.35	window glass	1				>1.6mm
208	200	320	0.35	bottle glass	2			clear	
209	200	320	0.35	RWE, painted	1	unknown	unknown	purple	
210	200	320	0.35	stoneware	1	hollow	unknown		
211	200	310	0.32	RWE	1	hollow	unknown		rim
212	200	310	0.32	porcelain	1	unknown	unknown		
213	200	310	0.32	yellowware	1	unknown	unknown		
214	200	310	0.32	RWE	1	unknown	unknown		
215	200	310	0.32	chipping detritus	1				Onondaga chert primary flake
216	200	350	0.35	bottle glass	8			brown	
217	200	350	0.35	bottle glass	1			olive	
218	200	350	0.35	bottle glass	7			green	
219	200	350	0.35	bottle glass	1			light green	
220	200	350	0.35	brick	6			red	
221	200	350	0.35	bottle glass	4			clear	embossed

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
222	200	350	0.35	bottle glass	1			clear	base fragment
223	200	350	0.35	stoneware	1	hollow	unknown		rim
224	200	350	0.35	bottle glass	1			blue	
225	200	350	0.35	glass dish	2			pink	moulded
226	200	350	0.35	bottle glass	2			pink	moulded
227	200	350	0.35	ironstone	2	unknown	unknown		
228	200	350	0.35	bottle glass	4			clear	
229	200	350	0.35	porcelain	3	unknown	unknown		
230	200	350	0.35	shell	2				
231	200	350	0.35	RWE	13	unknown	unknown		
232	200	350	0.35	RWE	2	flat	unknown		rim
233	200	350	0.35	RWE	5	unknown	unknown		rim
234	200	350	0.35	RWE	1	unknown	unknown		base
235	200	350	0.35	RWE, transfer printed	1	unknown	unknown	brown	
236	200	350	0.35	RWE, banded	1	unknown	unknown	blue	
237	200	350	0.35	bottle glass	76			clear	
238	200	350	0.35	mortar	7				
239	200	350	0.35	faunal remains, mammalian	12				unknown species
240	200	350	0.35	miscellaneous metal	14				
241	200	350	0.35	window glass	32				>1.6mm
242	200	350	0.35	tin	1				
243	200	350	0.35	window glass	1				<1.6mm
244	180	330	0.38	faunal remains, mammalian	14				unknown species
245	180	330	0.38	porcelain	1	hollow	unknown		rim
246	180	330	0.38	shell	10				
247	180	330	0.38	RWE	5	unknown	unknown		rim
248	180	330	0.38	RWE	13	unknown	unknown		
249	180	330	0.38	white clay pipe stem	1				unmarked
250	180	330	0.38	mortar	2				
251	180	330	0.38	bottle glass	1			clear	base fragment
252	180	330	0.38	biface	1				Onondaga chert. Length: 44.26mm; width: 27.24mm; thickness: 8.68mm; possible projectile point
253	180	330	0.38	bottle glass	1			light blue	base fragment
254	180	330	0.38	bottle glass	1			green	
255	180	330	0.38	recent material	2				terracotta
256	180	330	0.38	bottle glass	10			clear	
257	180	330	0.38	bottle glass	1			clear	Number 18 on it
258	180	330	0.38	brick	2			red	
259	180	330	0.38	window glass	7				>1.6mm
260	180	330	0.38	cut nail	33				
261	180	330	0.38	metal hinge	1				
262	180	330	0.38	tin	1				
263	180	330	0.38	screw	1				
264	180	330	0.38	miscellaneous metal	12				
265	180	330	0.38	wire nail	16				
266	200	340	0.39	window glass	109				>1.6mm

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
267	200	340	0.39	window glass	24				<1.6mm
268	200	340	0.39	wire nail	7				
269	200	340	0.39	coin	1				american 1 cent 1921
270	200	340	0.39	recent material	2				terracotta
271	200	340	0.39	shotgun shell	2				shell, 22. cal, rimfired
272	200	340	0.39	faunal remains, mammalian	19				unknown species
273	200	340	0.39	cut nail	16				
274	200	340	0.39	miscellaneous metal	30				
275	200	340	0.39	bottle glass	1			light purple	moulded
276	200	340	0.39	glass canning lid	1			light purple	
277	200	340	0.39	bottle glass	3			light purple	base fragment
278	200	340	0.39	bottle glass	9			light purple	
279	200	340	0.39	bottle glass	4			brown	base fragment
280	200	340	0.39	bottle glass	1			royal blue	base fragment
281	200	340	0.39	bottle glass	6			royal blue	
282	200	340	0.39	bottle glass	3			blue	
283	200	340	0.39	bottle glass	1			blue	
284	200	340	0.39	bottle glass	3			olive	
285	200	340	0.39	white clay pipe stem	1				montreal
286	200	340	0.39	white clay pipe stem	1				mcgill
287	200	340	0.39	white clay pipe stem	1				illegible maker's mark
288	200	340	0.39	bottle glass	14			olive	
289	200	340	0.39	bottle glass	26			green	
290	200	340	0.39	bottle glass	4			light green	
291	200	340	0.39	bottle glass	21			brown	
292	200	340	0.39	mortar	10				
293	200	340	0.39	stoneware	7	unknown	unknown		
294	200	340	0.39	stoneware	1	hollow	unknown		
295	200	340	0.39	RWE, painted	5	unknown	unknown	pink, green, blue	
296	200	340	0.39	recent material	1				red plastic bead
297	200	340	0.39	RWE, transfer printed	2	unknown	unknown	purple	
298	200	340	0.39	RWE	4	hollow	handle		
299	200	340	0.39	RWE	1	hollow	unknown		
300	200	340	0.39	RWE, transfer printed	4	unknown	unknown	blue	
301	200	340	0.39	RWE, transfer printed	4	unknown	unknown	brown	
302	200	340	0.39	RWE, banded	2	unknown	unknown	blue	
303	200	340	0.39	RWE, banded	1	unknown	unknown	blue	
304	200	340	0.39	RWE, transfer printed	2	unknown	unknown	green	
305	200	340	0.39	RWE	1	unknown	unknown		base
306	200	340	0.39	RWE, banded	1	flat	unknown	purple	rim
307	200	340	0.39	RWE, banded	1	flat	unknown	brown	rim
308	200	340	0.39	RWE, banded	1	flat	unknown	black, purple	rim
309	200	340	0.39	RWE, transfer printed	2	flat	unknown	brown	rim
310	200	340	0.39	RWE, transfer printed	1	unknown	unknown	brown, black	rim
311	200	340	0.39	stoneware	1	unknown	unknown		rim fragment

