



REVISED REPORT

Stage 3 Archaeological Assessment

*Turnbull Site (BfGd-8), Part of Lot 5, Concession 10, Dalhousie Township,
Lanark County, Ontario*

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PIF Number: P1107-0030-2020

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May 17, 2021

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Executive Summary

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

Golder Associates Ltd. (Golder) was retained by Thomas Cavanagh Construction Limited to complete a Stage 3 archaeological assessment for the Turnbull Site (BfGd-8), located within part of Lot 5, Concession 10, Dalhousie Township, Lanark County, Ontario (Maps 1 and 2). The Turnbull Site was excavated in support of an *Aggregate Resources Act* (ARA) license application for the proposed Highland Line Pit.

The objectives of this Stage 3 archaeological assessment are to determine the extent of the archaeological site and the characteristics of the artifacts, to collect a representative sample of the artifacts, to assess the cultural heritage value or interest of the archaeological site, and to determine the need for mitigation of development impacts and recommend appropriate strategies for mitigation.

Evidence for human occupation of Eastern Ontario dates to at least 11,000 BP following the retreat of the Champlain Sea. During the succeeding Archaic Period (9,000 to 2,500 BP), the environment of Ontario approached modern conditions with the Ottawa River and its many tributaries serving as a major transportation route that facilitated trade, including natural copper collected from surface deposits near Lake Superior. The Woodland Period (2,500 BP to 400 BP) saw the introduction of pottery and agriculture which led to the development of semi-permanent and permanent villages in southern Ontario. Within eastern Ontario, Woodland subsistence strategies were still based on hunting and gathering, and their migratory routes followed seasonal patterns to proven hunting locations. European contact began in 1610 following the expedition of French explorer Étienne Brûlé who passed through the area that would become Ottawa. Settlement of Dalhousie Township began in 1820. Land registry records indicate that Lot 5, Concession 10 was first settled by the mid-19 century. Golder's (2020) Stage 1 and 2 archaeological assessment identified the Turnbull Site (BfGd-8) is likely the remains of the Turnbull homestead shown on an 1863 Map of Lanark County.

The Stage 3 test unit excavation was completed in 9 days between July 23 and August 10, 2020. A total of 47 1-m² test units were hand excavated including 8 infill units. The Stage 3 excavation resulted in the collection of 1,534 artifacts and the identification of two cultural features. The artifact assemblage consists primarily of domestic refuse characteristic of a mid-19th century farmstead providing further evidence that the Turnbull Site (BfGd-8) is the remains of the Turnbull homestead. The distribution of artifacts indicates two components, both associated with the cultural features which are located on the east and west sides of the site. The two features may be the remains of structures such as the Turnbull family home and a small outbuilding located closer to the road.

This Stage 3 archaeological assessment resulted in the following recommendations:

- 1) The Turnbull Site (BfGd-8) possesses Cultural Heritage Value or Interest and should be subject to Stage 4 mitigation prior to any development impacts.
- 2) As the Turnbull Site (BfGd-8) is located within the area of the proposed Highland Line Pit and avoidance and protection is not a viable option, the Stage 4 mitigation would entail hand excavation of Features 1 and 2, and mechanical topsoil removal for the remainder of the site. The Turnbull Site meets all requirements for mechanical topsoil removal as outlined in Standard 1 of Section 4.2.3 of the *Standards and Guidelines for Consultant Archaeologists* (2011) and hand excavation of features as outlined in Section 4.2.1. Following consultation with an archaeology review officer (see supplementary documentation), hand excavation will extend only to the edge of the features.

- 3) Mechanical topsoil removal will employ an excavator with a flat-edged bucket and follow Standards 2 to 6 of Section 4.2.3 of the *Standards and Guidelines for Consultant Archaeologists* (2011).
- 4) As per Standard 1 of Section 4.3 of the *Standards and Guidelines for Consultant Archaeologists* (2011), mechanical excavation must extend a minimum of 10 m beyond uncovered cultural features, or to the edge of the project boundary (Map 4).

This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c. 0.18. The report is reviewed to ensure that the licensed consultant archaeologist has met the terms and conditions of their archaeological license, and that the archaeological field work and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.

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Abbreviations

BP	Before Present, taken to mean before 1950 and used as an alternative to BC/AD
CHVI	Cultural Heritage Value or Interest
Golder	Golder Associates Ltd.
m	Metre(s)
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
PIF	Project Identification Form

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1.0 PROJECT CONTEXT

1.1 Development Context

Golder Associates Ltd. (Golder) was retained by Thomas Cavanagh Construction Limited to complete a Stage 3 archaeological assessment for the Turnbull Site (BfGd-8), located within part of Lot 5, Concession 10, Dalhousie Township, Lanark County, Ontario. The Turnbull Site was excavated in support of an *Aggregate Resources Act* (ARA) license application for the for the proposed Highland Line Pit.

Permission to access the properties was provided by the client.

1.2 Objectives

The objectives of this Stage 3 site-specific archaeological assessment follow the Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011: 45):

- To determine the extent of the archaeological site and the characteristics of the artifacts.
- To collect a representative sample of artifacts.
- To assess the cultural heritage value or interest of the archaeological site.
- To determine the need for mitigation of development impacts and recommend appropriate strategies for mitigation and future conservation.

2.0 HISTORICAL CONTEXT

2.1 Regional Indigenous History

The Ottawa Valley was covered by the Laurentide ice sheet until approximately 11,000 years before present (BP). Following the period of deglaciation, the Ottawa Valley was inundated by the Champlain Sea which is interpreted to have extended from the Rideau Lakes in the south, along the Ottawa Valley and St. Lawrence areas and terminating in the vicinity of Petawawa in the west. The exact western boundary is unconfirmed as current elevation levels reflect the isostatic adjustment of the land following the melting of the glaciers which has obscured definitive traces of the Champlain Sea shoreline at the time of its existence. The eastern portion of the sea extended into the Atlantic Ocean.

During the much of the Paleo Period (11,000–ca. 9,000 BP) Ottawa would have remained inundated by the Champlain Sea, although as the Champlain Sea receded towards the end of this period it is possible that people migrated along the changing waterfront landscape eventually moving into the Ottawa Valley (Watson 1999a).

The ridges and old shorelines of the Champlain Sea and early Ottawa River channels generally represent areas most likely to contain evidence of Paleo occupation in this region, however identifying the location and dates of these ancient shorelines has proved challenging. The boundaries of the Champlain Sea are not marked by a continuous identifiable shoreline, especially in its western shore where rocky conditions were not favorable to the formation of beaches (Chapman and Putnam 1973). Attempts to use deposits of marine mollusk shells as a source for radiocarbon dates to delineate the transgression of the shorelines have proved unreliable as shells absorb carbon at different rates according to their depth below the surface and geological location (Robinson 2012). Additionally, earlier interpretations showing discrete stages of regression (see Chapman 1937) have proven not to be supported by the geological record. Unlike the catastrophic flood events during the Younger Dryas climatic event that led to the rapid formation of the Champlain Sea, its regression was a slow process occurring as sea waters drained during isostatic rebound (Robinson 2012). The interpretation of the presence of shorelines is further complicated by the fact that isostatic rebound may have raised the Ottawa region above its current elevation before it receded to its current level (Fulton and Richards 1987). Flooding resulting from the overflow of glacial Lake Agassiz also eroded and manipulated topographic landforms within the evolving landscape (Fulton et al. 1987). As a consequence, only the margins of the Champlain Sea at its maximum extent, a time when the Ottawa region would have been fully submerged, have been reliably mapped due to the rapid inundation creating pronounced shoreline features (Loring 1980). Although recent studies using various dating techniques that do not rely upon deposits of mollusk shells have provided some favourable results (Tremblay 2008), considerable work remains in developing the chronology of the Champlain Sea's regression.

The earliest possible settlement in the Ottawa Valley would have occurred during the recession of the Champlain Sea when the vegetation and wildlife began to develop within the area, which enabled the sustainability of humans (Watson 1999a). The ridges and old shorelines of the Champlain Sea and early Ottawa River channels reflect areas most likely to contain evidence of Paleo Period occupation in the region. Archaeological and geological investigations in the Ottawa Valley have suggested these early sites may be identified within the 550 foot (167.6 metres) or higher contour topography, although additional research may be required to confidently assess this correlation (Kennedy 1976).

Evidence of human occupation within the Ottawa Valley during this period has been documented by a variety of archaeological discoveries including fluted points (laurel leaf shaped points with a channel flake scar extending from the base of the point) recorded in the Rideau Lakes area (Watson 1982; 1999b). In Ottawa, sites interpreted to have produced Paleo Period material have been recorded near Greenbank Road (Swayze 2003), Albion Road

and Rideau Road (Swayze 2004), although the lack of diagnostic material represented at these sites and the inferred climatic environment suggests these sites may rather be reflective of Archaic Period occupation following the recession of the Champlain Sea.

During the succeeding Archaic Period (ca. 9,000 to 2,800 BP), the environment of eastern Ontario approached modern conditions (Ellis et al. 1990). Occupation within the Ottawa Valley developed as the environment became habitable, with an Early Archaic Dovetail projectile point recovered in Ottawa South sometime around 1918-1920 (Pilon and Fox 2015) potentially representing the earliest diagnostic evidence of human interaction within the local landscape.

Archaic Period inhabitants generally continued to employ a hunter-gatherer subsistence strategy focused on localized faunal and floral resources including deer, fish, berries and nuts. The McIntyre Site, located on the north shore of Rice Lake and south of Peterborough, contained the remains of a large variety of floral and faunal species (Ellis et al. 1990). Plant remains recovered from the site included butternut, acorn, hickory, plum, cherry, blueberry and hawthorn. Faunal remains included deer, canine, beaver, muskrat, bear, and a large variety of fish including bass, bullheads, and suckers. The inhabitants of the site may also have been gathering wild rice (McAndrews 1984). In the Ottawa Valley, a stone fish weir likely dating to the Archaic Period found upstream from Morrison Island and Allumette Island demonstrates the increasingly sophisticated technology that was being employed during the period (Allen 2010).

The Ottawa Valley was an important route for the movement of natural copper, either through direct trade between individual groups, or through trips to Lake Superior to exploit the surface deposits located there. Copper artifacts similar to those documented on Allumette Island in the Ottawa River have been discovered in Wisconsin, Michigan, New York State and Manitoba (Kennedy 1970). This commodity, as well as other tradable goods, was presumably transported by canoes and other vessels along the navigable waterways including the Ottawa River.

The earliest evidence of human burials within the Ottawa Valley are interpreted to date to the Archaic Period (Pilon & Young 2009). Excavations at Allumette and Morrison Islands have found burial sites containing the remains of dozens of individuals within deposits that appear to have been used continuously for millennia (Kennedy 1966). The inclusion of grave offerings such as natural/native copper pieces in burials found at the site of Coteau-du-Lac provides evidence for Archaic ritual practice (Pilon and Young 2009). Other sites with Archaic Period components within the Ottawa Valley region have been noted on Aylmer Island, Chaudière Falls, Wilber Lake, Leamy Lake, the Rideau Lakes (Watson 1982), Jessups Falls, and in Pendleton (Daechsel 1980). Archaic sites have been documented within the vicinity of the Rideau River (BhFw-19; BhFw-110, Golder 2017), and evidence from archaeological investigations around Honey Gables, Albion Road and Rideau Road may contain Early Archaic material (Swayze 2004). Evidence of Archaic Period occupation has also been recovered from isolated find spots within the City of Ottawa (Jamieson 1989), although the context of many of these have been poorly documented.

The Woodland Period (ca. 2,800 to 450 BP) is primarily distinguished from the Archaic Period by the introduction of ceramics (Wright 1972). Early Woodland Period inhabitants continued to live as hunters, gatherers and fishers in much the same way as earlier populations had done. They also shared an elaborate burial ceremonialism influenced by the inclusion of exotic artifacts within grave deposits (Spence et al. 1990: 129).

By the Middle Woodland Period (2,400 to 1,150 BP) regional cultural expressions or traditions have been distinguished by archaeologists. These traditions have been identified based on patterns of ceramic decorations, use of lithic materials, and are the primary basis to differentiate the Middle Period from the Early. A greater number of known sites from this period have allowed archaeologists to develop a better picture of the seasonal

round followed in order to exploit a variety of resources within a home territory. Through the late fall and winter, small groups would occupy an inland “family” hunting area. In the spring, these dispersed families would congregate at specific lakeshore sites to fish, hunt in the surrounding forest, and socialize. This gathering would last through to the late summer when large quantities of food would be stored for the approaching winter.

Along the Ottawa River, Middle Woodland sites have been identified in the northwest end of Ottawa at Marshall's and Sawdust Bays (Daechsel 1980; Daechsel 1981), Rockcliffe Park (Pilon 2008; Pilon and Boswell 2015), as well as at Leamy Lake (Laliberte 1995), along the Rideau River (BhFw-6, BhFw-101, BhFw-110 and BhFw-118; Golder 2017; Patterson 2016) and within the City of Ottawa west of Bank Street (Golder 2014). Sawdust Bay 2 (BiGb-6), located approximately 750 m west of where the Mississippi River drains into the Ottawa, represents a camp site radiocarbon dated to 1560 BP (\pm 290 BP) and interpreted to reflect the Point Peninsula Tradition. The corresponding artifact assemblage shows that subsistence was focused on hunting fauna living in the adjacent lakes and swamps. The Leamy Lake and Rockcliffe Park Sites (BiFw-16 and BiFw-91), all located in the area around the mouth of the Gatineau River and the east shore of the Ottawa River, show evidence of seasonal warm weather settlement spanning a period from 4000 BP up to at least the Middle Woodland period (Pilon & Boswell 2015).

Another significant development of the Woodland Period was the introduction of agriculture and appearance of domesticated plants ca. 1,450 BP. Initially, only a minor addition to the diet, the cultivation of corn, beans, squash, sunflowers and tobacco gained economic importance during the Late Woodland Period. Unlike in southern Ontario, where the shift in subsistence resulted in the development of semi-permanent and permanent villages, evidence suggests that the Ottawa Valley remained occupied by mobile hunter-gatherers. In part, this was because the terrain was less than suitable for early agriculture. It was also a reflection of the increased pressure on hunting territories and conflict over trade routes at the end of the Woodland Period.

By the end of the Late Woodland Period, distinct regional populations occupied specific areas of southern Ontario separated by vast stretches of largely unoccupied land, including the Huron along the north shore of Lake Ontario, and the St. Lawrence Iroquois along the St. Lawrence River. Facing persistent hostilities with Iroquoian populations based in what is now New York State, the Huron moved from their traditional lands on the north shore of Lake Ontario to the Lake Simcoe and Georgian Bay region. The St. Lawrence Iroquois disappeared sometime in the late 16th century with refugees possibly dispersing among the Algonquin populations in the Ottawa Valley region (Pendergast 1999).

The Algonquins, who occupied the lands north of the Huron, had historical hunting territories that may have extended as far east as the St. Maurice River in Quebec. They also claimed the lowlands south of the St. Lawrence River after the disappearance of the St. Lawrence Iroquois in the late 16th century (Trigger & Day 1994). At the time of initial contact, the French documented several Algonquin groups residing in the vicinity of the present location of the City of Ottawa (Heidenreich & Wright 1987, Plate 18). These included the Kichesipirini of Morrison Island, the Matouweskari along the Madawaska River to the west, the Onontcharonon in the Gananoque River basin to the southwest, and the Weskarini, the largest of the three, situated in the Petite Nation River basin to the northeast.

Late Woodland sites have been recorded throughout the Ottawa Valley. Two small Late Woodland sites were identified on a property near the Village of Cumberland (Ferris 2002). A significant Woodland Period occupation has also been identified at the Leamy Lake site and several burials dating to the Archaic Period have also been documented on the north side of the Ottawa River, just east of the Chaudière Falls. Many of these burials were observed during the mid-19th century, with upwards of twenty individuals documented along the northern shore of the Ottawa River between the Chaudière Falls and the Gatineau River. Many of these internments were associated with red ochre deposits, although there does not appear to be a consistent deposition positional pattern to those recorded (Pilon and Boswell 2015).

Though it is often difficult to link archaeological sites to specific historical Indigenous groups, the Highland Lake site (BiGh-1), located west of Ottawa, may be an Algonquin site associated with the Matouweskarini (von Gernet 1992). Ottawa Valley Algonquin sites typically consist of shallow deposits characteristic of seasonal occupation by small family groups within family or band territorial limits and are typically located on the headwaters of major tributaries (Pendergast 1999). Exceptions include a number of summer camps identified at Morrison Island and Leamy Lake where larger groups came together (Pilon and Boswell 2015).