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
312	200	340	0.39	RWE, banded	1	unknown	unknown	blue	
313	200	340	0.39	RWE	1	flat	unknown		makers mark ***LFRED England, base fragment
314	200	340	0.39	ironstone	5	unknown	unknown		
315	200	340	0.39	porcelain, transfer printed	2	unknown	unknown	black	
316	200	340	0.39	porcelain, painted	1	unknown	unknown	green, red, yellow	
317	200	340	0.39	RWE, painted	4	unknown	unknown	brown, black	
318	200	340	0.39	bottle glass	9			light blue	
319	200	340	0.39	bottle glass	286			clear	
320	200	340	0.39	stoneware	1	hollow	unknown		base
321	200	340	0.39	yellowware	1	unknown	unknown		
322	200	340	0.39	porcelain	12	unknown	unknown		
323	200	340	0.39	RWE	156	unknown	unknown		
324	200	340	0.39	porcelain	1	hollow	unknown		rim
325	200	340	0.39	porcelain, moulded	1	hollow	unknown		
326	200	340	0.39	bottle glass	26			clear	moulded
327	200	340	0.39	porcelain	2	unknown	unknown		base
328	200	340	0.39	RWE	3	unknown	unknown		base
329	200	340	0.39	RWE	16	unknown	unknown		rim
330	200	340	0.39	bottle glass	14			clear	base fragment
331	200	340	0.39	bottle glass	18			clear	
332	200	340	0.39	stoneware	1	hollow	unknown		rim
333	185	360	0.50	stoneware	2	hollow	unknown	brown and black glze	
334	185	360	0.50	red earthenware	2	unknown	unknown	red glaze	
335	185	360	0.50	RWE	7	unknown	unknown		
336	185	360	0.50	faunal remains, mammalian	5				unknown species
337	185	360	0.50	wire nail	1				
338	185	360	0.50	cut nail	10				
339	185	360	0.50	bottle glass	1			blue	
340	185	360	0.50	bottle glass	1			green	
341	185	360	0.50	bottle glass	31			clear	
342	185	360	0.50	brick	3			red	
343	185	360	0.50	window glass	6				>1.6mm
344	185	360	0.50	bottle glass	1			brown	
345	185	345	0.35	bottle glass	2			blue	
346	185	345	0.35	RWE	1	unknown	rim		
347	185	345	0.35	RWE	1	hollow	unknown		
348	185	345	0.35	ironstone	14	unknown	unknown		
349	185	345	0.35	white clay pipe bowl	1				fragment
350	185	345	0.35	faunal remains, mammalian	3				unknown species
351	185	345	0.35	mortar	2				
352	185	345	0.35	cut nail	7				
353	185	345	0.35	wire nail	1				
354	185	345	0.35	brick	2			red	
355	185	345	0.35	bottle glass	17			clear	
356	185	345	0.35	bottle glass	2			light green	