The Algonquins' location along the same river networks used for transportation by early French traders positioned them to monopolize the early fur trade with the two communities becoming close allies following Champlain's expedition in 1603. Competition for furs increased existing tensions between the Algonquin communities and their neighbours including the Haudenosaunee Nations, such as the Mohawk, residing to the south in what is now Ontario and New York. The 17th century saw a long period of conflict known as the Beaver Wars between the Algonquin and the Haudenosaunee that resulted in the significant disruption of life. Mohawk raids against Algonquin villages in the Upper Ottawa and St. Lawrence Valleys resulted in the abandonment or destruction of many Algonquin settlements in these areas (Trigger and Day 1994). Some Algonquin's found refuge in French settlements such as Trois Rivières, Quebec City, Sillery, and Montreal while others may have retreated to interior locations along the Ottawa River's tributaries (Holmes 1993). At the end of the 17th century, the Haudenosaunee were driven out of much of southern Ontario by the Mississaugas though they continued to occupy parts of eastern Ontario on a seasonal basis.

The French brokered a peace treaty in 1701 at Montreal where the Algonquin, the French, and the Haudenosaunee agreed to peacefully share the lands around the Great Lakes (INAC 2011). In exchange for peace, the Algonquin gave the Haudenosaunee secure access to furs which the Haudenosaunee used to secure their alliance with the British. Between 1712-1716, Algonquins were noted as living along the Gatineau River with the Haudenosaunee occupation located south of the St. Lawrence (Holmes 1993). By 1740, Algonquin communities were present in the vicinity of Trois-Rivières, Rivière Lièvre and Lake of Two Mountains and Mohawk community members were residing near Lake of Two Mountains (Holmes 1993).

Following the Seven Years' War in the mid-18th century, the defeat of the French, Algonquin, and their allies by the British and the Haudenosaunee resulted in the further loss of Algonquin hunting territories in southern Quebec and eastern Ontario as the British seized France's colonies. The extension of Quebec's boundaries in 1774 through the Quebec Act and the use of the Ottawa River as the boundary of Upper and Lower Canada following the 1791 Constitution Act separated the Algonquins between two government administrations (AOP ND).

Britain's colonial policy differed from the French in that the Crown was much more interested in securing land surrenders from the Indigenous populations for settlement by Europeans. The Royal Proclamation of 1763 issued by King George III enabled the Crown to monopolize the purchase of Indigenous lands west of Quebec. Although the proclamation recognized Indigenous rights to their land and hunting grounds, it also provided a way through which these rights could be taken away (Surtees 1994). Land cession agreements between Indigenous groups and the Crown increased following the War of 1812 as a new wave of settlers arrived in Upper Canada primarily from Britain. The Crown implemented annuity systems in the purchase of lands from Indigenous peoples where the interest payments of settlers on the land would cover the cost of the annuity rather than pay a one-time lump sum. By the 1850s, Indigenous groups had become cautious of these agreements and had begun to demand the retention of reserved land and preservation of hunting and fishing rights (Surtees 1994).

Between 1783 and 1784, Captain William Redford Crawford negotiated on behalf of the Crown with the Mississauga chiefs living in the Bay of Quinte region. In the so-called "Crawford Purchase," Crawford negotiated for the lands located east of the Bay of Quinte to the Trent River. This agreement was intended to provide land to

the United Empire Loyalists and Indigenous allies following the American Revolution (Ontario 2020). The lands covered by the Crawford Purchase now includes the communities of Kingston and Brockville. The Crown again negotiated with the Mississauga of the Bay of Quinte and Kingston areas during the Rideau Purchase (1819/1822) which included a portion of Algonquin territory in the Ottawa Valley (Surtees 1994). The Algonquin and Nipissing, who were left out of the talks, protested the purchase, but were largely ignored (Holmes 1993). The Rideau Canal was later built through the territory of the Rideau Purchase.

In 1839, the Crown denied the Algonquins and Nipissings the right to lease portions of their land, including islands in the Ottawa River, to settlers with whom they had previously been collecting rent payments (Holmes 1993). Furthermore, the Crown did little to prevent further additional encroachments by settlers on Indigenous lands.

A reserve was purchased for use by the Algonquins in Golden Lake in 1873 (Holmes 1993). The Golden Lake reserve, now known as the Algonquins of Pikwakanagan First Nation, has a registered population of around 2,000 people with over 400 living on the reserve (INAC 2013). Additional reserves and settlements for the Algonquins were established in Quebec during the mid-20th century.

The Indian Act of 1876 framed the relationship between the Canadian government and Canada's Indigenous peoples as a paternalistic one where the government served as their guardian until their cultures were able to integrate into Canadian society (INAC 2011). The Department of Indian Affairs was granted the authority to make policy decisions such as determine who was classified as Indigenous, manage their lands, resources and money, and promote "civilization". The consequence was the further erosion of Indigenous rights to autonomy and self-governance. The implementation of residential schools and adoption of Algonquin children by non-Indigenous families in the mid-20th century reflected further discrimination and the disregard of rights (AOP n.d.).

The Algonquins of Ontario today consist of ten communities: Antoine, Algonquins of Pikwakanagan First Nation, Bonnechere, Greater Golden Lake, Kijicho Manito Madaouskarini, Mattawa/North Bay, Ottawa, Shabot Obaadjiwan, Snimikobi, and Whitney and Area (AOO n.d.).

The Ottawa Valley is unceded Algonquin land and land claim negotiations with Canada and Ontario are in progress. The Algonquin and the Government of Canada signed an agreement in principle to transfer 117,500 acres of Crown lands in eastern Ontario to the Algonquin (INAC 2016; Tasker 2016). While this represents an important step in the negotiations, the talks are ongoing.

2.2 Post-Contact Regional History

Samuel de Champlain was the first European to document his explorations of the Ottawa Valley, initially in 1613 and again in 1615. He was preceded by two of his emissaries, Etienne Brule around 1610 and Nicholas de Vigneau in 1611. It is likely that all three travelled at least the lower reaches of the Rideau River. In the wake of Champlain's voyages, the Ottawa River became the principal route for explorers, missionaries and fur traders travelling from the St. Lawrence to the interior, and throughout the seventeenth and eighteenth centuries this route remained an important link in the French fur trade.

The Rideau River, which continued to serve as a seasonal hunting, fishing, and gathering area for Indigenous peoples living in the area, was used as a travel corridor that connected the Ottawa Valley to the St. Lawrence River (Watson 2018). The construction of the Rideau Canal (1826–1832) brought increased European settlement along the shores of the Rideau River. Further development of the Rideau shorelines during the 19th and 20th centuries resulted in diminished opportunities for Indigenous hunting and gathering in the area as Euro-Canadian settlement increased.

2.2.1 Lanark County and Dalhousie Township

Settlement of Lanark County began in 1815 following the British proclamation which offered free passage and land to emigrants to Upper Canada (Mika and Mika 1981: 490). The establishment of the military town of Perth in 1816 enabled the expansion of settlement into surrounding lands. Dalhousie Township was opened for settlement in 1820 (Mika and Mika 1977: 517-518). Many of the first settlers of the township were families of impoverished Scottish weavers who immigrated to Canada following a decline in the weaving industry in Scotland. A second wave of immigration occurred during the 1830s and 1840s consisting primarily of immigrants from Ireland (Lanark Highlands ND).

Due to steep and rocky terrain, agriculture was restricted to floodplains beside rivers and lakes so many early settlers participated in lumbering. Beside lumbering, early industry included grist mills, flour mills, pork packing, tanning, and maple syrup operations (Lanark Highlands ND)

In 1857, flooding at Crotch Lake, located approximately 18 km west of Dalhousie Township caused the Mississippi River to overflow. All three of the township's bridges were destroyed in this disaster along with a grist mill located at Dalhousie Lake (Lanark Highlands ND).

In 1850, Dalhousie Township was united with North Sherbrooke and Lavant Townships. Subsequent amalgamation took place in 1975 with Dalhousie Township joining the Township of Lavant, Dalhousie and North Sherbrooke. Most recently, Lavant, Dalhousie and North Sherbrooke Township amalgamated with Lanark Township and Lanark Village to become the Lanark Highlands in 1997.

2.3 Study Area History

Land registry records for Dalhousie Township indicate that the east half of Lot 5, Concession 10 was first granted to John Camfield in 1857. Camfield sold all but eight and a half acres to Alexander Turnbull in 1859. William Forgue purchased the property in 1876. The property appears to have changed hands a couple additional times during the late 19th century, but this portion of the land registry was largely illegible. John Duncan purchased the east half of Lot 5, Concession 10 for \$2,000 in 1928 and it has remained within the Duncan family throughout the 20th century.

The 1863 Walling Map of Lanark County (Map 3) shows the location of the Turnbull farmstead south of the road that passes through Lot 5 and lists the name A. Turnbull. Canada Census Records for 1861 list Alexander Turnbull as a 51-year-old farmer from Scotland. He is listed as living with his wife Margaret (33) and their children Ellen (8), Alex (7) and Elizabeth (5) in a one storey log house.

Turnbull's farmstead is not shown in the 1880-1881 Belden Map of Dalhousie Township (Map 3). As William Forgue had purchased the property by this time, the Turnbull Farmstead may no longer have been occupied. Indeed, the 1881 Canada Census Records list Margaret Turnbull (54) as widowed.

3.0 ARCHAEOLOGICAL CONTEXT

3.1 Study Area Environment

The study area is located within the Algonquin Highlands physiographic region, a region spanning over 40,000 square km and characterized by rough terrain underlain by Precambrian rocks (Chapman and Putnam 1984: 213). Low lying areas are commonly swamps and bogs. Common trees include sugar maple, yellow birch, white pine, hemlock and balsam fir (Chapman and Putnam 1984: 213). Black spruce and white cedar grow in the swamplands.

The Turnbull site is located within an agricultural field on a rise overlooking Highland Line road. Barbers Lake is located approximately 400 m to the east.

3.2 Previous Archaeology

The MHSTCI's Archaeological Report Database was searched on January 14, 2021 for previous archaeological assessments completed within 50 m of the study area. The only known archaeological assessment completed within 50 m of the study area is Golder's (2020) Stage 1 and 2 archaeological assessment completed by under PIF P1107-0027-2020, which first identified the presence of the Turnbull Site (BfGd-8) as well as a second mid-19th century site, the Duncan Site (BfGd-9) located on the west side of Lot 5, Concession 10 approximately 1 km away. The recommendations for the Stage 1 and 2 AA are provided in Section 3.3 of this report.

3.3 Stage 1 and 2 Recommendations

Golder's (2020) Stage 1 and 2 archaeological assessment for the project made the following recommendations:

- 1) *The Turnbull Site (BfGd-8) possesses Cultural Heritage Value or Interest, and the site should be subject to Stage 3 site-specific archaeological assessment prior to any development impacts.*
- 2) *The Stage 3 assessment of the Turnbull Site (BfGd-8) should employ the hand excavated test unit methodology, as outlined in Sections 3.2 and Table 3.1 of the MHSTCI' Standards and Guidelines for Consultant Archaeologists (MHSTCI 2011). As a controlled surface pickup was completed during the Stage 2, one is not required as part of the Stage 3 archaeological assessment. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid at 5 m intervals.*
- 3) *The Duncan Site (BfGd-9) possesses Cultural Heritage Value or Interest, and the site should be subject to Stage 3 site-specific archaeological assessment prior to any development impacts.*
- 4) *The Stage 3 assessment of the Duncan Site (BfGd-9) should employ the hand excavated test unit methodology, as outlined in Sections 3.2 and Table 3.1 of the MHSTCI' Standards and Guidelines for Consultant Archaeologists (MHSTCI 2011). As a controlled surface pickup was completed during the Stage 2, one is not required as part of the Stage 3 archaeological assessment. The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid at 5 m intervals.*
- 5) *No further archaeology assessment is required for the portions of the study area shown on Map 7.*
- 6) *Should ground disturbance extend beyond the present Stage 1 and 2 study area, additional archaeological assessment may be required.*

4.0 METHODOLOGY

4.1 Field Methodology

The Stage 3 archaeological assessment of the Turnbull Site (BfGd-8) was completed over nine days between July 23 and August 10, 2020 under the field supervision of the licensee, Randy Hahn (P1107). A 5 m grid aligned following the orientation of the lot was established over the site and a total of 47 1 m x 1 m units were hand excavated during the course of the Stage 3 fieldwork. The methods used to assess the Turnbull Site complied with the Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011).

The dates of all Stage 3 fieldwork activities and the weather conditions observed during these activities are presented in Table 1. At no time were the conditions detrimental to the recognition and recovery of archaeological material; field visibility and lighting conditions were MHSTCI compliant.

Table 1: Dates of Stage 3 Field Work and Weather Conditions

Date	Weather	High Temperature (degrees Celsius)
July 23, 2020	Cloudy	25
July 24, 2020	Sunny	29
July 28, 2020	Sunny	30
July 29, 2020	Cloudy with drizzle	27
July 30, 2020	Mostly Sunny	26
August 5, 2020	Partly Cloudy	25
August 6, 2020	Sunny	25
August 7, 2020	Sunny	29
August 10, 2020	Foggy	30

A controlled surface pick-up had previously been conducted as part of the Stage 2 archaeological assessment (see Golder 2020 or Section 3.3) thus no additional controlled surface pick-up was required as per recommendation 2 of that report.

The 5 m site grid was established using a Trimble unit and tape measures. A Trimble R8 Model 2 Global Navigation Satellite System (GNSS) unit was used to create a 10 m site grid and referenced to the Ottawa base station coordinated within the Cancel Network (Can-Net) for base station references. The coordinates are provided as a six-digit easting with three decimal places, and a seven-digit northing with three decimal places. Therefore, each survey observation can be considered a permanent and known datum point regardless of any future disturbance to the location of each observation. The Trimble R8 Model 2 GPS receiver has built in Wide-Area Augmentation System (WAAS) and European Geostationary Navigation Overlay Service (EGNOS) capability and supports a wide range of satellite signals, including GPS L1/L2C/L5, GLONASS L1/L2 and Galileo. The GNSS receiver is a dual frequency differential GPS (DGPS) capable of real time kinematic (RTK) corrections within the Can-Net Virtual Reference Station (VRS) network.

The 5 m Stage 3 site grid was then staked in using tape measures and the 10 m Trimble grid. The Stage 3 units were excavated stratigraphically by hand in 1 m x 1 m units as per the MHSTCI Standards and Guidelines (2011). Each 1 m x 1 m unit was designated by a grid reference from its southwest corner, formatted in metres. Within each unit the individual layers of soil, or lots, were given identifying numbers and correlated across the site. All lot numbers were unique.

The soil from each unit was screened through a 6 mm mesh screen. The units were examined for artifacts and/or features of archaeological interest. Upon encountering subsoil, the surface was shovel shined to identify possible features before excavation continued for a minimum of 5 cm. In the units that contained features, the features were photographed and drawn before being covered with geotextile fabric. Photographs were taken of all excavation units at the completion of each unit. All the dirt from the excavation was backfilled into the units following their recording.

A total of 47 test units were excavated. Eight of these units were infill units as per section 3.2.3 of the MHSTCI Standards and Guidelines (2011) stating that additional test units representing 20% of the grid total be excavated. The locations of infill units were chosen to either further investigate areas with features, high artifact counts or to confirm site boundaries.

Images 1 and 2 (p. 28) illustrate field conditions and the excavation methods employed during the Stage 3 assessment. The location and direction of photographs taken in the field are presented in Map 4.

The details of each test unit are described in Section 5.0 of this report. A field logbook was maintained for the duration of the investigation detailing pertinent information and digital photographs that were taken of the tested areas, topography, and specific representative excavation units. A total of 9 pages of field notes were generated by this investigation supported by 100 digital photos. These notes and photos, as well as the GPS data, are stored digitally on the Golder server.

Permission to access the study area was provided by the client.

4.2 Artifact Analysis and Curation Methods

This report and the following artifact inventory (Appendix A) provide a record of the artifacts and other archaeological materials (samples) recovered from the study area/site. This information provides a basis for interpretation of the site. This report aims to offer enough artifact information that a future researcher may determine whether the study area/site is of relevance to their investigation.

4.2.1 The Inventory System

The artifact inventory was compiled in a Microsoft Office Access 2007 database system.

Each entry in the database contains the following information:

- an individual inventory number
- spatial location (provenience) within the study area/site (operation, sub-operation, stratum)
- artifact analysis (see below)
- the quantity of any given entry

4.2.2 Artifact Analysis

The artifact analysis was based upon the MHSTCI standard requirements, as set out in Tables 6.1 and 6.2 of the Standards and Guidelines (MHSTCI 2011). Every artifact entry in the database includes material composition, artifact type (object), and the function which it served and if any alterations had been made to the original artifact (e.g., burning). Additional artifact descriptions were based upon the type of artifact (see below).

4.2.3 Historical Artifacts

Only historical period artifacts were found during this investigation, including: ceramic objects, glass items, and other inorganic and organic cultural objects (metal, stone, flora, fauna). Ceramic ware and glaze types were provided, as well as their decoration and colours. When a maker's mark was visible it was recorded.

Date ranges were provided where possible, and the reference cited. Glass artifact colours and decorative patterns were recorded, in addition to technique of manufacture when identifiable. As with ceramic material, when a marker's mark was visible it was recorded. Date ranges were provided where possible, and the reference cited.

All other artifacts were described in as much detail as possible including surface treatment, decorative pattern, and technique of manufacture when identifiable.

4.2.4 Storage and Curation

The collection was packed for storage by spatial location (provenience). When inventoried, artifacts were bagged in transparent, re-sealable (zippered) polyethylene bags which are inert and moisture resistant.

The contents of each artifact bag were identified on archival quality labels (acid-free, non-yellowing, acrylic adhesive), with an archival ink which is permanent and fade resistant. The artifact bags were then placed in a banker's box (12" W x 15" D x 10" H).

Artifact collections are stored in the Ottawa archaeology lab, until the report has been submitted to the MHSTCI, after which they will be moved to a secure, indoor, climate-controlled storage facility. This collection contains 1,731 artifacts (197 from the Stage 2 and 1,534 from the Stage 3) and is packed in two banker's boxes.

5.0 RECORD OF FINDS

The Stage 3 archaeological fieldwork was conducted employing methods described in Section 4.0 of this report. An inventory of the documentary record generated from the fieldwork is provided in Table 2, and the results of the Stage 3 archaeological fieldwork are described below.

Table 2: Inventory of Documentary Record

Document Type	Current Location of Document	Additional Comments
Field Notes	Golder Associates Ltd. Ottawa Office	Original field notebook with digital copies in project file. 9 pages.
Maps provided by Client	Golder Associates Ltd. Ottawa Office	Stored in the project file.
Digital Photographs	Golder Associates Ltd. Ottawa Office	Stored electronically in the project file. 100 photos.
GPS Data	Golder Associates Ltd. Ottawa Office	Stored electronically in the project file.
Artifact Assemblage	Golder Associates Ltd. Ottawa Office	Stored in 2 bankers boxes.

5.1 Stratigraphy

The soil stratigraphy at the Turnbull Site consists of 5 lots. Lot 1, the plough zone, is a dark grey-brown sand with loose compaction and gravel inclusions (Image 3, p. 29). Two subsoils were identified within the study area. Lot 2 is orange-brown sterile sand with loose compaction and gravel inclusions (Images 4 and 5, pp. 29-30). Lot 3 is a light grey coarse sand with loose compaction and gravel inclusions (Images 6 and 7, p. 30). Two cultural features were identified during the excavation. Lot 4 (Feature 1) was identified in Units E115 N110 (Images 8 and 9, p. 31) and E116 N111. It appears to consist of grey sand with inclusions consisting of a mix of cobble and mortar and loose compaction. Several cut stone fragments were noted within Lot 1 in the vicinity of Feature 1 suggesting that the feature is associated with the remains of a stone structure. Lot 5 (Feature 2) was identified in Units E90 N135 (Image 10, p. 32) and E91 N134 (Image 11, p. 32). Lot 5 consists of mottled grey and orange sand with gravel inclusions. Following Standard 6 of Section 3.2.2 of the *Standards and Guidelines* (MHSTCI 2011), the plans of the two features were recorded and then covered with geotextile fabric and backfilled.

The depth and number of artifacts in each 1 m x 1 m Stage 3 excavation unit is summarized in Table 3.

Table 3: Depths and Artifacts Totals by Excavation Unit

Unit	Depth (cm)	# of Artifacts	Unit	Depth (cm)	# of Artifacts
E80 N135	33	5	E112 N112	50	12
E85 N130	35	7	E115 N100	33	24
E85 N135	32	0	E115 N105	36	116
E85 N140	30	1	E115 N110	20	109
E90 N130	34	2	E115 N115	32	59
E90 N135	35	40	E115 N120	31	4
E90 N140	34	3	E116 N111	30	158
E91 N134	28	39	E117 N102	36	9
E95 N130	15	4	E120 N100	34	8
E95 N135	38	0	E120 N105	35	247
E95 N140	32	7	E120 N110	32	200

Unit	Depth (cm)	# of Artifacts	Unit	Depth (cm)	# of Artifacts
E100 N130	28	0	E120 N115	32	40
E105 N100	28	15	E120 N120	32	0
E105 N105	25	27	E122 N102	28	14
E105 N110	39	13	E122 N107	36	100
E105 N125	32	0	E122 N112	37	31
E105 N130	35	10	E125 N100	36	4
E110 N100	36	15	E125 N105	40	16
E110 N105	32	64	E125 N110	40	49
E110 N110	50	18	E125 N115	40	10
E110 N115	33	6	E130 N100	32	2
E110 N120	31	5	E130 N105	75	4
E110 N125	29	4	E130 N110	25	25
E112 N102	29	8			
Total					1,534

5.2 Artifacts

A total of 1,534 artifacts were found during the Turnbull Site Stage 3 archaeological assessment. Eight of these artifacts were mortar samples, with an additional 17 pieces discarded. The number of artifacts per 1 m x 1 m excavation can be seen on Map 4. The artifacts are summarized by function in Table 4. The single sample was a piece of charcoal. The 27 indeterminate fauna were mammal bones and dentition, except for one gastropod shell.

Table 4: Turnbull Site Artifact Functions

Function	# of Artifacts
fauna: indeterminate	27
food/beverage	1071
indeterminate	136
personal/societal	53
sample	1
structural	236
tools/equipment	10
Total	1534

5.2.1 Food/Beverage Artifacts

The majority (70%) of the artifacts had a food/beverage related function. Food/beverage function artifacts can be further divided into the more specific categories of beverage containers, food preparation, storage containers, indeterminate and tableware. Beverage containers included: wine bottle, case/gin bottle, and a sherd that could only be identified as alcohol bottle. Two bottle finishes were identified as “applied” (Image 12, p. 33), which date to before the 1890s, when bottle manufacturing technology changed (Lindsay 2020). Food preparation artifacts included 13 sherds likely from a milk pan. These large, shallow pans were a common household item, being used to separate the cream from milk. The cream was then skimmed off to make butter. Eight ceramic sherds were identified as sherds from storage containers, all of them coarse stoneware, with the exception of one sherd of

coarse red earthenware from a jar lid. Five sherds had Albany Slip on the interior (Image 12, p. 33). Albany Slip was primarily in use from 1805 to 1920 (Miller 2000: 10). Artifacts determined to be food/beverage function related, but unidentifiable beyond that were 34 sherds of coarse red earthenware, these sherds could belong to either food preparation or storage vessels.

Tableware artifacts accounted for 94% of the food/beverage artifacts. Tableware objects were mainly ceramic, including sherds from: bowls, plates, saucers, teabowls/cups, a pitcher and a platter. A fork and two sherds of glassware were also recovered. Tableware ceramics often provide the best evidence for dating artifact assemblages as they change more often than other artifacts according to popularity trends. Basic ceramic tableware decoration types are summarized in Table 5 and representative examples of the decoration types found are shown in Images. Relevant date information is stated where available. Decoration types that are starred have further detail below.

Table 5: Frequency of Ceramic Decoration Styles

Decoration Type	# of Artifacts	Date	Reference
edged*	44	Commonly used between 1790 and 1860	(Hunter and Miller 1994, p. 443)
Black glaze (Image 13, p. 33)	5	Made into the 19 th century	(MACL 2002)
Rockingham glaze (Image 13, p. 33)	6	Peak of Canadian manufacturing was in the 1890s	(Burke 1991:35)
hand painted*	182	19 th century	(Samford 2014)
indeterminate	5	n/a	
industrial slip*	32	Introduced in the 18 th century	(Sussman 1997, p. 1)
Moulded*	11	n/a	
plain	498	n/a	
sponged (closely spaced, dabbed colour) (Image 14, p. 34)	88	common from the 1820s to the 1860s, most popular in the 1830s	(Samford 2013, p. 500)
sponged: cut (Image 15, p. 34)	107	1840s to 1870s	(Samford 2013:501)
transfer printed*	22	1820 to 1840 was the period of peak production	(Little 1969, p. 15)
TOTAL	1000		

Edge Decorated Ceramics

Edge decorated ceramics were one of the most common decorative types used on tablewares in North America between 1790 and 1860. The earliest documented occurrence of the decorative type was in the mid-1770s (Miller 2013:487). Edged wares were produced into the 1890s. Different types and colours of edged wares have distinct date ranges. All of the sherds found at the Turnbull site were blue, which becomes rare by around 1860 but is produced up to 1890s (Miller 1991: 6). There were two types of edged decoration identified (Image 16, p. 35): symmetrical scalloped rim with impressed lines (1800 to 1830) and unscalloped rim with impressed repetitive patterns (1840s to 1860s) (Miller 2013:488).

Hand Painted Ceramics

A total of 182 sherds of ceramic were noted with hand painted decoration (Image 17, p. 35). Sherds included blue painted and polychrome late palette decoration. Nine sherds were noted to likely (as they were all small sherds) have large blue floral designs, this type of pattern likely dates from c. 1815 to 1830. A total of 173 sherds were decorated with polychrome late palette which began to appear around 1835 and remained common into the 1870s (Samford 2014). A single example of a London shape teacup and a single example of a Canova shape teacup were identified (Image 17, p. 35). The London shape was the dominant style used from circa 1825 into the 1840s, while the Canova shape was used from the 1830s into the 1850s (Miller 2011: 11-12).

Industrial Slipped Ceramics

A total of 32 sherds of industrial slip decorated ceramic was identified. The majority were decorated with blue banding, a few had brown banding. Blue banded industrial slip was common after the 1840s and into the 20th century (Miller 1991:6). Other decoration included a sherd each of mocha and slip-trailed (Image 18, p. 36). Mocha decoration has a date range of 1835 to 1900 (Jouppien 1980: 26-27). Two sherds of London shaped holloware were identified. The London shape was the dominant style used from circa 1825 into the 1840s (Miller 2011: 11).

Moulded/Child's Plate

Twelve sherds were recovered with moulded design or transfer printed writing that indicated that they were likely from "child's plates" (Image 19, p. 36). These plates, which were produced for children and often exhibited educational, displaying animals, stories, proverbs or riddles, were most popular between 1820 and 1860 (Wooten 2013: 508).

Transfer Printed Ceramics

Twenty-two sherds of transfer printed ceramics were recovered (3 black, 8 blue, 10 brown and 1 pink; Image 20, p. 37). Transfer print as a ceramic decoration began in 1750s and was developed by John Sadler and Guy Green of Liverpool. It was then adopted by Josiah Wedgwood who used it on his Creamware. Transfer printing is a process by which a pattern or design is etched onto a copper (or other metal) plate. The plate is then inked and the pattern is "transferred" to a special tissue. The inked tissue is then laid onto a bisque fired ceramic item, glazed, and fired again. Key dates in the history of transfer print are noted in Table 6.

Table 6: Key Dates of Transfer Print Ceramics

Date	Reference
technique invented c. 1753 (over-glaze)	(Kybalova 1989:212)
1783 first overglaze printed patterns	(Shaw 1829)
1820 to 1840 was the period of peak production	(Little 1969:15)
declined in popularity in 1850s	(Miller 1991:9)
revival in the 1870s	(MACL 2002)
produced into the early 20 th century	(Samford 1997:18)
Black, peak production 1825 to 1838	(MACL 2002)
blue, peak production 1817 to 1848	(MACL 2002)
Brown, peak production 1829 to 1843	(MACL 2002)
Pink, peak production 1829 to 1842	(MACL 2002)

5.2.2 Structural Artifacts

The next most common artifacts were structural in function and included nails, windowpane sherds and mortar samples. A total of 133 nails were recovered; 102 were machine cut, 29 were wrought by a blacksmith, and 2 could not be identified. There were three methods of nail manufacture that developed over time as the industry grew and became more mechanized. The first nails were hand wrought individually by a blacksmith (Image 21, p. 37). Machine cut nails (Image 21, p. 37) became available after 1800, when a nail cutting machine became of practical use (Vincent 1993: 159). By the 1830s machine cut nails had mostly replaced wrought nails in common use (Vincent 1993: 163). Wire nails replaced the machine cut nail and became of common use in the 1860s (Miller 2000: 14).

5.2.3 Indeterminate Artifacts

A total of 130 artifacts were inventoried whose function could not be concluded. Artifacts included: a metal bar, glass and ceramic vessels, iron sheet, strap and wire, screws and samples of charcoal, mica and stone.

5.2.4 Personal/Societal Artifacts

Personal/societal artifacts totalled 53. The majority of these were sherds of clay smoking pipes, all of them white clay except one terracotta sherd. Four different smoking pipe makers were identified by their marks along the pipe stem: Coghill, McDougall, Murray and White (Table 7; Image 22, p. 38), all operational out of Glasgow, Scotland. The dates of their operations are in the Table below. One unique pipe stem was embossed with the writing "PRINCE OF WALES/VISITED CANADA" (Image 22, p. 38). Albert Edward, Prince of Wales, (later King Edward VII), the 18-year-old son of Queen Victoria visited Canada in 1860. This pipe was likely a souvenir to commemorate the event.

Table 7: Glasgow Smoking Pipe Manufacturers (Bradley 2000: 117)

Manufacturer	Operations Date
Coghill	1826 - 1904
McDougall	1847 - 1967
Murray	1830 - 1861
White	1805 - 1955

Other personal/societal artifacts included umbrella fragments, a pocketknife, and various health/hygiene related bottles, of which a few had embossed lettering that could not be deciphered. Six clothing buttons were also found, one metal, one bone, and three Prosser-made (Image 23, p. 38). Prosser buttons generally date post 1840 (Sprague 2002:111).

5.2.5 Tools/Equipment

A total of 10 tools/equipment artifacts were catalogued. Two horseshoe nails were recovered, one machine cut and one wrought. Three corroded blades were identified (one in four pieces), but their specific use could not be identified. Other artifacts included two pieces of corroded iron, of which one could possibly be from farm machinery, one piece could have been a weight of some kind.

5.3 General Site Distribution

The distribution of artifacts shows two components to the Turnbull Site (Map 4). The first and largest component is located between N105 and N115 and includes Feature 1. The second component is located to the northwest and is centered around Feature 2.

6.0 ANALYSIS AND CONCLUSIONS

The Stage 3 archaeological assessment supports the interpretation of the Turnbull Site as remains of the Turnbull homestead shown in the 1863 map (Map 3). The artifact assemblage is domestic refuse dating to the mid-19th century and even contained a pipestem commemorating the 1860 visit of the Prince of Wales (later King Edward VII) to Canada. As few artifacts date to the late 19th century, the Stage 3 also supports the historical documentation (see Section 2.3) which indicates that the Turnbull homestead was no longer occupied by the late 19th century.

The distribution of artifacts around two distinct cultural features suggests that there was likely at least two components to the site, possibly the family homestead and an outbuilding such as a root cellar. As Feature 1 contains mortar, it is likely associated with a structure. Furthermore, cut stone fragments noted within the matrix of Lot 1 in the units associated with feature suggest the presence of a stone structure, perhaps a stone fireplace attached to the log house listed in the 1861 Canada Census records.

Homestead log houses in Ontario were generally produced from lumber obtained during the clearing of forests on the property and is associated with the earliest settlers (MacDonald 1997). Log houses generally measured approximately 4.9 m by 6 m and were constructed with floors made from planks pinned to logs laid directly on the ground. The house would include a chimney made from stone or brick and measure 1.2 to 1.8 m wide. Earlier fireplaces were sometimes constructed using wattle and daub on a stone platform. Though many of the stones that would have been used for any fireplace at the Turnbull Site would likely have been removed when the location was converted to an agricultural field. Partial remains of fireplaces at other Ontario archaeological sites have been noted including a rectangular concentration of large stones and ash at the Pickard Site (AhGx-24) in Ancaster (Welsh and MacDonald 1996).