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
357	185	345	0.35	recent material	2				terracotta
358	185	345	0.35	red earthenware	1	unknown	unknown	red glaze	
359	175	340	0.50	brick	13			red	
360	175	340	0.50	bottle glass	5			olive	
361	175	340	0.50	faunal remains, mammalian	32				unknown species
362	175	340	0.50	mortar	13				
363	175	340	0.50	recent material	12				terracotta
364	175	340	0.50	bottle glass	1			clear	embossed with 'MARSH'
365	175	340	0.50	miscellaneous metal	7				
366	175	340	0.50	wire nail	2				
367	175	340	0.50	slate	2				writing tablet fragments
368	175	340	0.50	white clay pipe stem	1				fragment
369	175	340	0.50	RWE, transfer printed	2	unknown	unknown	blue	
370	175	340	0.50	RWE, flow transfer print	1	unknown	unknown	blue	
371	175	340	0.50	red earthenware	22	hollow	unknown	yellow glaze	
372	175	340	0.50	stoneware	4	hollow	unknown	white glaze	
373	175	340	0.50	red earthenware	3	hollow	unknown	red glaze	
374	175	340	0.50	stoneware	1	hollow	unknown	black glaze	
375	175	340	0.50	cut nail	23				
376	175	340	0.50	RWE, banded	1	hollow	rim	brown	
377	175	340	0.50	RWE	5	hollow	rim		
378	175	340	0.50	RWE	39	unknown	unknown		
379	175	340	0.50	ironstone	6	unknown	unknown		
380	175	340	0.50	bottle glass	61			clear	
381	175	340	0.50	window glass	39				<1.6mm
382	175	340	0.50	window glass	12				>1.6mm
383	195	340	0.30	RWE, transfer printed	2	unknown	unknown	purple	
384	195	340	0.30	RWE, painted	1	unknown	unknown	green, blue	
385	195	340	0.30	RWE, transfer printed	1	unknown	unknown	black	
386	195	340	0.30	recent material	3				20th century ceramic fragments
387	195	340	0.30	RWE, transfer printed	1	unknown	unknown	green	
388	195	340	0.30	RWE, banded	1	unknown	unknown	blue	
389	195	340	0.30	stoneware	1	unknown	unknown		
390	195	340	0.30	red earthenware	1	unknown	unknown		
391	195	340	0.30	white clay pipe bowl	1				fragment
392	195	340	0.30	bottle glass	1			white	
393	195	340	0.30	RWE	3	hollow	rim		
394	195	340	0.30	RWE	27	unknown	unknown		
395	195	340	0.30	ironstone	32	unknown	unknown		
396	195	340	0.30	ironstone	4	flat	rim		
397	195	340	0.30	glass handle	1			clear	
398	195	340	0.30	bottle glass	1			clear	embossed: ***blisch
399	195	340	0.30	bottle glass	3			dark blue	
400	195	340	0.30	mortar	6				
401	195	340	0.30	bottle glass	9			brown	

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
402	195	340	0.30	cut nail	13				
403	195	340	0.30	window glass	20				>1.6
404	195	340	0.30	faunal remains, mammalian	2				unknown species
405	195	340	0.30	bottle glass	10			green	
406	195	340	0.30	bottle glass	182			clear	
407	175	350	0.30	wire nail	3				
408	175	350	0.30	slate	1				writing tablet fragment
409	175	350	0.30	faunal remains, mammalian	22				unknown species
410	175	350	0.30	brick	3			red	
411	175	350	0.30	mortar	4				
412	175	350	0.30	RWE, transfer printed	1	flat	rim	blue	
413	175	350	0.30	bottle glass	4			clear	
414	175	350	0.30	bottle glass	1			light green	base
415	175	350	0.30	red earthenware	2	unknown	unknown	cream	glazed
416	175	350	0.30	red earthenware	27	unknown	unknown	tan	glazed
417	175	350	0.30	cut nail	19				
418	175	350	0.30	red earthenware	3	unknown	unknown	brown	glazed
419	175	350	0.30	faunal remains, avian	10				unknown species
420	175	350	0.30	window glass	4				<1.6
421	175	350	0.30	stoneware	6	unknown	unknown		
422	175	350	0.30	RWE	11	unknown	unknown		
423	185	315	0.28	RWE, painted	1	unknown	unknown	black	
424	185	315	0.28	bottle glass	22	unknown		clear	
425	185	315	0.28	shell	1	unknown			
426	185	315	0.28	stoneware	1	unknown	unknown	brown	
427	185	315	0.28	wire nail	5	unknown			
428	185	315	0.28	RWE	6	unknown	unknown		
429	185	315	0.28	RWE, edged	1	unknown	rim	blue	
430	185	315	0.28	RWE, banded	1	unknown	rim	blue	
431	185	315	0.28	RWE, banded	1	unknown	unknown	light blue	
432	185	315	0.28	recent material	1				20th century ceramic fragment
433	185	315	0.28	mortar	13				
434	185	315	0.28	cut nail	21				
435	185	315	0.28	faunal remains, mammalian	7				unknown species
436	185	315	0.28	window glass	14				>1.6
437	185	315	0.28	RWE, transfer printed	1	unknown	unknown	blue	
438	200	335	0.30	RWE, transfer printed	7	unknown	unknown	blue	
439	200	335	0.30	ironstone	1	hollow	rim		
440	200	335	0.30	RWE, painted	1	unknown	unknown	pink, yellow, red, green	
441	200	335	0.30	white caly pipe stem	1				fragment
442	200	335	0.30	recent material	5				20th century ceramic fragments
443	200	335	0.30	stoneware	1	unknown	unknown	brown	
444	200	335	0.30	stoneware	1	hollow	rim	brown	
445	200	335	0.30	mortar	5				
446	200	335	0.30	ironstone, transfer printed	1	unknown	unknown	black, tan	