The Turnbull Site contains cultural heritage value or interest that requires Stage 4 mitigation. Following Standards 1a and 1b of Section 3.4.2 of the Standards and Guidelines (MHSTCI 2011), most of the occupation of the Turnbull Site appears to date to before 1870 and the site is associated with the first generation of settlement of Dalhousie Township. The Turnbull site is also significant as it contains at least two features associated with different components providing opportunity for the spatial analysis of the site. Stage 4 mitigation may uncover additional features which could provide additional insight into the spatial layout of the site.

7.0 RECOMMENDATIONS

The Stage 3 archaeological assessment has provided the basis for the following recommendations:

- 1) The Turnbull Site (BfGd-8) possesses Cultural Heritage Value or Interest and should be subject to Stage 4 mitigation prior to any development impacts.
- 2) As the Turnbull Site (BfGd-8) is located within the area of the proposed Highland Line Pit and avoidance and protection is not a viable option, the Stage 4 mitigation would entail hand excavation of Features 1 and 2, and mechanical topsoil removal for the remainder of the site. The Turnbull Site meets all requirements for mechanical topsoil removal as outlined in Standard 1 of Section 4.2.3 of the *Standards and Guidelines for Consultant Archaeologists* (2011) and hand excavation of features as outlined in Section 4.2.1. Following consultation with an archaeology review officer (see supplementary documentation), hand excavation will extend only to the edge of the features.
- 3) Mechanical topsoil removal will employ an excavator with a flat-edged bucket and follow Standards 2 to 6 of Section 4.2.3 of the *Standards and Guidelines for Consultant Archaeologists* (2011).
- 4) As per Standard 1 of Section 4.3 of the *Standards and Guidelines for Consultant Archaeologists* (2011), mechanical excavation must extend a minimum of 10 m beyond uncovered cultural features, or to the edge of the project boundary (Map 4).

8.0 ADVICE ON COMPLIANCE WITH LEGISLATION

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

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed 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 *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ontario Ministry of Consumer Services is also immediately notified.

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

9.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT

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

This report has been prepared for the specific site, design objective, developments and purpose described to Golder by Thomas Cavanagh Construction Limited (the Client). The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

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

10.0 REFERENCES

Algonquins of Ontario

ND Our Proud History. <http://www.tanakiwin.com/algonquins-of-ontario/our-proud-history/>. Accessed April 3, 2017.

Algonquins of Pikwakanagan

ND History. http://www.algonquinsofpikwakanagan.com/culture_history.php. Accessed July 24, 2017.

Allen, William A.

2010 Archaeology Comes to the Rescue of Species at Risk. **Arch Notes** 15(6): 5-14.

Belden, H. & Co.

1879 **Illustrated Historical Atlas of the County of Carleton**. Reprinted, 1981, Ross Cumming, Port Elgin.

Burke, Charles Alexander

1991 **Nineteenth Century Ceramic Artifacts from a Seasonally Occupied Fishing Station on Saddle Island, Red Bay, Labrador**. Thesis, Memorial University of Newfoundland.

Chapman, D.H.

1937 Late-Glacial and Postglacial History of the Champlain Valley. **American Journal of Sciences** 5(34): 89-124.

Chapman, L.J., and Putnam, D.F.

1973 **The Physiography of Southern Ontario**. University of Toronto Press, Toronto.

1984 **The Physiography of Southern Ontario**. University of Toronto Press, Toronto.

Daechsel, Hugh J.

1980 **An Archaeological Evaluation of the South Nation River Drainage Basin**. Report prepared for the South Nation Conservation Authority, Berwick, Ontario.

1981 **Sawdust Bay-2: The Identification of a Middle Woodland Site in the Ottawa Valley**. Unpublished M.A. Thesis, Department of Anthropology, McMaster University.

Ellis, C.J. and Deller, D.B.

1990 Paleo-Indians. In **The Archaeology of Southern Ontario to A.D. 1650**, eds C.J. Ellis and N. Ferris, Ontario Archaeology Society (Occasional Publication No. 5), London, Ontario, p. 37-74.

Ellis, Chris J., Kenyon, Ian T. and Michael W. Spence

1990 The Archaic. In **The Archaeology of Southern Ontario to A.D. 1650**, edited by Chris Ellis and Neal Ferris, pp. 65-124. Occasional Publication of the London Chapter, OAS Number 5.

Ferris, Neal

2002 When the Air Thins: The Rapid Rise of the Archaeological Consulting Industry in Ontario. **Revista de Arqueología Americana (Journal of American Archaeology)** 21: 53-88

Fulton, R.J & S.H. Richard

1987 "Chronology of Late Quaternary Events in the Ottawa Region." In **Quaternary Geology of the Ottawa Region, Ontario and Quebec**. Edited by R.J. Fulton, pp. 24-30. Geological Survey of Canada Geological Survey of Canada 86-23.

Fulton, R.J., Anderson, T.W., Gadd, N.R., Harington, C.R., Kettles, I.M., Richard, S.H., Robrigues, C.G., Rust, B.R. and Shilts, W.W.

1987 Summary of the Quaternary of the Ottawa Region. In H.M. French and P. Richard (eds) **Papers Presented at the Quaternary of the Ottawa Region and guides for day excursions INQUA 87 International Congress**, National Research Council of Canada, p. 7-20.

Golder Associates Ltd.

2014 **Stage 3 Archaeological Assessment, Applewood Site, BhFw-25, Lot 21, Concession 4, Geographic Township of Gloucester, City of Ottawa**. Consultant's Report Submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries. PIF Number P385-0005-2013.

2017 **Stage 2 Archaeological Assessment, Riverside South Phase 12-708 River Road, Part Lot 20 and 21, Broken Front Concession Rideau Front, Geographic Township of Gloucester, Ottawa Ontario**. Consultant's Report Submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries. PIF Number P366-0049-2015.

2020 **Stage 1 and 2 Archaeological Assessment, Duncan Pit Property, Part of Lot 5, Concession 10, Dalhousie Township, Lanark County, Ontario**. Consultant's Report Submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries. PIF Number P1107-0027-2020.

Heidenreich, Conrad and J.V. Wright

1987 **Population and Subsistence. Plate 18, Historical Atlas of Canada, Volume 1: From the Beginning to 1800**, edited by R. Cole Harris, University of Toronto Press, Toronto.

Holmes, Joan & Associates, Inc.

1993 **Report on the Algonquins of Golden Lake Claim**.

Hunter, Robert R., Jr. and George L. Miller

1994 English Shell-Edged Earthenwares. **Antiques**, March 1994: 432-443.

Indigenous and Northern Affairs Canada (INAC)

2011 **A History of Treaty-Making in Canada**. <https://www.aadnc-aandc.gc.ca/eng/1314977704533/1314977734895>. Accessed April 3, 2017.

2013 **Algonquins of Pikwakanagan**. <https://www.aadnc-aandc.gc.ca/eng/1357840942028/1360163432152>. Accessed February 10, 2020.

2016 **Algonquins of Ontario Land Claim Negotiations: Infographic**. <https://www.aadnc-aandc.gc.ca/eng/1476707913976/1476707942691>. Accessed April 3, 2017.

Jamieson, James B

1989 **An Inventory of the Prehistoric Archaeological Sites of Ottawa-Carleton**. Paper submitted to the Ontario Archaeological Society, Ottawa Chapter.

Jouppien, J.K.

1980 The Application of South's Mean Ceramic Dating Formula to Ontario Historic Sites. **Arch Notes** May/June 1980: 24-29.

Kennedy, Clyde

1966 Preliminary Report on the Morrison's Island-6 Site. In **Bulletin No. 206, Contributions to Anthropology, 1963-1964, part I**. pp. 100-124. Ottawa: National Museum of Canada.

- 1970 **The Upper Ottawa Valley**. Renfrew County Council, Pembroke.
- 1976 Champlain Sea and Early Ottawa River Shoreline Studies, 1975. **Arch Notes** 76-7:18-23.
- Kybalova, Jana
1989 **European Creamware**. Hamlyn, Prague.
- Laliberte, Marcel
1995 Quand le sol s'emmele – Problemes de chronologie dans un sol alluvial. **Archeologiques** 9: 6-11.
- Lanark Highlands
ND **Our History**. <https://www.lanarkhighlands.ca/lh-discover/visiting/our-history>. Accessed July 7, 2020.
- Lindsey, Bill
2020 **Historic Glass Bottle Identification & Information Website. Society for Historical Archaeology and Bureau of Land Management**. Available: [https://sha.org/bottle/finishes.htm#Molded & Tooled finish](https://sha.org/bottle/finishes.htm#Molded%20&%20Tooled%20finish) [November 2020]
- Little, W. L.
1969 **Staffordshire Blue**. Crown Publishers Inc., New York.
- Loring, Stephen
1980 Paleo-Indian Hunters and the Champlain Sea: A Presumed Association. **Man in the Northeast** 19: 15-42.
- MacDonald, Eva M.
1997 The Root of the Scatter: Nineteenth Century Artifact and Settlement Patterns in Rural Ontario. **Ontario Archaeology** 64: 56-80.
- Maryland Archaeological Conservation Laboratory (MACL)
2002 **Jackfield – Type**
<https://apps.jefpat.maryland.gov/diagnostic/ColonialCeramics/Colonial%20Ware%20Descriptions/Jackfield-type.html> Accessed: January 14, 2021.
- McAndrews, John H.
1984 Late Quaternary Vegetation History of Rice Lake, Ontario, and the McIntyre Archaeological Site. In **The McIntyre Site: Archaeology, Subsistence and Environment**, edited by R.B. Johnston. Archaeological Survey of Canada, Paper No. 126. National Museums of Canada, Ottawa, Canada.
- Mika, Nick and Helma Mika
1977 **Places in Ontario: Their Name Origins and History. Part I A-E**. Belleville: Mika Publishing Company.
1981 **Places in Ontario: Their Name Origins and History. Part II F-M**. Belleville: Mika Publishing Company.
- Miller, George L.
1991 A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880. **Historical Archaeology**, 25(1):1-25.
2000 Telling Time for Archaeologists. **Northeast Historical Archaeology** 29: 1-17.
- Ontario Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI)
2011 **Standards and Guidelines for Consultant Archaeologists**. Queens Printer, Ontario.

Patterson Group

2016 **Stage 1-2 Archaeological Assessment: Manotick Main Street Properties 5721, 5731, and 5741 Manotick Main Street, Concession A, Part Lot 5 Geographic Township of North Gower, City of Ottawa, Ontario.** Consultant's Report Submitted to the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries. PIF Number P369-0041-2016.

Pendergast, James F.

1999 The Ottawa River Algonquin Bands in a St. Lawrence Iroquoian Context. **Canadian Journal of Archaeology** 23(1/2): 63-136.

Pilon, Jean-Luc

2008 Getting Over the Falls: The Archaeological Heritage of Rockcliffe Park. **Ontario Archaeological Society Arch Notes** 13(1): 7-16.

Pilon, Jean-Luc and Boswell, Randy

2015 Below the Falls; An Ancient Cultural Landscape in the Centre of (Canada's National Capital Region) Gatineau. **Canadian Journal of Archaeology** 39: 257-293.

Pilon, Jean-Luc and Fox, William

2015 "St. Charles or Dovetail Points in Eastern Ontario" in *Arch Notes*, Newsletter of the Ontario Archaeological Society, New Series Vol. 20 Issue 1 pp 5-9.

Pilon, Jean-Luc and Young, Janet

2009 Ottawa Valley Burial Patterns Spanning Six Millennia. In **Painting the Past with a Broad Brush: Papers in Honour of James Valliere Wright**, edited by David L. Keenlyside and Jean-Luc Pilon, pp. 181-211. Gatineau, QC: Canadian Museum of Civilization.

Robinson, Francis W.

2012 Between the Mountains and the Sea: An Exploration of the Champlain Sea and Paleoindian Land Use in the Champlain Basin. In **Late Pleistocene Archaeology and Ecology in the Far Northeast**, edited by Claude Chapdelaine, pp. 191-217. Texas A&M University Press, College Station.

Samford, Patricia M.

1997 **Response to a Market: Dating English Underglaze Transfer-Printed Wares.** *Historical Archaeology*. 31(2) p1-30.

2013 **Identifying and Dating Sponge-Decorated Wares.** *Ceramic Identification in Historical Archaeology: The View from California, 1822-1940.* Society for Historical Archaeology. Special Publication Series No.11.

2014 **Colonial and Post-Colonial Ceramics. Jefferson Patterson Park & Museum: State Museum of Archaeology.** Accessed from <<http://www.jefpat.org/Documents/Colonial-PostColonialCeramics.pdf>> [September 26, 2016].

Spence, M.W., R.H. Phil and C.R. Murphy

1990 Cultural Complexes of the Early and Middle Woodland Periods'. In **The Archaeology of Southern Ontario to A.D. 1650**, Occasional Publications of the London Chapter, Ontario Archaeological Society, No. 5. London, Ontario.

Surtees, Robert J.

- 1994 Land Cessions, 1763-1830. In **Aboriginal Ontario: Historical Perspectives on the First Nations**. Edited by Edward S. Rogers and Donald B. Smith, pp 92-121. Toronto: Dundurn Press.

Sussman, Lynne

- 1997 **Mocha, Banded, Cat's Eye, and Other Factory-Made Slipware**, Council for Northeast Archaeology.

Swayze, Ken

- 2003 **Stage 1 and 2 Archaeological Assessment of a Proposed Subdivision on Part of Lot A, Concession 9, Cumberland Township (Geo), City of Ottawa**. Consultant's report submitted to the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.
- 2004 **Stage 1 & 2 Archaeological Assessment of Proposed Central Canada Exhibition, Albion Road Site, Part Lots 24 and 25, Concession 3, Gloucester Township (Geo.), City of Ottawa**. Summary report, on file, Ontario Ministry of Heritage, Sport, Tourism and Culture Industries., Toronto. PIF: P039-034.

Surtees, Robert J.

- 1994 Land Cessions, 1763-1830. In **Aboriginal Ontario: Historical Perspectives on the First Nations**. Edited by Edward S. Rogers and Donald B. Smith, pp 92-121. Toronto: Dundurn Press.

Tasker, Paul

- 2016 Historic Land Deal with Algonquin Peoples Signed by Federal, Ontario Governments. <http://www.cbc.ca/news/politics/ottawa-ontario-algonquin-agreement-in-principle-1.3809876>. Accessed April 3, 2017.

Tremblay, Tommy

- 2008 **Hydrostratigraphie et géologie Quaternaire dans le Bassin-Versant de la rivière Chateauguay, Québec**. M.A. Thesis Submitted to the Université du Québec à Montréal.

Trigger, Bruce G. and Gordon M. Day

- 1994 Southern Algonquian Middlemen: Algonquin, Nipissing, and Ottawa, 1550-1780. In **Aboriginal Ontario: Historical Perspectives on the First Nations**. Edited by Edward S. Rogers and Donald B. Smith, pp 64-77. Toronto: Dundurn Press.

Vincent, Elizabeth

- 1993 **Substance and Practice: Building Technology and the Royal Engineers in Canada**. Parks Canada Agency, Ottawa.

von Gernet, A.

- 1992 A Possible Matouweskarini Hunting Camp: Excavations at the Highland Lake Site, Renfrew County. **Annual Archaeological Report Ontario (New Series) 2**: 120-124.

Watson, Gordon

- 1982 Prehistoric Peoples of the Rideau Waterway. In **Archaeological and Historical Symposium, October 2-3, 1982, Rideau Ferry, Ontario**, edited by F.C.L. Wyght, Smiths Falls: Performance Printing.
- 1999a The Paleo-Indian Period in the Ottawa Valley. In **Ottawa Valley Prehistory**, edited by J.L. Pilon, pp. 28-41. Imprimerie Gauvin, Hull.
- 1999b The Early Woodland of the Ottawa Valley. In **Ottawa Valley Prehistory**, pp. 56-76. Imprimerie Gauvin, Hull.

Welsh, B. and E. MacDonald

1994 **Archaeological Salvage Excavation of the Pickard Site (AhGc-24), Historic Component, Part Lot 51, Concession 3, Town of Ancaster, Ontario.** Consultant's Report Submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries.

Wooten, Kimberly J.

2013 The ABCs and Bacchus: An Unusual Child's Alphabet Plate. **Ceramic Identification in Historical Archaeology: The View from California, 1822-1940.** Society for Historical Archaeology. Special Publication Series No.1

Wright, James V.

1972 **Ontario Prehistory, An Eleven-Thousand-Year Archaeological Outline.** Ottawa: National Museums of Canada.

11.0 IMAGES



Image 1: Field crew conducting Stage 3 test pit excavation, view north.



Image 2: Field crew excavating Stage 3 test unit, view north.



Image 3: North profile of Unit E120 N120 showing representative soil stratigraphy consisting of Lot 1 (plough zone) over Lot 2 (subsoil).