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
447	200	335	0.30	RWE, transfer printed	1	unknown	rim	brown	
448	200	335	0.30	RWE, painted	2	flat	rim	brown, blue, green	
449	200	335	0.30	RWE, painted	1	unknown	unknown	brown, blue, green	
450	200	335	0.30	ironstone, banded	1	unknown	unknown	green	
451	200	335	0.30	RWE	1	unknown	unknown		makers mark, ***kin
452	200	335	0.30	RWE, transfer printed	3	unknown	unknown	purple	
453	200	335	0.30	RWE, painted	4	unknown	unknown	orange, yellow, black	
454	200	335	0.30	RWE, transfer printed	1	unknown	unknown	black	
455	200	335	0.30	ironstone, decal ware	3	unknown	rim	red, black, yellow, grey	
456	200	335	0.30	RWE	10	unknown	rim		
457	200	335	0.30	RWE	143	unknown	unknown		
458	200	335	0.30	ironstone	17	unknown	unknown		
459	200	335	0.30	RWE, banded	2	flat	rim	purple	
460	200	335	0.30	RWE, banded	2	unknown	rim	black	
461	200	335	0.30	porcelain	7	hollow	rim		
462	200	335	0.30	porcelain	5	hollow	base		
463	200	335	0.30	porcelain, decal ware	2	unknown	unknown	yellow, green, orange	
464	200	335	0.30	porcelain	15	unknown	unknown		
465	200	335	0.30	bottle glass	7			clear	base fragment
466	200	335	0.30	bottle glass	2			light pink	embossed
467	200	335	0.30	bottle glass	3			light purple	
468	200	335	0.30	bottle glass	2			brown	1 external thread finish fragment
469	200	335	0.30	bottle glass	18			clear	
470	200	335	0.30	bottle glass	19			brown	
471	200	335	0.30	bottle glass	1			white	
472	200	335	0.30	bottle glass	2			light green	
473	200	335	0.30	bottle glass	1			green	rim fragment
474	200	335	0.30	bottle glass	25			green	
475	200	335	0.30	bottle glass	6			olive	
476	200	335	0.30	bottle glass	1			blue	base fragment
477	200	335	0.30	bottle glass	1			blue	external thread finish fragment
478	200	335	0.30	bottle glass	9			blue	
479	200	335	0.30	bottle glass	12			clear	pattern, embossed; rim fragment
480	200	335	0.30	bottle glass	404			clear	
481	200	335	0.30	window glass	66				>1.6
482	200	335	0.30	faunal remains, mammalian	6				unknown species
483	200	335	0.30	recent material	2				terracotta
484	200	335	0.30	stoneware	3	unknown	unknown	yellow	glazed
485	200	335	0.30	stoneware	1	unknown	unknown	brown	glazed
486	200	335	0.30	stoneware	2	unknown	unknown	black	glazed
487	200	335	0.30	shell	4				
488	200	335	0.30	wire nail	27				
489	200	335	0.30	miscellaneous metal	22				
490	200	335	0.30	cut nail	48				
491	200	335	0.30	brick	6			red	

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
492	200	345	0.30	RWE, flow transfer print	1	unknown	unknown	blue	
493	200	345	0.30	RWE, transfer printed	1	unknown	unknown	green	
494	200	345	0.30	RWE, painted	1	unknown	unknown	blue, brown	
495	200	345	0.30	stoneware	5	unknown	unknown	black	glazed
496	200	345	0.30	recent material	3				20th century ceramic fragments
497	200	345	0.30	RWE, transfer printed	1	unknown	unknown	blue	
498	200	345	0.30	bottle glass	7			green	
499	200	345	0.30	red earthenware	1	unknown	unknown	red	glaze
500	200	345	0.30	stoneware	1	hollow	unknown		saltglaze
501	200	345	0.30	stoneware	1	unknown	unknown	white, balck	glaze
502	200	345	0.30	ironstone	71	unknown	unknown		
503	200	345	0.30	faunal remains, mammalian	4				unknown species
504	200	345	0.30	RWE	2	flat	rim		
505	200	345	0.30	ironstone	4	flat	rim		
506	200	345	0.30	ironstone	3	flat	base		
507	200	345	0.30	porcelain	1	hollow	rim		
508	200	345	0.30	bottle glass	1			white	
509	200	345	0.30	bottle glass	6			brown	
510	200	345	0.30	bottle glass	4			dark blue	
511	200	345	0.30	glass handle	1			clear	
512	200	345	0.30	mortar	4				
513	200	345	0.30	cut nail	15				
514	200	345	0.30	bottle glass	210			clear	
515	200	345	0.30	window glass	40				>1.6
516	185	330	0.30	recent material	2				20th century ceramic fragments
517	185	330	0.30	stoneware	1	unknown	unknown	cream	
518	185	330	0.30	red earthenware	2	unknown	unknown		
519	185	330	0.30	bottle glass	19			clear	
520	185	330	0.30	wire nail	7				
521	185	330	0.30	bottle glass	2			green	
522	185	330	0.30	ironstone	2	flat	base		
523	185	330	0.30	stoneware	15	unknown	unknown		
524	185	330	0.30	RWE, painted	1	unknown	unknown	blue, pink	
525	185	330	0.30	RWE	18	unknown	unknown		
526	185	330	0.30	stoneware	1	unknown	unknown		
527	185	330	0.30	bottle glass	1			blue	
528	185	330	0.30	RWE, painted	2	unknown	unknown	purple	
529	185	330	0.30	cut nail	12				
530	185	330	0.30	faunal remains, avian	2				unknown species
531	185	330	0.30	window glass	12				>1.6
532	190	340	0.30	bottle glass	1			green	
533	190	340	0.30	porcelain	2	unknown	unknown		
534	190	340	0.30	RWE	3	unknown	rim		
535	190	340	0.30	wire nail	1				
536	190	340	0.30	RWE	11	unknown	unknown		