Image 4: North profile of Unit E125 N112 showing representative stratigraphy consisting of Lot 1 over Lot 2.

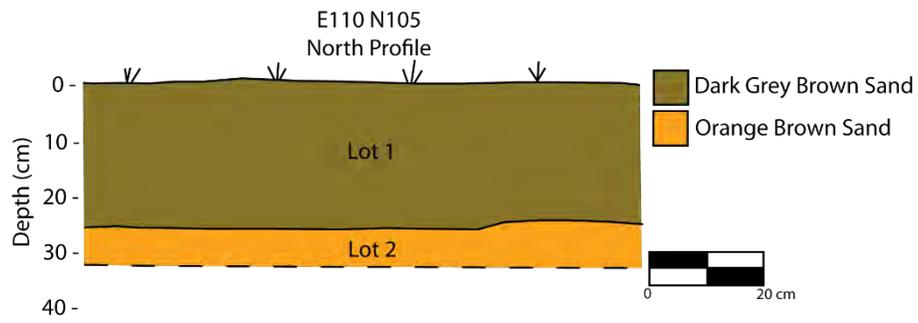


Image 5: Profile drawing of E110 N105 showing Lot 1 over Lot 2.



Image 6: Representative unit containing Lot 3 (E120 N110), view north.

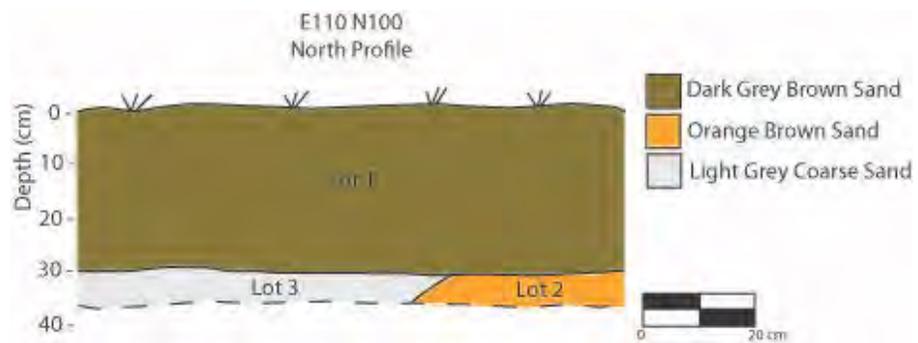


Image 7: Profile drawing from E110 N100 showing profile with Lot 3.



Image 8: Plan view of Feature 1 in Unit E115 N110, view north.

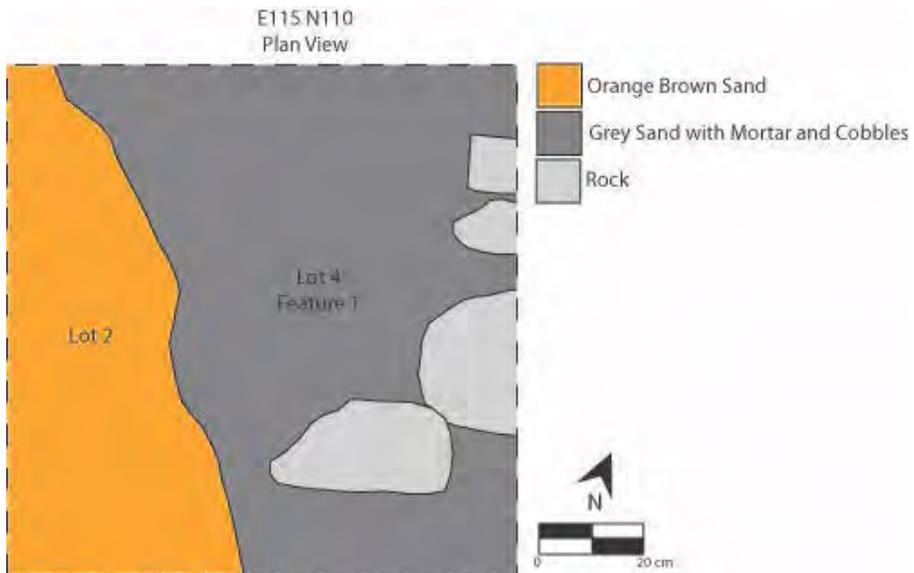


Image 9: Plan drawing of Feature 1 in Unit E115 N110.



Image 10: Plan view of Feature 2 in Unit E90 N135, view north.

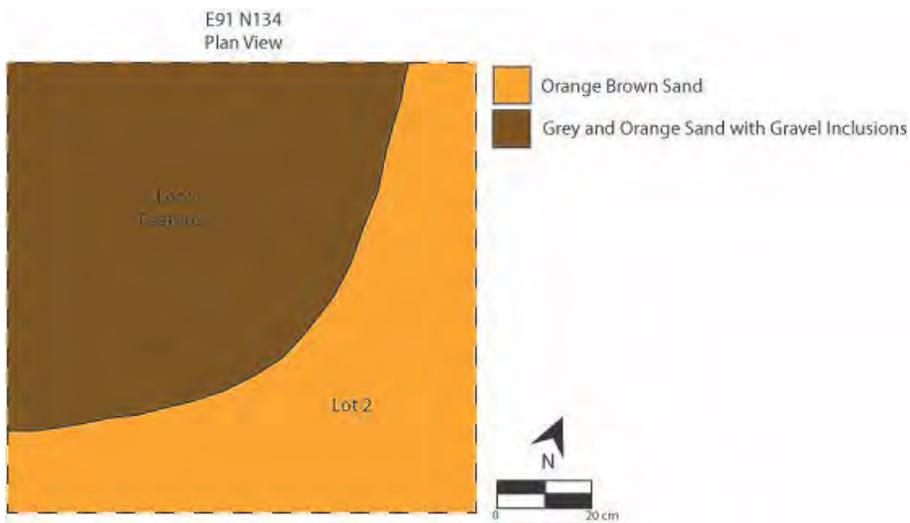


Image 11: Plan view of Feature 2 in Unit E91 N134.



Image 12: Albany Slip ceramic (E110 N120) and applied case bottle finish (E125 N110).



Image 13: Ceramic sherds with black glaze (left, E091 N134) and Rockingham glaze (right, E115 N110).



Image 14: Representative examples of sherds with blue sponged decoration.



Image 15: Brown cut sponged teacup and saucer (E116 N111).



Image 16: Edge decorated plate types (left to right): symmetrical scalloped rim with impressed lines (E112 N102) and unscalloped rim with impressed repetitive patterns (E116 N111).



Image 17: Hand painted ceramics (left to right): large blue floral (E120 N110), late palette London shape (E120 N110) and late palette Canova shape teacup (E116 N111).



Image 18: Industrial slipped ceramics (left to right): blue banded London shape (E112 N102), mocha London Shape (E116 N111), and slip-trailed (E116 N111).



Image 19: Ceramic sherds likely from Child's Plates. Top row (left to right): E115 N110, E120 N105, and E120 N110. Bottom row (left to right): E122 N107 and E122 N112.



Image 20: Transfer printed ceramic colours (left to right): black (E110 N105), blue (E112 N102), brown (E122 N102) and pink (E110 N05).



Image 21: Wrought nail (top) from Unit E090 N135 and machine cut nail (bottom) from Unit E120 N110.



Image 22: Smoking pipe manufacturers: Coghill (E115 N110), McDougall (E120 N110), Murray (E120 N135) and White (E090 N135) and the Prince of Wales commemorative pipe (E122 N107).

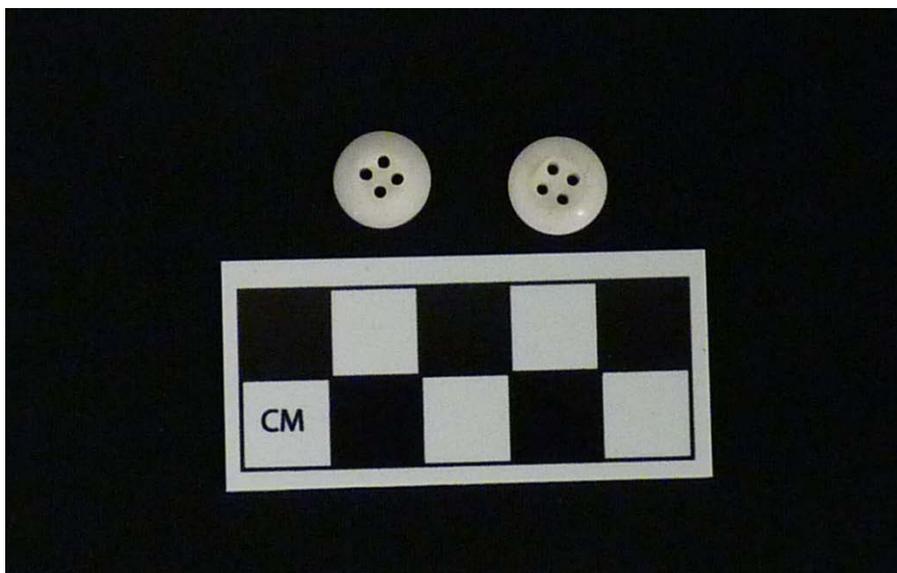
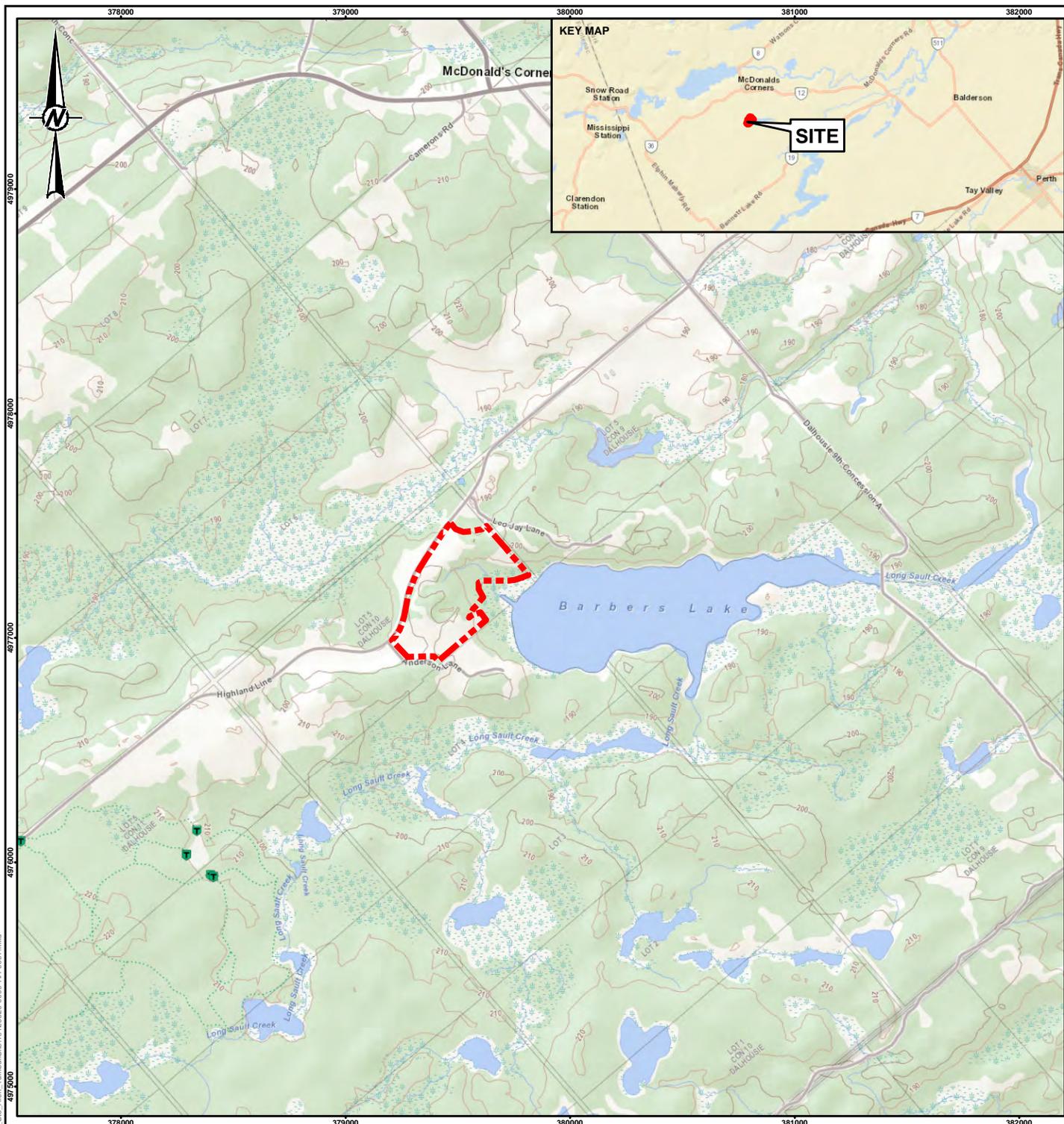


Image 23: Examples of Prosser buttons from Unit E120 N110.

12.0 MAPS



LEGEND

 STUDY AREA



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COORDINATE SYSTEM: UTM ZONE 18 VERTICAL DATUM: CGVD28



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PROJECT
STAGE 3 ARCHAEOLOGICAL ASSESSMENT TURNBULL SITE (BFGD-8), PART OF LOT 5, CONCESSION 10, DALHOUSIE TOWNSHIP, LANARK COUNTY, ONTARIO

TITLE
KEY PLAN

CONSULTANT	YYYY-MM-DD	2021-02-09
	DESIGNED	----
	PREPARED	BR
	REVIEWED	RH
	APPROVED	MT

PROJECT NO.	CONTROL	REV.	MAP
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SCALE 1:425,000

LEGEND

- STUDY AREA
- ROADWAY
- TOPOGRAPHIC CONTOUR, METRES
- WATERCOURSE
- WATERBODY
- WETLAND
- LOT / CONCESSION FABRIC

NOTE(S)
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STAGE 3 ARCHAEOLOGICAL ASSESSMENT TURNBULL SITE (BFGD-8), PART OF LOT 5, CONCESSION 10, DALHOUSIE TOWNSHIP, LANARK COUNTY, ONTARIO

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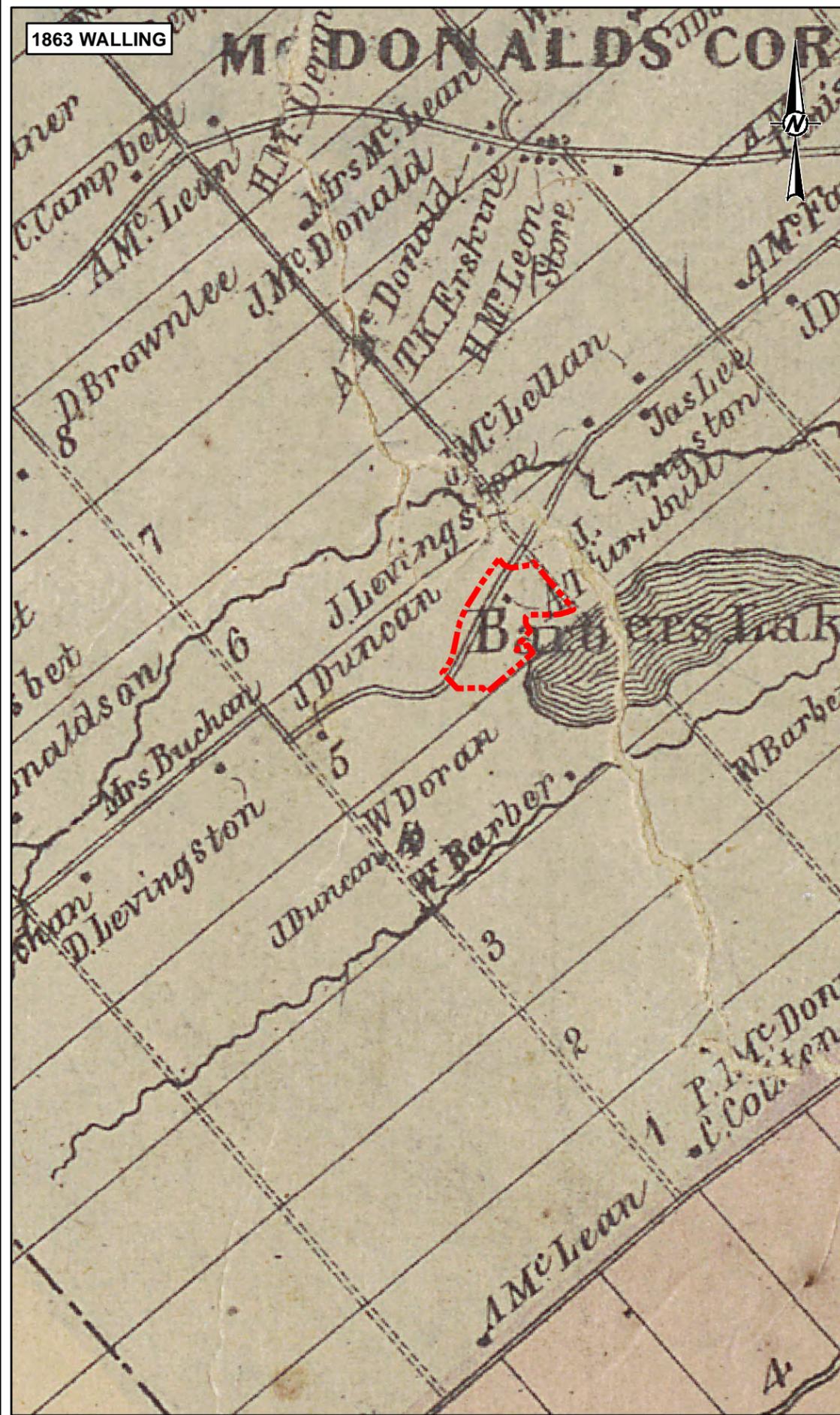
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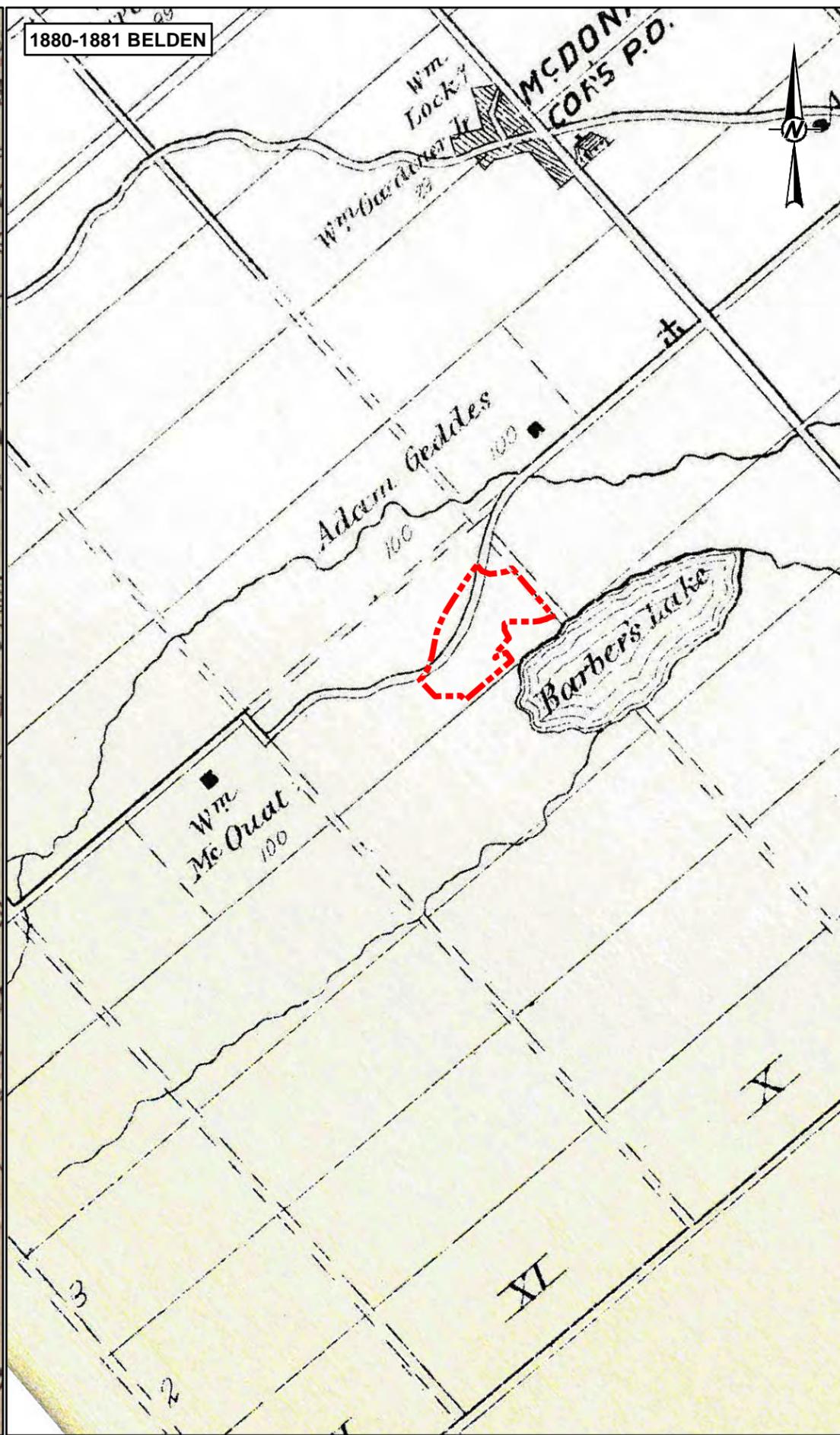
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1863 WALLING



1880-1881 BELDEN



KEY MAP



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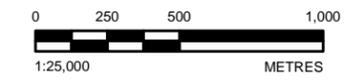
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PROJECT STAGE 3 ARCHAEOLOGICAL ASSESSMENT TURNBULL SITE (BFGD-8), PART OF LOT 5, CONCESSION 10, DALHOUSIE TOWNSHIP, LANARK COUNTY, ONTARIO

TITLE HISTORIC MAPS

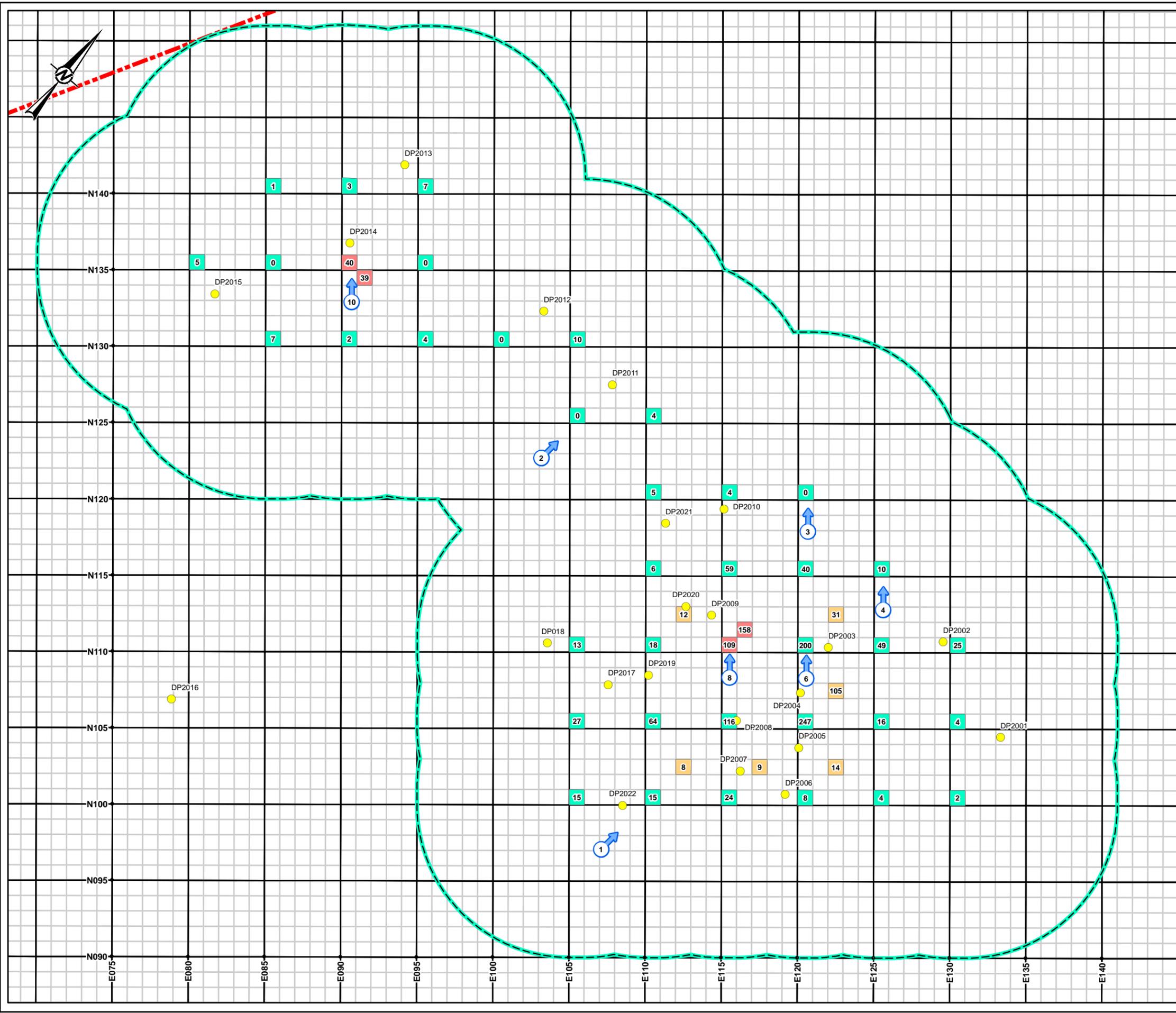
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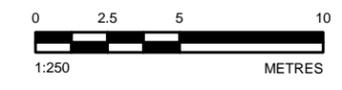


LEGEND

- PHOTO LOCATION AND DIRECTION
- CSP LOCATIONS
- STAGE 3 TEST UNIT
- STAGE 3 INFILL UNIT
- POSSIBLE FEATURE
- AREA RECOMMENDED FOR STAGE 4 MECHANICAL TOPSOIL REMOVAL
- 1 METRE GRID
- 5 METRE GRID

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PROJECT
STAGE 3 ARCHAEOLOGICAL ASSESSMENT TURNBULL SITE (BFGD-8), PART OF LOT 5, CONCESSION 10, DALHOUSIE TOWNSHIP, LANARK COUNTY, ONTARIO

TITLE
STAGE 3 RESULTS, RECOMMENDATIONS AND PHOTO LOCATIONS

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PREPARED	BR	
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APPROVED	MT	

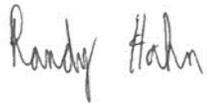
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Signature Page

We trust that this report meets your current needs. If you have any questions, or if we may be of further assistance, please contact the undersigned.

Golder Associates Ltd.



Randy Hahn, Ph.D.
Archaeologist



Michael Teal, M.A.
Associate, Senior Archaeologist

RH/MT/ca

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APPENDIX A

Artifact Catalogue

Appendix A
Artifact Catalogue

ID	EASTING	NORTHING	LOT	MATERIAL 1	MATERIAL 2	FUNCTION 1	FUNCTION 2	OBJECT	FRAGMENT	ATTRIBUTE 1	ATTRIBUTE 2	MANUFACTURE	ALTERATION	# OF ARTIFACTS	NOTE
5337	080	135	01	ceramic	coarse earthenware: red	food/beverage	food preparation	milk pan	rim	slipped	cream/yellow			1	milk pan?
5338	080	135	01	ceramic	coarse earthenware: red	food/beverage	tableware	holloware: cylindrical	body	glaze: lead	black			1	
5336	080	135	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	plain	clear/colourless			2	London Shape
5339	080	135	01	fauna	bone	fauna: indeterminate		mammal	incomplete					1	
5342	085	130	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
5344	085	130	01	ceramic	coarse earthenware: red	food/beverage	food preparation	milk pan	body	slipped	cream/yellow			1	milk pan?
5345	085	130	01	ceramic	coarse earthenware: red	indeterminate		holloware: cylindrical	body	glaze: none				1	
5343	085	130	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			2	
5340	085	130	01	composite	iron/bone	personal/societal	personal gear	pen / pocket knife	incomplete					1	bone leaf, broken blade
5341	085	130	01	fauna	dentition	fauna: indeterminate		mammal	incomplete					1	
5346	085	140	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			1	London shape
5348	090	130	01	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown			1	
5347	090	130	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			1	
5566	090	135	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
5568	090	135	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	Glasgow: W.White				1	
5567	090	135	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
5561	090	135	01	ceramic	coarse earthenware: red	food/beverage	food preparation	milk pan	rim/body	glaze: lead	brown: light			11	milk pan?
5564	090	135	01	ceramic	coarse earthenware: red	food/beverage	tableware	holloware: cylindrical	body	glaze: lead	black			1	
5562	090	135	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			17	
5563	090	135	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	rim/body	hand painted	polychrome: late palette			6	
5565	090	135	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		1	
5560	090	135	01	metal	iron	structural	hardware	nail: common	complete	rosehead		wrought		1	
5351	090	140	01	ceramic	creamware	food/beverage	tableware	teabowl/cup	footring/footrim	plain	clear/colourless			1	finely made, London shape, CW or discoloured?
5350	090	140	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	plain	clear/colourless			1	
5349	090	140	01	metal	iron	indeterminate		strap	incomplete					1	
5354	091	134	01	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	black			1	
5356	091	134	01	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown			14	
5358	091	134	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	rim/footrim	plain	clear/colourless			6	
5355	091	134	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			3	
5359	091	134	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			11	2 burnt
5357	091	134	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	footring/footrim	plain	clear/colourless			1	
5352	091	134	01	fauna	bone	fauna: indeterminate		mammal	incomplete					2	
5353	091	134	01	metal	iron	tools/equipment	indeterminate	tool: indeterminate	blade					1	rat-tail tang, curved blade, ridged
5361	095	130	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			3	
5360	095	130	01	glass	indeterminate	food/beverage	beverage container	bottle: alcohol	body	plain	green: olive	indeterminate		1	
5363	095	140	01	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown			6	
5362	095	140	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			1	
5575	105	100	01	ceramic	coarse earthenware: red	food/beverage	tableware	holloware: cylindrical	body	glaze: lead	black			1	
5574	105	100	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	indeterminate			1	brown
5572	105	100	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			3	
5571	105	100	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	footring/footrim	plain	clear/colourless			1	
5573	105	100	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	footring/footrim	sponged: cut	black			2	
5570	105	100	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	hand painted	polychrome: late palette			3	
5569	105	100	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		1	
5578	105	100	01	metal	iron	indeterminate		indeterminate	incomplete			wrought		1	structural hardware?
5577	105	100	01	metal	iron	indeterminate		strap	incomplete					1	
5576	105	100	01	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut		1	
5585	105	105	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	glaze: yellow				1	
5584	105	105	01	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown			2	
5583	105	105	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	body	plain	clear/colourless			7	
5581	105	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			2	
5580	105	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			7	
5579	105	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	transfer printed	black			1	
5582	105	105	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: indeterminate	blue		spalled	2	
5588	105	105	01	glass	indeterminate	food/beverage	beverage container	bottle: wine	body	plain	green: dark olive	indeterminate		1	
5586	105	105	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		1	
5587	105	105	01	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut		3	
5592	105	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			6	
5590	105	110	01	ceramic	refined white earthenware	food/beverage	tableware	teacup	body	hand painted	polychrome: late palette		spalled	1	
5591	105	110	01	ceramic	yellowware	food/beverage	tableware	holloware: cylindrical	body	glaze: Rockingham	brown		spalled	1	
5595	105	110	01	glass	indeterminate	personal/societal	health/hygiene	bottle: panel	body	embossed: lettering	blue: light	moulded: contact	patinated	2	'..TRA.' '..T'
5594	105	110	01	metal	iron	indeterminate		wire	incomplete					1	
5593	105	110	01	metal	iron	structural	hardware	nail: common	incomplete	rosehead		wrought		1	
5589	105	110	01	mortar		structural	building component	sample						1	
5604	105	130	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	mark: indeterminate				1	'..L'
5603	105	130	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
5600	105	130	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	footring/footrim	plain	clear/colourless			1	
5601	105	130	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim	sponged	blue			1	
5602	105	130	01	ceramic	yellowware	food/beverage	tableware	holloware: cylindrical	body	glaze: Rockingham	brown			1	
5599	105	130	01	glass	indeterminate	indeterminate		holloware: cylindrical	body	plain	clear/colourless	indeterminate		2	
5598	105	130	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		1	
5596	105	130	01	metal	iron	indeterminate		sheet	incomplete					1	
5597	105	130	01	metal	iron	structural	hardware	nail: common	incomplete	rosehead		wrought		1	
5364	110	100	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			4	
5365	110	100	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	sponged: cut	purple			1	
5366	110	100	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	body	sponged: cut	purple			1	
5367	110	100	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	rim/body	hand painted	polychrome: late palette			4	
5368	110	100	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light			4	
5369	110	100	01	metal	iron	structural	hardware	nail: common	incomplete	rectangular head		cut		1	
5380	110	105	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
5374	110	105	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	body	transfer printed	black			1	