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
537	190	340	0.30	stoneware	1	unknown	unknown	cream	glazed
538	190	340	0.30	RWE, painted	1	unknown	rim	brown, blue	
539	190	340	0.30	red earthenware	3	hollow	unknown		
540	190	340	0.30	bottle glass	1			blue	
541	190	340	0.30	bottle glass	4			brown	
542	190	340	0.30	stoneware	1	unknown	unknown	beige, black	
543	190	340	0.30	bottle glass	1			olive	
544	190	340	0.30	window glass	8				>1.6
545	190	340	0.30	bottle glass	39			clear	
546	181	350	0.25	bottle glass	24			clear	
547	181	350	0.25	RWE	10	unknown	unknown		
548	181	350	0.25	RWE, transfer printed	1	unknown	unknown	purple	
549	181	350	0.25	faunal remains, mammalian	2				unknown species
550	181	350	0.25	bottle glass	1			light green	
551	181	350	0.25	miscellaneous metal	2				
552	181	350	0.25	stoneware	1	hollow	unknown	brown	
553	181	350	0.25	bottle glass	2			dark green	
554	181	350	0.25	red earthenware	7	unknown	unknown	red	glazed
555	181	350	0.25	cut nail	4				
556	181	350	0.25	brick	2			red	
557	181	350	0.25	bottle glass	1			brown	
558	200	355	0.42	miscellaneous metal	5				
559	200	355	0.42	RWE	16	unknown	unknown		
560	200	355	0.42	bottle glass	18			clear	
561	200	355	0.42	stoneware	1	unknown	unknown		
562	200	355	0.42	RWE, transfer printed	1	unknown	unknown	blue	
563	200	355	0.42	coin	1				1933 canadian penny
564	200	355	0.42	faunal remains, mammalian	1				unknown species
565	200	355	0.42	stoneware	1	hollow	base		
566	200	355	0.42	bottle glass	1			blue	
567	200	355	0.42	RWE, transfer printed	1	unknown	unknown	brown	
568	200	355	0.42	bottle glass	2			brown	
569	200	355	0.42	faunal remains, avian	3				unknown species
570	200	355	0.42	RWE	5	unknown	rim		
571	200	355	0.42	mortar	3				
572	200	355	0.42	stoneware	1	unknown	unknown	tan	glaze
573	200	355	0.42	stoneware	1	unknown	unknown	brown	glaze
574	200	355	0.42	faunal remains, mammalian	4				unknown species
575	200	355	0.42	wire nail	4				
576	200	355	0.42	window glass	3				>1.6
577	185	355	0.35	brick	1			red	
578	185	355	0.35	red earthenware	2	hollow	unknown		
579	185	355	0.35	earthenware	1	hollow	rim	brown	glazed
580	185	355	0.35	earthenware	7	unknown	unknown	brown	glazed
581	185	355	0.35	RWE	2	unknown	rim		

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
582	185	355	0.35	ironstone	1	unknown	rim		
583	185	355	0.35	porcelain	2	unknown	unknown		
584	185	355	0.35	RWE	8	unknown	unknown		
585	185	355	0.35	wire nail	9				
586	185	355	0.35	ironstone	1	unknown	base		
587	185	355	0.35	bottle glass	1			clear	rim fragment
588	185	355	0.35	window glass	6				>1.6
589	185	355	0.35	bottle glass	1			green	
590	185	355	0.35	miscellaneous metal	4				
591	185	355	0.35	cut nail	2				
592	185	355	0.35	stoneware	1	unknown	unknown	yellow	glaze
593	185	355	0.35	RWE, transfer printed	1	unknown	rim	brown	
594	185	355	0.35	bottle glass	1			brown	
595	185	355	0.35	bottle glass	1			brown	base fragment
596	185	355	0.35	bottle glass	45			clear	
597	185	305	0.40	bottle glass	1			blue	
598	185	305	0.40	stoneware	2	unknown	unknown	cream, white	
599	185	305	0.40	faunal remains, mammalian	2				unknown species
600	185	305	0.40	RWE	6	unknown	unknown		
601	190	360	0.30	RWE	1	unknown	rim		
602	190	360	0.30	stoneware	2	unknown	unknown	brown	glazed
603	190	360	0.30	window glass	3				>1.6
604	190	360	0.30	porcelain	1	hollow	base		
605	190	360	0.30	RWE	6	unknown	unknown		
606	190	360	0.30	faunal remains, mammalian	3				unknown species
607	190	360	0.30	bottle glass	13			clear	
608	190	325	0.30	bottle glass	1			blue	
609	190	325	0.30	bottle glass	1			light blue	embossed
610	190	325	0.30	bottle glass	6			green	
611	190	325	0.30	bottle glass	1			olive	
612	190	325	0.30	faunal remains, mammalian	4				unknown species
613	190	325	0.30	window glass	9				>1.6
614	190	325	0.30	RWE	1	unknown	unknown		
615	190	325	0.30	brick	1			red	
616	190	325	0.30	cut nail	16				
617	190	325	0.30	wire nail	12				
618	190	325	0.30	mortar	8				
619	190	325	0.30	bottle glass	22			clear	
620	190	350	0.30	miscellaneous metal	8				
621	190	350	0.30	faunal remains, mammalian	2				unknown species
622	190	350	0.30	bottle glass	1			dark green	
623	190	350	0.30	bottle glass	1			light green	
624	190	350	0.30	stoneware	2	unknown	unknown		
625	190	350	0.30	window glass	1				>1.6
626	190	350	0.30	bottle glass	7			clear	

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
627	190	350	0.30	stoneware	8	unknown	unknown		
628	190	350	0.30	ironstone	1	unknown	unknown		
629	190	350	0.30	faunal remains, avian	1				unknown species
630	190	350	0.30	mortar	3				
631	190	350	0.30	wire nail	4				
632	180	315	0.26	cut nail	2				
633	180	315	0.26	ironstone	1	unknown	rim		
634	180	315	0.26	ironstone	1	unknown	base		
635	180	315	0.26	stoneware	1	unknown	unknown	brown	glaze
636	180	315	0.26	red earthenware	1	unknown	unknown		
637	180	315	0.26	brick	1			red	
638	180	315	0.26	stoneware	1	unknown	unknown	yellow	glazed
639	180	315	0.26	RWE	5	unknown	unknown		
640	180	315	0.26	faunal remains, mammalian	2				unknown species
641	180	315	0.26	RWE	2	unknown	rim		
642	180	315	0.26	window glass	5				>1.6
643	180	315	0.26	bottle glass	5			clear	
644	181	336	0.19	miscellaneous metal	1				
645	181	336	0.19	bottle glass	12			clear	
646	181	336	0.19	bottle glass	1			green	
647	181	336	0.19	bottle glass	2			blue	
648	181	336	0.19	RWE, banded	1	unknown	unknown	blue	
649	181	336	0.19	faunal remains, mammalian	1				unknown species
650	181	336	0.19	wire nail	1				
651	181	336	0.19	ironstone	1	hollow	base		teacup
652	181	336	0.19	RWE	20	unknown	unknown		
653	181	336	0.19	brick	2			red	
654	166	350	0.30	red earthenware	1	unknown	unknown		
655	166	350	0.30	cut nail	1				
656	166	350	0.30	faunal remains, mammalian	1				
657	166	350	0.30	mortar	1				
658	166	350	0.30	window glass	1				>1.6
659	166	350	0.30	RWE	6	unknown	unknown		
660	185	320	0.50	mortar	5				
661	185	320	0.50	RWE, transfer printed	1	unknown	unknown	purple	
662	185	320	0.50	RWE	1	unknown	unknown		
663	185	320	0.50	cut nail	1				
664	185	320	0.50	miscellaneous metal	2				
665	185	320	0.50	wire nail	1				
666	205	350	0.28	bottle glass	1			clear	
667	205	350	0.28	red earthenware	2	unknown	unknown	brown	glazed
668	205	350	0.28	ironstone	2	unknown	unknown		
669	180	365	0.27	bottle glass	1			clear	rim fragment
670	181	340	0.16	bottle glass	1			brown	
671	181	340	0.16	bottle glass	1			blue	

Cat#	Unit Easting	Unit Northing	Depth(m)	Artifact	Frequency	Ceramic Form	Ceramic Function	Colour	Comments
672	181	340	0.16	RWE	3	unknown	unknown		
673	200	360	0.30	wire nail	1				
674	200	360	0.30	window glass	2				>1.6
675	200	360	0.30	bottle glass	1			clear	
676	200	360	0.30	miscellaneous metal	1				
677	205	340	0.25	ironstone	3	unknown	unknown		
678	205	340	0.25	cut nail	2				
679	205	340	0.25	bottle glass	4			clear	
680	195	350	0.30	bottle glass	10			clear	
681	195	350	0.30	bottle glass	1			brown	
682	195	350	0.30	mortar	1				
683	195	350	0.30	red earthenware	2	unknown	unknown		
684	195	350	0.30	cut nail	4				
685	195	350	0.30	faunal remains, mammalian	1				
686	195	350	0.30	bottle glass	1			blue	
687	195	350	0.30	RWE	6	unknown	unknown		
688	195	350	0.30	RWE, transfer printed	1	unknown	unknown	purple	
689	195	350	0.30	RWE, transfer printed	1	unknown	unknown	blue	
690	195	350	0.30	RWE	1	unknown	unknown	blue	
691	195	350	0.30	bottle glass	2			green	

10.2 Euro-Canadian Artifact Descriptions

10.2.1 Household Artifacts

Bottle Glass

Bottle glass fragments are generally not diagnostic and are often simply categorized according to colour. Clear, or colourless glass was uncommon prior to the 1870s. Until 1880, clear glass bottles often displayed an aqua tinge that resulted from the iron additives used to de-colourise it. Clear or colourless glass came into much more widespread use after the development of automatic bottle manufacturing machines in the early 20th century (Lindsey 2019).