ID	EASTING	NORTHING	LOT	MATERIAL 1	MATERIAL 2	FUNCTION 1	FUNCTION 2	OBJECT	FRAGMENT	ATTRIBUTE 1	ATTRIBUTE 2	MANUFACTURE	ALTERATION	# OF ARTIFACTS	NOTE
5373	110	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	banded			2	blue, London shape
5371	110	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	sponged: cut	blue			2	
5372	110	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	sponged: cut	brown			2	
5377	110	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	glaze: lead	brown			1	
5376	110	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			4	
5379	110	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			22	
5375	110	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	transfer printed	pink			1	
5370	110	105	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	body	sponged: cut	purple			1	
5378	110	105	01	ceramic	vitrified white earthenware	food/beverage	tableware	plate: indeterminate	base/body	plain	clear/colourless			2	discoloured
5381	110	105	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light		indeterminate	12	
5382	110	105	01	metal	iron	structural	hardware	nail: common	complete	rectangular head			cut	1	
5383	110	105	01	metal	iron	structural	hardware	nail: common	incomplete	rectangular head			cut	1	
5386	110	105	01	metal	iron	structural	hardware	nail: indeterminate	incomplete	indeterminate			cut	8	
5384	110	105	01	metal	iron	structural	hardware	nail: lath	complete	rectangular head			cut	1	
5385	110	105	01	metal	iron	structural	hardware	nail: lath	incomplete	rectangular head			cut	2	
5393	110	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			2	
5394	110	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			6	
5387	110	110	01	fauna	bone	fauna: indeterminate		mammal	incomplete					1	
5388	110	110	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light		indeterminate	3	
5390	110	110	01	metal	iron	structural	hardware	nail: indeterminate	incomplete	indeterminate			cut	1	
5389	110	110	01	metal	iron	structural	hardware	nail: lath	complete	rectangular head			cut	3	
5391	110	110	01	metal	iron	structural	hardware	nail: lath	complete	rosehead			wrought	1	
5392	110	110	01	metal	iron	tools/equipment	horse related	nail: common	complete	horseshoe head			cut	1	
5395	110	115	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	banded			1	blue
5396	110	115	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	body	hand painted	polychrome: late palette			1	
5397	110	115	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light		indeterminate	1	
5399	110	115	01	metal	iron	indeterminate		sheet	incomplete					1	
5398	110	115	01	metal	iron	structural	hardware	nail: common	incomplete	rectangular head			cut	1	
5400	110	115	01	mortar		structural	building component	sample						1	
5401	110	120	01	ceramic	coarse stoneware: grey	food/beverage	storage container	holloware: cylindrical	body	slipped/glaze: salt	Albany (interior)/clear (exterior)			2	blue painted
5403	110	120	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			1	
5402	110	120	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	rim	hand painted	polychrome: late palette			1	
5404	110	120	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light			1	
5408	110	125	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	handle	hand painted	polychrome: late palette			1	pitcher/teapot?
5405	110	125	01	flora	charcoal	indeterminate		sample						1	
5407	110	125	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light		indeterminate	1	heat altered: melted
5406	110	125	01	metal	iron	structural	hardware	nail: common	incomplete	indeterminate			wrought	1	
5617	112	102	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	banded			1	blue, London shape
5616	112	102	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			3	
5614	112	102	01	ceramic	refined white earthenware	food/beverage	tableware	plate: dinner (9-12")	rim	edged: symmetrical scalloped/imp. lines	blue			1	
5615	112	102	01	ceramic	refined white earthenware	food/beverage	tableware	plate: dinner (9-12")	rim	transfer printed	blue			2	
5613	112	102	01	metal	iron	indeterminate		bar	incomplete					1	
5833	112	112	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim	industrial slip	banded			1	blue
5834	112	112	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim	sponged	blue			1	
5835	112	112	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	rim	indeterminate	blue		spalled	1	
5832	112	112	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light		indeterminate	6	
5831	112	112	01	metal	iron	indeterminate		sheet	incomplete					1	
5829	112	112	01	mortar		structural	building component	sample						1	
5830	112	112	01	stone	slate	indeterminate		sample						1	writing tablet?
5418	115	100	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	hand painted	polychrome: late palette			2	pink, grn, blue, ppl
5419	115	100	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim/body	sponged: cut	brown			5	
5414	115	100	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			5	
5415	115	100	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: unscalloped, imp. repetitive patterns	blue			1	imp. Curved lines
5416	115	100	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	body	sponged: cut	purple			1	
5417	115	100	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	hand painted	polychrome: late palette			3	
5413	115	100	01	glass	indeterminate	indeterminate		indeterminate	body	plain	aqua: light		indeterminate	1	heat altered: melted
5409	115	100	01	metal	iron	indeterminate		sheet	incomplete					1	
5410	115	100	01	metal	iron	indeterminate	hardware	screw: slot	complete	countersunk head				1	
5412	115	100	01	metal	iron	structural	hardware	nail: common	incomplete	indeterminate			cut	2	
5411	115	100	01	metal	iron	structural	hardware	nail: common	incomplete	rectangular head			cut	2	
5528	115	105	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	bowl	embossed				1	beard/hair?
5527	115	105	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
5529	115	105	01	ceramic	coarse stoneware: buff	food/beverage	storage container	holloware: cylindrical	body	glaze: lead	brown			1	
5543	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	footrim/base	plain	clear/colourless			9	
5532	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	rim/body	transfer printed	blue			2	
5530	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	glaze: Rockingham	brown			1	
5533	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	indeterminate			1	
5531	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	transfer printed	brown			1	
5537	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim/body	sponged: cut	purple			3	
5541	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			29	
5539	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged: cut	blue			8	
5536	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged: cut	brown			1	
5542	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	plate: child's	rim	moulded	clear/colourless			1	Child's Plate?, checkered pattern
5534	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: indeterminate	blue		heat altered: burnt	4	
5535	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	sponged: cut	black			1	
5538	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	sponged: cut	purple			5	
5540	115	105	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	body	hand painted	polychrome: late palette			7	
5524	115	105	01	fauna	bone	fauna: indeterminate		mammal	incomplete					6	
5526	115	105	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light		indeterminate	7	
5517	115	105	01	metal	iron	indeterminate		indeterminate	incomplete				cast	1	
5514	115	105	01	metal	iron	indeterminate		strap	incomplete					1	
5516	115	105	01	metal	iron	indeterminate	hardware	screw: indeterminate	incomplete	indeterminate				1	
5515	115	105	01	metal	iron	indeterminate	hardware	screw: slot	complete	countersunk head				1	

ID	EASTING	NORTHING	LOT	MATERIAL 1	MATERIAL 2	FUNCTION 1	FUNCTION 2	OBJECT	FRAGMENT	ATTRIBUTE 1	ATTRIBUTE 2	MANUFACTURE	ALTERATION	# OF ARTIFACTS	NOTE
5522	115	105	01	metal	iron	structural	hardware	nail: common	complete	rectangular head			cut	1	
5521	115	105	01	metal	iron	structural	hardware	nail: common	complete	rosehead			wrought	1	
5523	115	105	01	metal	iron	structural	hardware	nail: common	incomplete	indeterminate			cut	5	
5518	115	105	01	metal	iron	structural	hardware	nail: common	incomplete	rectangular head			cut	4	
5520	115	105	01	metal	iron	structural	hardware	nail: lath	incomplete	rectangular head			cut	3	
5519	115	105	01	metal	iron	structural	hardware	nail: lath	incomplete	rectangular head			cut	8	
5525	115	105	01	mortar		structural	building component	sample						1	
5672	115	110	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	Glasgow: A. Coghill				1	
5686	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	footrim/base	plain	clear/colourless			5	
5680	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	sponged: cut	black			1	
5683	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	transfer printed	blue		spalled	1	
5687	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			12	
5681	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged	blue			2	tiny
5682	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	plate: child's	body	transfer printed	brown			1	..BITI..
5685	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: indeterminate	blue			1	
5684	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: unscalloped, imp. repetitive patterns	blue			1	chicken foot
5676	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	footrim	sponged: cut	brown		spalled	2	
5678	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	hand painted	polychrome: late palette			3	3 pink rim lines
5677	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	sponged: cut	purple			10	
5679	115	110	01	ceramic	refined white earthenware	food/beverage	tableware	teacup	body	hand painted	polychrome: late palette			5	
5673	115	110	01	ceramic	vitrified white earthenware	food/beverage	tableware	platter	vessel portion	transfer printed	blue			2	lg floral pattern
5674	115	110	01	ceramic	yellowware	food/beverage	tableware	holloware: cylindrical	body	glaze: Rockingham	brown			1	
5675	115	110	01	ceramic	yellowware	food/beverage	tableware	holloware: cylindrical	rim/body	moulded	clear/colourless			6	
5693	115	110	01	fauna	bone	fauna: indeterminate		mammal	incomplete					4	
5692	115	110	01	glass	indeterminate	food/beverage	beverage container	bottle: case/gin	body	plain	green: dark olive	moulded: contact		4	
5690	115	110	01	glass	indeterminate	indeterminate		holloware: cylindrical	body	plain	clear/colourless	indeterminate		1	
5691	115	110	01	glass	indeterminate	personal/societal	health/hygiene	bottle: rectangular	body	embossed: lettering	aqua: light	moulded: contact		1	..A./..W YO..'
5689	115	110	01	glass	indeterminate	structural	building component	plate (pane)	incomplete	plain	aqua: light	indeterminate		1	
5688	115	110	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		11	
5699	115	110	01	metal	iron	indeterminate		sheet	incomplete					1	
5700	115	110	01	metal	iron	indeterminate		sheet	incomplete					2	rectangular plate?
5702	115	110	01	metal	iron	indeterminate		strap	incomplete					6	one wrought nail in situ, one rivet in situ
5697	115	110	01	metal	iron	personal/societal	personal gear	umbrella	stretcher					1	
5694	115	110	01	metal	iron	structural	hardware	nail: common	complete	rectangular head			cut	1	
5698	115	110	01	metal	iron	structural	hardware	nail: common	incomplete	rosehead			wrought	9	
5695	115	110	01	metal	iron	structural	hardware	nail: indeterminate	incomplete	indeterminate			cut	8	
5696	115	110	01	metal	iron	structural	hardware	nail: lath	incomplete	rectangular head			cut	4	
5701	115	110	01	metal	iron	tools/equipment		weight						1	weight?, machinery piece?, rectangular
5671	115	110	01	mortar		structural	building component	sample						1	
5553	115	115	01	ceramic	coarse stoneware: buff	indeterminate		holloware: cylindrical	body	glaze: lead	brown			2	
5556	115	115	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	banded			5	blue
5559	115	115	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			13	
5558	115	115	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged	blue			12	
5555	115	115	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	rim/body	hand painted	polychrome: late palette			2	
5557	115	115	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: indeterminate	blue			4	
5554	115	115	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	body	sponged: cut	brown			1	
5550	115	115	01	glass	indeterminate	indeterminate		bottle: indeterminate	finish: 1 part	plain	aqua: light	indeterminate		1	
5551	115	115	01	glass	indeterminate	indeterminate		holloware: cylindrical	body	embossed: lettering	aqua: light	moulded: contact		1	..LA..'
5552	115	115	01	glass	indeterminate	indeterminate		holloware: indeterminate	body	plain	aqua: light	indeterminate		2	
5549	115	115	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		9	
5548	115	115	01	metal	iron	indeterminate		strap	incomplete					2	one with rivet, 2 widths
5545	115	115	01	metal	iron	structural	hardware	nail: common	incomplete	rectangular head			cut	1	
5547	115	115	01	metal	iron	structural	hardware	nail: lath	incomplete	indeterminate			cut	2	
5546	115	115	01	metal	iron	structural	hardware	nail: lath	incomplete	rectangular head			cut	2	
5422	115	120	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			2	
5421	115	120	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		1	
5420	115	120	01	metal	iron	indeterminate		indeterminate	incomplete	plain		cast		1	
5426	115	125	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			5	
5427	115	125	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged	blue		heat altered: burnt	2	
5424	115	125	01	glass	indeterminate	indeterminate		holloware: cylindrical	body	plain	clear/colourless	indeterminate		1	
5425	115	125	01	glass	indeterminate	personal/societal	clothing	button: 4 hole	complete	plain	white	Prosser		1	
5423	115	125	01	metal	iron	indeterminate		strap	incomplete					1	
5800	116	111	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	bowl	embossed				1	
5799	116	111	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
5780	116	111	01	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: salt	clear/colourless			1	
5781	116	111	01	ceramic	coarse stoneware: grey	food/beverage	storage container	holloware: cylindrical	rim	glaze: lead	brown: dark			1	
5791	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	bowl	body	industrial slip	mocha			1	black mocha on grey, blue band, London shape
5792	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	bowl	body	industrial slip	slip-trailed			1	green, brown, blue
5793	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	bowl	footring/footrim	hand painted	polychrome: late palette			4	
5797	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	footrim/base	plain	clear/colourless			8	'10' imp on one sherd
5798	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			26	
5786	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged	blue			4	
5796	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	plate: child's	body	moulded	clear/colourless			1	Child's Plate?, checkered pattern
5782	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: symmetrical scalloped/imp. lines	blue			4	
5784	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: unscalloped, imp. repetitive patterns	blue			1	chicken foot
5783	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: unscalloped, imp. repetitive patterns	blue			3	lg pieces, imp lines
5795	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	hand painted	polychrome: late palette			1	pink rim line
5788	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	sponged: cut	purple			1	
5785	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	vessel portion	sponged	blue			1	
5789	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	vessel portion	sponged: cut	brown			6	
5794	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	teacup	body	hand painted	polychrome: late palette			1	Canova shape
5787	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	teacup	rim	sponged: cut	black			6	