10.2.2 Ceramic Ware Types

Ironstone

Ironstone was a variety of RWE designed by the Turner family in the late 1700s (Tharp 2017). Like its contemporaries, it featured a white surface, but with a bluish tint. Furthermore, ironstone vessels were usually thicker than earlier whiteware varieties with a dense, heavy paste. The impetus behind their development was a desire among Staffordshire potters to find a cheap alternative to imported porcelain. By 1813 James Mason had reworked and patented "ironstone china." The patent lasted only fourteen years; by that time a variety of Staffordshire potteries were producing a similar product. Nevertheless, the Mason's brand name had become associated with all of the various stone china ceramics that were in production. Ironstone began to be imported from England to Canada during the 1840s and came to dominate the ceramic trade during the middle part of the century (The Potteries.org 2003). In terms of appearance, ironstone vessels were commonly left plain with infrequent applied surface decoration, although moulded designs were common (Adams 1994).

Porcelain

Porcelain was a variety of refined white earthenware, first manufactured in China in the 16th Century. Porcelain wares are produced with very high firing temperatures resulting in a partial vitrification of the paste. Vessel bodies tend to be translucent and can be very thin. Because of its prohibitive cost, porcelain is rare on 19th Century sites in Ontario but became relatively common by the 20th Century as less expensive production techniques were developed in England, Germany and Holland (Kenyon 1980).

Throughout the 19th Century, potters in Staffordshire, England, sought to replicate Chinese porcelain resulting in the creation of many variations of refined white earthenware, including creamware, pearlware and whiteware. English porcelain, also known as bone china or English soft-paste porcelain, was the most common variety of porcelain represented in Euro-Canadian sites throughout the 19th Century (Majewski and O'Brien 1987: 129). It was a vitreous ceramic with high silicon oxide content (although not as high as Chinese porcelain) that maintained glass-like sharpness on breakage. Given its cost, its presence of porcelain in large numbers on Euro-Canadian sites in Southern Ontario usually indicates a higher economic status.

Red and Yellow Earthenware

Red and yellow earthenware are utilitarian wares that are fired at a lower temperature than more RWE varieties, and are made from a coarser, more porous paste. Earthenwares cannot be used to date an archaeological assemblage since they were in use throughout the entirety of the 19th century. Their frequency on sites began to decline slowly from the 1850s onwards with the importation of stoneware from the United States and then dramatically after 1890 when they were replaced by glass jars (Miller 1980b:9). Earthenware vessels were also less expensive than other, more refined tablewares. As a result, an abundance of earthenware pieces relative to other ware types, especially on a late 19th century site, may indicate lower economic status.

RWE

In the 1820s, the blue-tinted pearlware glaze gave way to a whiter variety that some archaeologists have taken to calling whiteware; like pearlware, however, this term was not used

by manufacturers. According to Miller (1980a:18), the white appearance of whiteware was caused by reducing the amount of cobalt added to the glaze and adding it instead to the paste. It was manufactured by many different recipes, however, and can be difficult to distinguish from other ceramics in the period, including sherds of pearlware, especially when examining small sherds. As Miller suggests,

> *...if an assemblage of ceramics from the first half of the 19th Century is placed before six archaeologists and they are asked for counts of creamware, pearlware, whiteware, and stone china wares, the results will probably be six different enumerations*
>
> Miller 1980a:2

Accordingly, the term RWE is used in this report to identify whiteware sherds as well as any sherds that are too small to distinguish between whiteware, pearlware or ironstone (noting that this gives a conservative date to any pearlware sherds not correctly identified).

Stoneware

Stoneware ceramics are made from a heavy, non-porous paste and, although naturally impermeable, were usually glazed with a grey or brown slip (Lamb 2003). Early 19th century varieties were manufactured in England, Germany and the United States and featured a salt glaze. Stoneware vessels were relatively infrequent in Southern Ontario until the mid-1800s; by 1850, at least two potteries in Ontario (Brantford and Toronto) were producing stoneware. Because they were large and durable, stoneware vessels were typically utilitarian, functioning as food storage containers, beer jugs and tankards, butter crocks, and cream jars (Lamb 2003).

Yellowware

Yellowware is a type of coarse earthenware that was produced in England in the late 18th century. It first appeared on sites in Southern Ontario in the 1840s, and remained popular throughout the remainder of the 19th century. In addition to the distinctive mustard-yellow glaze, yellowware vessels can be identified by their porous, buff-coloured fabric. They were often slip decorated and commonly used for utilitarian kitchen bowls (Adams 1994).

10.2.3 Ceramic Decorative Styles

Banding

Banding is one of several terms that denotes the use of an applied coloured slip to decorate the edge of a vessel; others include annular ware and slip-decorated ware. As the name implies, simple bands of colour were a common motif among banded vessels, but the term also includes dendritic (or mocha), cabling, and cat's eye designs, as well as machine-turned impressed patterns. Banding was common on ceramic vessels throughout the 19th century. As the century progressed, the patterns tended to become simpler and blue the most dominant colour (Adams 1994).