ID	EASTING	NORTHING	LOT	MATERIAL 1	MATERIAL 2	FUNCTION 1	FUNCTION 2	OBJECT	FRAGMENT	ATTRIBUTE 1	ATTRIBUTE 2	MANUFACTURE	ALTERATION	# OF ARTIFACTS	NOTE
5790	116	111	01	ceramic	refined white earthenware	food/beverage	tableware	teacup	vessel portion	sponged: cut	brown			9	
5779	116	111	01	ceramic	vitrified white earthenware	food/beverage	tableware	pitcher	rim/handle	sponged	blue			2	rest/edge for a lid
5770	116	111	01	fauna	bone	fauna: indeterminate		mammal	incomplete					3	
5771	116	111	01	fauna	bone	personal/societal	clothing	button: 4 hole	complete	plain				2	
5772	116	111	01	glass	indeterminate	food/beverage	beverage container	bottle: wine	body	plain	green: dark olive	indeterminate		4	
5778	116	111	01	glass	indeterminate	food/beverage	tableware	tumbler	base	fluted	clear/colourless	moulded: contact		1	
5774	116	111	01	glass	indeterminate	indeterminate		holloware: cylindrical	body	plain	blue: light	indeterminate	patinated	1	
5776	116	111	01	glass	indeterminate	indeterminate		holloware: cylindrical	body	plain	clear/colourless	indeterminate		1	
5777	116	111	01	glass	indeterminate	personal/societal	health/hygiene	bottle: cylindrical	base	plain	clear/colourless	moulded: contact		1	sm diameter, rough pontil scar
5775	116	111	01	glass	indeterminate	personal/societal	health/hygiene	bottle: panel	neck/body	embossed: lettering	blue: light	moulded: contact	patinated	4	..PSIA..
5773	116	111	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		13	
5764	116	111	01	metal	iron	food/beverage	tableware	fork	time: three					1	rat-tail tang
5763	116	111	01	metal	iron	indeterminate		sheet	incomplete					17	some wire/rolled edges, some folded edges
5762	116	111	01	metal	iron	indeterminate		strap	incomplete					4	
5766	116	111	01	metal	iron	structural	hardware	nail: common	incomplete	rectangular head		cut		8	
5768	116	111	01	metal	iron	structural	hardware	nail: indeterminate	incomplete	indeterminate		indeterminate		2	
5765	116	111	01	metal	iron	structural	hardware	nail: lath	incomplete	rectangular head		cut		2	
5767	116	111	01	metal	iron	structural	hardware	nail: lath	incomplete	rosehead		wrought		8	
5761	116	111	01	metal	iron	tools/equipment	agricultural	indeterminate						1	farm machinery?
5760	116	111	01	mortar		structural	building component	sample						1	
5429	117	102	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	bowl	plain				1	
5431	117	102	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			2	
5430	117	102	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			3	
5433	117	102	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged	blue			1	
5432	117	102	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged: cut	brown			1	
5428	117	102	01	fauna	bone	fauna: indeterminate		mammal	incomplete					1	
5436	120	100	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	bowl	plain				1	
5437	120	100	01	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown			1	
5439	120	100	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim	sponged: cut	black			1	
5438	120	100	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			1	
5440	120	100	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			1	
5435	120	100	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		2	
5434	120	100	01	metal	iron	indeterminate		strap	incomplete					1	
5492	120	105	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	Glasgow: Murray				1	'MU[rray]?/[glas]GOW'
5491	120	105	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain		worn		2	1 with bite mark from tooth wear
5493	120	105	01	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown: light			8	
5513	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	footrim/rim/body	plain	clear/colourless			17	
5495	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	glaze: Rockingham	brown			2	
5500	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	banded			3	brown/blue
5505	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim/body	sponged	blue			5	one sherd with black hand painting
5497	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim/body	sponged: cut	brown			2	
5496	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim/body	sponged: cut	purple			4	
5512	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim/body/footring	plain	clear/colourless			10	
5501	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	blue			2	
5510	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			21	
5511	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			70	
5507	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged	blue			9	
5499	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	rim	sponged	pink			1	
5504	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	plate: child's	rim/body	transfer printed/moulded	brown			5	TP', SCHOOL..', moulded checkered and floral pattern, scalloped rim
5503	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: indeterminate	blue			4	unscalloped/imp curved lines
5502	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: unscalloped, imp. repetitive patterns	blue			4	chicken foot
5498	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	sponged: cut	black			2	
5509	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	hand painted	polychrome: late palette			10	
5506	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	sponged	blue			4	
5508	120	105	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	rim/body	hand painted	polychrome: late palette			10	
5494	120	105	01	ceramic	yellowware	food/beverage	tableware	holloware: cylindrical	body	plain	clear/colourless			1	
5482	120	105	01	fauna	bone	fauna: indeterminate		mammal	incomplete					1	
5483	120	105	01	fauna	bone	fauna: indeterminate		mammal	incomplete			heat altered: calcined		1	
5484	120	105	01	fauna	dentition	fauna: indeterminate		mammal	incomplete					1	
5485	120	105	01	fauna	shell	fauna: indeterminate		gastropod	incomplete					1	
5481	120	105	01	flora	charcoal	sample		sample						1	
5490	120	105	01	glass	indeterminate	indeterminate		holloware: cylindrical	rim/body	plain	clear/colourless	indeterminate		5	
5488	120	105	01	glass	indeterminate	indeterminate		holloware: indeterminate	body	embossed: lettering	aqua: light	moulded: contact	patinated	1	'.O..?'
5487	120	105	01	glass	indeterminate	indeterminate		holloware: indeterminate	body	plain	green	indeterminate	patinated	1	
5489	120	105	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		5	
5470	120	105	01	metal	iron	indeterminate		indeterminate	incomplete			cast		1	farm machinery?
5477	120	105	01	metal	iron	indeterminate		pipe: indeterminate	incomplete					1	sheet iron, sm/fine
5479	120	105	01	metal	iron	indeterminate		sheet	incomplete					5	
5476	120	105	01	metal	iron	indeterminate		sheet	indeterminate					1	sm triangle
5475	120	105	01	metal	iron	indeterminate		strap	incomplete					1	w= 4cm
5478	120	105	01	metal	iron	indeterminate	hardware	screw: slot	complete	countersunk head				2	diff sizes
5472	120	105	01	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut		5	
5471	120	105	01	metal	iron	structural	hardware	nail: common	incomplete	rectangular head		cut		8	
5474	120	105	01	metal	iron	structural	hardware	nail: common	incomplete	rosehead		wrought		4	
5473	120	105	01	metal	iron	structural	hardware	nail: lath	complete	rectangular head		cut		3	
5486	120	105	01	mortar		structural	building component	sample						1	
5480	120	105	01	stone	slate	indeterminate		sample	incomplete					1	
5725	120	110	01	ceramic	clay: terracotta	personal/societal	smoking	smoking pipe	bowl	fluted				1	
5721	120	110	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	bowl	embossed				3	
5722	120	110	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	bowl	plain				3	
5723	120	110	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	Glasgow: McDougall				1	

ID	EASTING	NORTHING	LOT	MATERIAL 1	MATERIAL 2	FUNCTION 1	FUNCTION 2	OBJECT	FRAGMENT	ATTRIBUTE 1	ATTRIBUTE 2	MANUFACTURE	ALTERATION	# OF ARTIFACTS	NOTE
5724	120	110	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
5739	120	110	01	ceramic	coarse earthenware: red	indeterminate		holloware: cylindrical	body	glaze: none				1	
5738	120	110	01	ceramic	coarse stoneware: grey	food/beverage	storage container	holloware: cylindrical	body	slipped/glaze: salt	Albany (interior)/clear (exterior)			1	
5737	120	110	01	ceramic	earthenware: ind. white	food/beverage	tableware	indeterminate	body	indeterminate			heat altered: burnt	2	
5736	120	110	01	ceramic	earthenware: ind. white	food/beverage	tableware	plate: child's	body	moulded	clear/colourless		heat altered: burnt	1	floral
5741	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	footring/footrim	plain	clear/colourless			9	
5727	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	hand painted	blue			4	lg blue floral
5726	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	banded			11	blue, brown
5731	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	sponged	blue			24	
5733	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	sponged: cut	brown			3	
5742	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	footring/footrim	plain	clear/colourless			7	
5743	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			33	
5734	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged: cut	black			1	
5730	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: indeterminate	blue			5	unscaloped, imp curved lines
5735	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	body	sponged: cut	purple			1	
5728	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	hand painted	polychrome: late palette			7	
5732	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	sponged: cut	brown			7	
5729	120	110	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	rim/body	hand painted	polychrome: late palette			22	1 sherd London shape
5740	120	110	01	ceramic	yellowware	food/beverage	tableware	holloware: cylindrical	body	indeterminate			heat altered: burnt	1	
5719	120	110	01	fauna	bone	fauna: indeterminate		mammal	incomplete					5	
5720	120	110	01	fauna	bone	fauna: indeterminate		mammal	incomplete				heat altered: calcined	2	
5749	120	110	01	glass	indeterminate	indeterminate		holloware: cylindrical	base/body	plain	aqua: light	indeterminate	patinated	6	
5746	120	110	01	glass	indeterminate	indeterminate		holloware: cylindrical	body	plain	clear/colourless			1	
5747	120	110	01	glass	indeterminate	indeterminate		holloware: cylindrical	body	plain	green: light	indeterminate		1	
5745	120	110	01	glass	indeterminate	indeterminate		indeterminate		indeterminate	aqua: light	indeterminate	heat altered: melted	4	
5750	120	110	01	glass	indeterminate	personal/societal	clothing	button: 4 hole	complete	plain	white	Prosser		2	one dish, one inkwell?
5744	120	110	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		4	
5748	120	110	01	glass	manganese	indeterminate		holloware: cylindrical	body	plain	purple: light	indeterminate		1	
5758	120	110	01	metal	iron	indeterminate		container: indeterminate	rim					2	folded rim
5759	120	110	01	metal	iron	indeterminate		sheet	incomplete					12	
5756	120	110	01	metal	iron	indeterminate		strap	incomplete					2	
5757	120	110	01	metal	iron	indeterminate		wire	incomplete					1	
5755	120	110	01	metal	iron	structural	hardware	nail: common	incomplete	indeterminate			cut	3	
5752	120	110	01	metal	iron	structural	hardware	nail: common	incomplete	rectangular head			cut	1	
5753	120	110	01	metal	iron	structural	hardware	nail: common	incomplete	rosehead			wrought	1	
5754	120	110	01	metal	iron	tools/equipment	horse related	nail: common	incomplete	horseshoe head			wrought	1	
5751	120	110	01	metal	metal: ind. White	personal/societal	clothing	button: other	complete	piecrust				1	
5718	120	110	01	mortar		structural	building component	sample						1	
5810	120	115	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	Glasgow: Murray				1	'GLAS./..AY'
5809	120	115	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
5811	120	115	01	ceramic	coarse stoneware: grey	food/beverage	storage container	holloware: cylindrical	body	slipped/glaze: salt	Albany (interior)/clear (exterior)			1	blue painted
5814	120	115	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	base/body	plain	clear/colourless			17	
5813	120	115	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			6	
5812	120	115	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	transfer printed	blue		spalled	1	
5815	120	115	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	footring/footrim	plain	clear/colourless			2	
5804	120	115	01	fauna	bone	fauna: indeterminate		mammal	incomplete					3	
5805	120	115	01	glass	indeterminate	beverage container		bottle: wine	finish: 2 part	plain	green: dark olive	moulded: contact		1	applied finish
5806	120	115	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		1	
5807	120	115	01	metal	indeterminate	structural	hardware	nail: common	complete	rosehead			wrought	1	
5808	120	115	01	metal	indeterminate	structural	hardware	nail: lath	incomplete	rectangular head			cut	1	
5801	120	115	01	metal	iron	indeterminate		sheet	incomplete					1	folded, curved edge, holes around circumference
5802	120	115	01	metal	iron	indeterminate		sheet	incomplete					2	
5803	120	115	01	metal	iron	indeterminate		strap	incomplete					1	one folded edge
5612	122	102	01	ceramic	coarse stoneware: grey	food/beverage	storage container	jug	neck	slipped/glaze: salt	Albany (interior)/clear (exterior)			1	
5610	122	102	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	footring/footrim	plain	clear/colourless			2	
5605	122	102	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim	transfer printed	brown			2	leaves
5607	122	102	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	blue			2	
5611	122	102	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			4	
5606	122	102	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	rim	hand painted	polychrome: late palette			1	
5609	122	102	01	ceramic	refined white earthenware	food/beverage	tableware	plate: child's	body	moulded	clear/colourless			1	Child's Plate?, checkered pattern
5608	122	102	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: unscaloped, imp. repetitive patterns	blue			1	
5456	122	107	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	embossed: lettering			heat altered: burnt	1	'PRINCE OF WALES/VISITED CANADA'
5455	122	107	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain			heat altered: burnt	1	
5465	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	body	sponged	blue			11	
5468	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	footrim/body	plain	clear/colourless			13	
5463	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	sponged: cut	brown			2	
5467	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim/body	hand painted	polychrome: late palette			6	unusual rim
5461	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim/body	industrial slip	banded			2	blue
5469	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			29	
5459	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	transfer printed	blue			1	
5458	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	transfer printed	brown			1	
5457	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	plate: child's	base	transfer printed	black			1	'..E..' child's plate?
5460	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: indeterminate	blue			1	
5466	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	hand painted	polychrome: late palette			10	
5462	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	sponged: cut	brown			8	
5464	122	107	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	rim	sponged	blue			1	
5452	122	107	01	glass	indeterminate	indeterminate		holloware: cylindrical	body	plain	aqua: light	indeterminate		1	
5453	122	107	01	glass	indeterminate	indeterminate		holloware: cylindrical	body	plain	clear/colourless	indeterminate		1	
5454	122	107	01	glass	indeterminate	personal/societal	health/hygiene	bottle: panel	body	plain	aqua: light	moulded: contact	patinated	3	
5451	122	107	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		3	
5448	122	107	01	metal	iron	indeterminate		sheet	incomplete					1	
5449	122	107	01	metal	iron	structural	hardware	nail: common	complete	rectangular head			cut	2	

Appendix A
Artifact Catalogue

ID	EASTING	NORTHING	LOT	MATERIAL 1	MATERIAL 2	FUNCTION 1	FUNCTION 2	OBJECT	FRAGMENT	ATTRIBUTE 1	ATTRIBUTE 2	MANUFACTURE	ALTERATION	# OF ARTIFACTS	NOTE
5450	122	107	01	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut		1	
5824	122	112	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	footring/footrim	plain	clear/colourless			4	
5823	122	112	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	banded			1	blue
5825	122	112	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			8	
5821	122	112	01	ceramic	refined white earthenware	food/beverage	tableware	plate: child's	rim	moulded	clear/colourless			1	Child's Plate?, checkered pattern, scalloped rim
5820	122	112	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: indeterminate	blue			1	
5816	122	112	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	sponged	blue		spalled	4	
5822	122	112	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	sponged: cut	brown			1	
5817	122	112	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	sponged: cut	purple			2	
5818	122	112	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	hand painted	polychrome: late palette			3	
5819	122	112	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	rim/body	hand painted	polychrome: late palette			2	
5827	122	112	01	glass	indeterminate	indeterminate		indeterminate	indeterminate	indeterminate	clear/colourless	indeterminate	heat altered: melted	1	
5826	122	112	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		1	
5828	122	112	01	metal	iron	indeterminate		sheet	incomplete					2	
5441	125	100	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			4	
5851	125	105	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
5850	125	105	01	ceramic	coarse earthenware: red	food/beverage	storage container	holloware: cylindrical	lid	glaze: lead	brown: dark			1	
5847	125	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	blue			1	
5849	125	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			6	
5845	125	105	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: symmetrical scalloped/imp. lines	blue			1	
5846	125	105	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	body	sponged	blue			1	
5848	125	105	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim/body	hand painted	polychrome: late palette			3	
5853	125	105	01	glass	indeterminate	food/beverage	tableware	holloware: cylindrical	body	panel	clear/colourless	moulded: contact		1	
5852	125	105	01	glass	indeterminate	personal/societal	health/hygiene	bottle: panel	body	plain	aqua: light	moulded: contact		1	
5710	125	110	01	ceramic	clay: white	personal/societal	smoking	smoking pipe	body	plain			heat altered: burnt	1	
5709	125	110	01	ceramic	coarse earthenware: red	food/beverage	tableware	holloware: cylindrical	body	glaze: lead	black			1	
5714	125	110	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	industrial slip	banded			1	blue
5715	125	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			5	
5717	125	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			20	
5712	125	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	sponged: cut	purple			2	tiny
5716	125	110	01	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	rim	edged: unscalloped, imp. repetitive patterns	blue		spalled	5	chicken foot, sm
5711	125	110	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	sponged: cut	brown			1	
5713	125	110	01	ceramic	refined white earthenware	food/beverage	tableware	teabowl/cup	rim	sponged	blue			1	
5703	125	110	01	glass	indeterminate	food/beverage	beverage container	bottle: case/gin	finish: 1 part	plain	green: dark olive	moulded: contact		1	applied finish
5705	125	110	01	glass	indeterminate	indeterminate		holloware: indeterminate	body	plain	blue: light	indeterminate	heat altered: melted	1	
5704	125	110	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		4	
5706	125	110	01	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		cut		1	
5707	125	110	01	metal	iron	structural	hardware	nail: lath	incomplete	rectangular head		cut		1	
5708	125	110	01	metal	iron	tools/equipment	indeterminate	tool: indeterminate	blade					4	one toothed edge, sm saw?
5443	130	100	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	hand painted	polychrome: late palette			1	
5442	130	100	01	metal	iron	indeterminate		sheet	incomplete					1	
5445	130	105	01	ceramic	refined white earthenware	food/beverage	tableware	flatware	rim	indeterminate	blue		heat altered: burnt	1	
5446	130	105	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	rim	plain	clear/colourless			1	
5444	130	105	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	sponged	blue		spalled	1	
5447	130	105	01	metal	iron	tools/equipment	indeterminate	tool: indeterminate	blade					1	tool blade?
5842	130	110	01	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	rim	hand painted	polychrome: late palette			2	
5843	130	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	hand painted	polychrome: late palette			4	tiny sherds
5844	130	110	01	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			13	
5841	130	110	01	ceramic	refined white earthenware	food/beverage	tableware	saucer	body	hand painted	polychrome: late palette			1	
5838	130	110	01	glass	indeterminate	food/beverage	beverage container	bottle: wine	body	plain	green: olive	indeterminate		1	
5839	130	110	01	glass	indeterminate	indeterminate		bottle: indeterminate	finish: 2 part	plain	aqua: light	moulded: contact		1	applied finish, health/hygiene bottle?
5840	130	110	01	glass	indeterminate	structural	building component	window pane	incomplete	plain	aqua: light	indeterminate		1	
5837	130	110	01	metal	iron	indeterminate		sheet	incomplete					1	
5836	130	110	01	mica		indeterminate		sample						1	
														1535	



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