Edging

Edging is used to describe ceramics where decoration is concentrated on moulding or colouring the rim of the vessel, most commonly plates and other flatware. The earliest edged vessels bore asymmetrical, rococo shell-edging and date from roughly 1775. Over time, the style of the edge design changed, becoming symmetrical scalloping from around 1800, to straight-edged with feathering by 1840 and non-embossed, straight edges by 1860 (Hunter and Miller 2009). Dates vary somewhat for the popularity of the dominant colours – blue and green – but blue scalloped edged vessels date from 1820 to 1840, blue unscalloped edged vessels from after 1860.

Hand Painting

Hand painted floral tea and dinner ware sets were a staple ceramic item in the 1800s. From 1785 to 1815, potters used metal oxide colours that produced subdued, earth tones including brownish orange, olive-green, raw umber, and a limited use of blue. Cobalt blue, often referred to as Early Palette Blue, was the most dominant colour observed between 1815 and 1830, and typically

featured large brushstrokes. Between 1830 and 1870, a growing variety of chrome colours, often referred to as Late Palette colours, were popular for RWE and ironstone dinner and tea sets (Adams 1994). By the end of the century, blue had once again emerged as the post popular colour for hand painted vessels.

Transfer Printing

The technique of transferring a pattern from an engraved metal plate to the surface of a ceramic vessel is thought to have developed in the mid-18th century (Jervis 1911); it became more widely used among Staffordshire potteries in the 1790s (Shaw 1829). In Southern Ontario, transfer printing was popular through the first half of the 19th Century before simpler techniques or no decoration whatsoever became popular. It underwent a revival after 1870 until the end of the Century (Majewski and O'Brien 1987). Blue transfer print ware was a popular decorated ceramic ware manufactured throughout the 19th century on various wares and it was the dominant colour available for printed wares before 1830. Brown and black transfer print wares were popular for a long span roughly between 1830 and 1870 (Adams 1994).

Flow Transfer Printing

Flow transfer printing was similar to regular transfer printing, with the exception that designs were allowed to bleed into the glaze giving them a misty appearance. Flow transfer printing was popular in the late 1840s and 1850s and was later revived in the 1890s. Traditionally, blue is the most predominant colour used in flow-transfer printing, although examples in black do exist (Adams 1994).

10.2.4 Structural Artifacts

Nails

Originally, all nails were hand made (wrought) and required skill, as well as a forge. As a result, nails were relatively expensive and methods were sought to have them machine made. Whereas cut, or square nail manufacture began in the late 1790s, cut nails only become readily available in Upper Canada by the 1830s. Cut nails revolutionized house framing and were common for a long period, from approximately 1830 to 1890 by which time they had been largely supplanted by wire nails. Wire drawn nails are identical to the type of nails used today, with their round heads and wire shafts (Adams 1994).

Window Glass

Window glass can be temporally diagnostic in a limited manner, but only if at least ten specimens are available. In the 1840s, window glass thickness changed dramatically, in large part due to the lifting of the English import tax on window glass in 1845. This tariff taxed glass by weight and encouraged manufacturers to produce thin panes. Most window glass manufactured before 1845 tended to be thinner, while later glass was thicker. However, because window glass thickness varied even within a single pane, an assemblage of ten specimens is required to provide an adequate sample (Kenyon 1980).

10.2.5 Personal Artifacts

Slate Tablets and Pencils

The value of paper, especially writing quality paper, in the 1800s prevented its use for junior schoolwork and everyday household use. Instead, both adults and children commonly used slate boards and pencils. Boards comprised a flat sheet of fine quality slate (typically 2.5mm thick) bounded in a wood frame. The pencils were typically 3-5mm thick and composed of slate or shale softer than the board. There were several methods of pencil manufacture, from reducing slices it by forcing them through tubes (the evidence of which can be seen as flat facets along the pencil length); turning slices of slate (Davies 2005), or by grinding slate or shale to a powder to then compress it in moulds (Evening Standard 1891). Given the expense of slate for roofing purposes, most thin slate fragments on historic sites are likely to be from writing boards.

White Clay Pipes

White clay pipes were popular throughout the 19th century, with a decline in use around 1880 due to the rise in popularity of briar pipes and cigarettes (Kenyon 1980). Most white clay pipes were manufactured in either Québec or Scotland, with occasional examples from English, Dutch, French, and American manufacturers. The maker's name is commonly impressed on one side of the stem with the city of manufacture on the opposite side, although this did not become common practice until after 1840.

10.3 Pre-Contact Aboriginal Artifact Descriptions

10.3.1 Chipping Detritus

Chipping detritus is the waste product from the production of stone tools and is the most frequently recovered artifact on pre-contact Aboriginal sites in southern Ontario. Chipping detritus has a low significance and interpretive value when it is not associated with any diagnostic material, therefore they cannot be used to determine the cultural affiliation or time period of the occupation of a site.

10.3.2 Biface

Bifaces are the most common form of pre-contact Aboriginal lithic tool and could be made into a variety of tools with different functions. Due to the long span of production of biface tools they cannot be used to determine the cultural affiliation or time period of the occupation of a site.

10.3.3 Preform

Preforms are associated with early stage lithic reduction as chert cores or flint nodules area converted into blanks or preforms. These artifacts are not temporally diagnostic, beyond the fact that they date to the pre-contact Aboriginal period.